Advancing Women's Health:

Health Plans' Innovative Programs in Breastfeeding Promotion

American Association of
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Advancing Women's Health:

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Preface

Women represent more than 51% of the U.S. population, 60% of the labor force, and make most of the health care decisions for themselves and their families. Until recently, medicine has been slow to respond to the special health care needs of women. Today, however, health plans are doing exemplary work in meeting women's needs through a wide variety of programs, interventions, and partnerships aimed at addressing critical women's health issues.

The American Association of Health Plans (AAHP) has been proud to focus on these efforts through the Advancing Women's Health monograph series. Previous topics in the series have included high-risk pregnancy, breast cancer, mid-life issues, osteoporosis, depression, and domestic violence. Each report in the series highlights excellent care models offered by member plans and provides a glimpse into how health plans systematically and continually organize, coordinate, and track health services in order to improve outcomes.

This latest monograph focuses on the important topic of breastfeeding. Although breast milk provides infants with the ideal form of nutrition and while breastfeeding confers major health benefits on mothers and babies, too few American women choose to breastfeed. Those that do can encounter early challenges that make continuation difficult unless they receive appropriate lactation counseling and support. Health plans have a vital role to play in increasing the number of women who successfully breastfeed their babies. As the case studies in this monograph compellingly demonstrate, health plans are promoting breastfeeding through a range of educational, support, and case management programs.

The case studies included in this report deserve to be widely read by consumers, policymakers, and health plan staff. They will help consumers better understand how health plans can support the decision to breastfeed. They will help policymakers appreciate the unique strengths that managed care brings to the ongoing challenge of increasing the percentage of women who initiate and maintain breastfeeding. And within the community of health plans, they will provide new tools and new inspirations for professionals dedicated to assisting mothers and babies in getting the best possible start.

Karen Ignagni
President and Chief Executive Officer

A Message from the Surgeon General, U.S. Public Health Service

Health plans have an instrumental role to play in promoting breastfeeding to American families. The *HHS Blueprint for Action on Breastfeeding*, which was released on October 30, 2000, recommends that infants should be exclusively breastfed during the first four to six months, preferably for a full six months, and ideally through the first year of life. It also recognizes the contribution of the health care system in improving breastfeeding and recommends that the health care system needs to:

- Train health care professionals who provide maternal and child care on the basics of lactation, breastfeeding counseling, and lactation management during internship, residency, in-service training, and continuing education.
- Ensure that breastfeeding mothers have access to comprehensive, up-to-date, and culturally tailored lactation services provided by trained physicians, nurses, lactation consultants, and nutritionists/dieticians.
- Establish hospital and maternity center practices that promote breastfeeding such as the "Ten Steps to Successful Breastfeeding."
- Develop breastfeeding education for women, their partners, and other significant family members during the prenatal and postnatal visits.

The health care system can make a significant difference in the breastfeeding experience of mothers. Health plans can influence both families and health care providers through targeted educational interventions promoting breastfeeding. In addition, they can offer breastfeeding support services before, during, and after birth. Specifically, health plans can support breastfeeding mothers during the critical first days and weeks postpartum by offering all mothers access to lactation management services provided by trained physicians, nurses, lactation specialists, and peer counselors or other trained healthcare providers. It is also important that all healthcare providers who interact with women or infants are knowledgeable about the basics of lactation and the role their specialty plays in breastfeeding. For example, providers of maternal and child health care have a special role in the promotion of breastfeeding during the prenatal and postnatal periods. They must be knowledgeable, skillful and continuously educated in counseling women about breastfeeding and lactation.

To this end, culturally appropriate training for breastfeeding should be integrated into the curricula of health profession schools, with attention to barriers that could interfere with breastfeeding. Nonsupportive hospital experiences and lack of support from healthcare providers have been identified as barriers to breastfeeding, especially among African American women. Therefore, maternity care and newborn facilities must adopt practices conducive to proper lactation even when in-hospital maternity care is of short duration.

Cost savings is an obvious concern for most health plans and their enrollees. Breastfeeding can provide economic benefits to individual families and health plans. For families who choose breastfeeding, costs of infant feeding are substantially reduced. Even after accounting for the costs of breast pump equipment and additional food required by the nursing mother, families could save several hundred dollars over the course of the infant's first year. Because breastfed babies are in general

healthier than non-breastfed babies, they require fewer sick care visits, prescriptions, and hospitalizations, which lead to reduced health care expenditures. Employers also benefit since breastfed infants are sick less often; therefore maternal absenteeism from work is significantly lower in companies with established lactation programs.

This monograph highlights the outstanding programs of eight health plans that promote breastfeeding among enrollees, and three health plans that have demonstrated their commitment to breastfeeding promotion through programs for their own employees. Based on the experiences of these health plans, the lessons learned may be helpful for other managed care organizations interested in promoting breastfeeding. Health plans, including health maintenance organizations (HMOs), preferred provider organizations (PPOs), point-of-service (POS) plans, and all other health plan types, share a common focus on disease prevention and health promotion. Breastfeeding is part of this focus since it promotes infant and maternal health, and decreases the frequency of doctor visits, hospitalizations, and medication utilization. The *HHS Blueprint for Action on Breastfeeding* calls for an immediate response to the major public health challenge of improving breastfeeding rates. Health plans are essential partners for us to achieve this goal.

David Satcher, MD, PhD
Surgeon General
U.S. Public Health Service
U.S. Department of Health and Human Services

Executive Summary

This publication summarizes key findings from AAHP's assessment of eight health plans that have implemented innovative programs to promote breastfeeding among enrollees. It also highlights three health plans that have demonstrated their commitment to breastfeeding promotion through programs for their own employees.

Breastfeeding is the optimal way to feed infants. Breastfeeding promotes infant and maternal health, decreases the frequency of doctor visits, hospitalizations, and medication utilization, and thereby lowers medical costs. As a result, the decision to breastfeed is of significant importance to the newborn child, the mother, and the health care system.

Healthy People 2010, the health agenda for the Nation set every 10 years, establishes objectives for improving breastfeeding rates among all racial and ethnic groups in America: 50% of mothers to breastfeed exclusively for six months and 25% of those mothers to continue nursing through the end of the baby's first year of life. According to the *HHS Blueprint for Action on Breastfeeding*, a comprehensive framework to promote breastfeeding released by the Surgeon General in October 2000, significant steps must be taken to increase breastfeeding rates and to close the wide racial and ethnic gaps in breastfeeding. The *HHS Blueprint for Action* states that the *Healthy People 2010* goals can only be achieved through comprehensive support for breastfeeding in the family, community, workplace, health care sector, and overall society.

Health plans have key roles to play in encouraging women and their families to initiate and maintain breastfeeding. Broadly, opportunities for support include provider education, prenatal patient education and counseling, postpartum inpatient and outpatient lactation support, home care, and assistance with back-to-work issues. The health plans highlighted in this report each provide a unique array of breastfeeding education and promotion services.

Promising Strategies

The following eight organizations participated in AAHP's identification of promising strategies for promoting breastfeeding among enrollees.

- **Health Net, Inc.** has developed a Strategic Action Plan for the Promotion of Breastfeeding to address the decrease in breastfeeding prevalence among the Medicaid populations served by the health plan. The strategy is comprised of specific action plans to address breastfeeding through provider education, member education, provider network management services, public health coordination, and corporate commitment.
- **HealthPartners** provides comprehensive services, including prenatal education and support, discharge planning, postpartum lactation support, and assistance with rental or purchase of breast pump equipment, through its Breastfeeding & Parent Support Center.
- **Independent Health** has a Prenatal Case Management Program that targets members who are identified as high risk for pregnancy complications. Home visits by nurses form the centerpiece of this program. Breastfeeding is promoted in a variety of ways, including prenatal education, postpartum visits, and breast pump rental.

- **Kaiser Health Plan of Georgia** promotes breastfeeding through a series of educational components, including a specially-produced video, "Celebrate the Miracle," educational handouts, no-cost breastfeeding classes, continuing education for providers, and postpartum lactation support.
- **Kaiser Permanente Northwest** has a Mother-Baby Program that incorporates prenatal education, inpatient lactation support, and outpatient lactation consultation services. In addition, through staff education efforts, Kaiser Permanente Northwest ensures that the health plan's strong commitment to breastfeeding promotion is demonstrated consistently.
- **Kaiser Permanente of Southern California** has a comprehensive program that includes prenatal education, inpatient lactation support, postpartum outpatient support, a breastfeeding information line, breast pump rental services, and provider education. The health plan has several Medical Centers, each of which serves a unique racial/ethnic membership composition. Educational programs, classes, and services are developed to meet the specific needs of the community.
- **Keystone Health Plan East's** Baby BluePrints (or Baby Footsteps as the program is called outside of Pennsylvania), is a comprehensive perinatal program including prenatal risk assessment, information dissemination, case management, and postpartum services for at-risk mothers and newborns.
- **UCare Minnesota** has a Breastfeeding Promotion Program featuring strong community partnerships with state and local public health agencies and educational components targeted to all Minnesota residents, with particular emphasis on pregnant Medicaid enrollees and their families. UCare has also provided funding for a breastfeeding intervention targeted specifically to the Hmong population in Minnesota.

Programs for Health Plan Employees

While health plans are most often recognized for their role in promoting enrollee health, health plans are also employers, and as such have a tremendous opportunity to make a difference in the lives of the women they employ. The following three organizations illustrate the ways some health plans are promoting breastfeeding among their own employees:

- **Aetna Inc.**'s Corporate Lactation Program encompasses services prior to delivery, during maternity leave, and upon return to work. The program includes breastfeeding classes, unlimited consultations with a lactation consultant, access to an electric breast pump in private rooms at the worksite, a personal accessory carrying case with bottles, and a refrigeration compartment to store breast milk safely.
- **Humana, Inc.**'s NursingMoms program encourages pregnant employees to enroll in either on-site or community breastfeeding classes. Women are given incentives for their participation, including a $25.00 coupon toward the purchase of a breastfeeding kit and/or insulated carrying bag from Medela®. These kits hook up to the hospital-quality Medela® double breast pumps provided in the lactation rooms provided at the workplace.

- **Physicians Health Plan of Northern Indiana, Inc.** provides support to breastfeeding mothers through provision of the "mother's room," with a lock for privacy, a comfortable recliner, and an electric breast pump. Managers work with employees to schedule pumping sessions during the day. Attachments for the breast pump and coolers for storing expressed milk are available to employees for purchase at cost.

Overall Lessons Learned

Based on the experiences of the health plans described in this report, the following lessons may be helpful for other managed care organizations interested in promoting breastfeeding:

- Find a champion—obtain senior management support, using the science proving breastfeeding is optimal;
- Build the business case for a return on investment, using data that demonstrates patient satisfaction and significant cost in medical saving;
- Incorporate consistent pro-breastfeeding messages throughout all prenatal education and counseling sessions;
- Build a culture that promotes breastfeeding as the best infant feeding choice;
- Sell the program to providers in the network—convince them of the value of the program;
- Provide continuing education opportunities to obstetricians/gynecologists, nurses, nurse-midwives, and other personnel who routinely are in contact with pregnant or lactating women;
- Work with hospitals in the network to implement practices that promote breastfeeding, including putting the baby to the breast immediately in the delivery room, rooming-in, and providing access to inpatient lactation consultation;
- Utilize certified lactation consultants;
- Establish a network of community resources for referral;
- Establish postpartum support procedures, including routine nurse follow-up calls, access to lactation consultants, and/or a telephone advice line;
- Offer high quality breast pumps at cost or partial reimbursement for purchase or rental;
- Consider targeting special efforts to racial and ethnic minorities, low-income women, teenagers, and women with high-risk pregnancies; and
- Provide culturally appropriate educational materials translated in the languages of the patients.

Study Methodology and Findings

Background

In 1996, AAHP convened representatives from member health plans, including primary and specialty care medical providers, health services researchers, quality improvement professionals, health educators, and health policy experts to guide the work of the association in the area of women's health and managed care. This group became the Women's Health Subcommittee (see Appendix A). For this monograph on breastfeeding, a special Review Committee was formed that included a member of the Subcommittee as well as five additional members representing health plans, breastfeeding experts, health services researchers, and government agencies (see Appendix B).

Review of the Process

The practices that are showcased in this monograph represent only a fraction of the initiatives that health plans have developed to improve women's health. AAHP's study of "best practices" in women's health highlighted a sample of plans that responded to AAHP's request for model programs. Overall, the process included the following steps:

- Inviting AAHP's entire membership to submit information on their breastfeeding promotion programs, for both health plan members and health plan employees;
- Screening the submissions for key elements such as program title, program components, goals, evaluation, and results to date;
- Reviewing the screened group of submissions using 12 criteria, including goals/objectives, innovative program qualities, quality of program evaluation, and sustainability;
- Selecting eight outstanding case studies that stood out as particularly innovative and enlightening for inclusion in this monograph; and
- Conducting in-depth site visits or telephone interviews with representatives from each selected health plan.

Lastly, in order to highlight health plans' efforts as employers supporting employees' breastfeeding, AAHP solicited additional information from each health plan that responded to the employee questionnaire and summarized that information in the section entitled, "Health Plans, as Employers, Supporting Breastfeeding Mothers Who Return to Work" (see page 77).

During the summer of 2000, AAHP mailed queries about breastfeeding programs to multiple contacts at all member health plans, including medical directors, health plan staff concerned with women's health, maternal and child health, tobacco cessation, and corporate communications. In total, more than 800 health plan staff were contacted through this mailing. The questionnaires were intentionally designed to be brief, yet comprehensive enough to yield sufficient and useful information. AAHP made the questionnaires available electronically and most submissions were received via e-mailed attachment.

AAHP received more than 30 submissions from health plans that serve a total of 41 million enrollees, have multiple product lines (commercial, Medicaid, and Medicare), and are clearly committed to breastfeeding promotion. AAHP believes that the submissions represent a fraction of the breastfeeding promotion programs within health plans. There are a variety of reasons that health plans may have not responded to the query: the plan might not have a formal breastfeeding promotion program; the program might be new and/or not have outcome data; time constraints may have precluded some plans with programs from responding to the survey; or the health plan's current quality improvement strategies focus on other areas of health care services.

Each submission was screened by AAHP staff for key elements such as program title, program components, goals, evaluation, and results to date. Any programs which were minimal and informal—such as merely handing out educational brochures at one prenatal visit—were not considered. The remaining submissions were blinded, duplicated, and sent to all members of the Review Committee. In cases where there would be conflict of interest (i.e., a committee member representing a health plan that had submitted a questionnaire), staff did not send that submission to the committee member in question. A rating chart was developed and sent to each Review Committee member to help in the evaluation and ranking of the programs.

The rating chart was developed following the 12 dimensions established in 1997 by the Women's Health Subcommittee. These included:

1. **Worthy, clear, and explicit goals and objectives**
2. **Ability to involve staff**

   For example, can administrative staff who enter data make suggestions regarding data collection tools?
3. **Willingness of providers**

   For instance, are providers interested in promoting the program to their patients and are they committed to enhancing it?
4. **Commitment of the health plan to the program**
5. **Innovative qualities of the program**

   In what ways does this program stand out from others? What makes it unique?
6. **Evaluation of the program, including quality, relevance, and validity of the measures used**
7. **Outcomes achieved**
8. **Percentage of target population that participates in the program**
9. **Patient satisfaction**
10. **Program cost and effectiveness**
11. **Sustainability of the program**
12. **Replicability**

Using these criteria, the Review Committee selected the most outstanding programs for inclusion in this monograph. In order to learn more about the health plans' innovative practices, staff then conducted in-depth interviews, either on-site or by telephone, with each health plan. During these interviews, health plan representatives answered detailed questions specific to their program.

A Lesson in Health Plan Variety

The programs included in the entire monograph series are making a difference and advancing women's health care. While the Breastfeeding Monograph Review Committee selected programs based on their merits, the diversity of the plans presented mirrors the diversity of the health plan industry as a whole. As a result, the monograph offers "something for everyone." Throughout the report, readers will find examples of practices in IPA, staff, group and network-model HMOs and PPOs (both not for-profit and for-profit organizations) that:

- Represent large, national chains and small, regional companies;
- Care for public (Medicaid) and private (commercial) populations;
- Serve urban and rural populations;
- Serve a variety of racially and ethnically diverse populations (African-American, Hispanic, and Asian Pacific Islander);
- Serve teen mothers;
- Constantly refine and improve their program;
- Utilize strategies to increase program participation; and
- Partner with community-based organizations and statewide agencies to maximize resources and increase effectiveness.

Note: While each program described in the monograph has unique qualities, only some have proven effectiveness. In addition, some programs could only provide limited information in some areas. For example, some featured health plans could not provide data on the exact cost of a given program. In these instances, health plan contacts estimated costs as best as possible, but because of the complex way in which individual departments assume direct and indirect costs, these figures may be underestimated.

Overview: Focus on Breastfeeding

Introduction

According to the *HHS Blueprint for Action on Breastfeeding*, a national comprehensive breastfeeding policy released by the Surgeon General in October 2000, "extensive research on the biology of human milk and on the health outcomes associated with breastfeeding has established that breastfeeding is more beneficial than formula feeding (1)." Breastfeeding promotes infant and maternal health and thereby lowers medical costs by decreasing the frequency of doctor visits, hospitalizations, and medication utilization. As a result, the decision to breastfeed is of significant importance to the newborn child, the mother, the health care system, and the healthcare economy. Health plans can play key roles in encouraging women and their families to start and continue breastfeeding.

Benefits to Baby

The *HHS Blueprint for Action on Breastfeeding* outlines several important health benefits for breastfed babies, including resistance to infectious disease, enhancement to the immune system, nutritional and growth benefits, reduced risk for chronic diseases, and possibly cognitive benefits (1).

- Human milk contains an abundance of factors that are active against infection; breastfeeding offers resistance to infectious diseases. Research demonstrates that several infections are lower in incidence or severity in breastfed infants than in formula-fed infants. These infections include diarrhea (2-6) respiratory tract infections (2-3, 6-9), otitis media (4, 10-12), pneumonia (13-14), urinary infection (15-16), necrotizing enterocolitis (17-18), and invasive bacterial infection (19-22).
- Breastfeeding enhances a baby's immune system. Research indicates that breastfed infants, compared with formula-fed infants, produce enhanced immune response to polio, tetanus, diptheria, and Haemophilus influenzae immunizations, as well as to a common infant respiratory infection called respiratory synctial virus infection (19, 23- 24). There is also evidence that breastfeeding results in earlier development of the infant immune system (25).
- Human milk contains a balance of nutrients that more closely matches human infant requirements for growth and development than does the milk of any other species (26). For example, compared to cow's milk, human milk is low in total protein and low in casein, making it more readily digestible and less stressful on the immature kidneys of infants. In addition, the lipids and enzymes in human milk promote efficient digestion and utilization of nutrients (26-27).
- Recent studies in infant feeding suggest that breastfeeding may reduce the risk of type 1 and 2 diabetes (28-32), celiac disease (33-36), inflammatory bowel disease (37-39), childhood cancer (40-42), and allergic disease/asthma (43-48). Mixed results from some studies suggest that further research is needed to establish some of these benefits (49-52).

While any length of breastfeeding is better than no breastfeeding, research indicates that exclusive and prolonged breastfeeding has a greater preventative effect than short-term nursing or nursing along with supplemental formula feeding. A recent study determined that infants categorized as exclusively breastfed, mostly breastfed, and equally breastfed (with even amounts of breastfeeding and formula feeding) for the first six months encountered lower rates of diarrhea, cough or wheezing than those who were not breastfed (7). The *HHS Blueprint for Action on Breastfeeding*, recommends that mothers breastfeed their babies exclusively for the first four to six months, preferably a full six months. The *Healthy People 2010* recommendation is to include breastfeeding, with solid foods added, until the baby's first birthday.

Benefits to Mother

Breastfeeding is also advantageous to maternal health. The *HHS Blueprint for Action on Breastfeeding* (53) states, "breastfeeding has several positive hormonal, physical, and psychosocial effects on the mother" and lists the following benefits:

- Breastfeeding increases levels of oxytocin, a hormone that stimulates uterine contractions, helping to expel the placenta, to minimize postpartum maternal blood loss, and to induce a more rapid return of the uterus to normal size (54-55);
- Breastfeeding, particularly exclusive breastfeeding, postpones the resumption of normal ovarian cycles and the return of fertility in most women (56)—although breastfeeding should not be relied upon as a contraceptive;
- Mothers who breastfeed their infants may also experience psychological benefits, such as increased self-confidence and facilitated bonding with their infants (57-59);
- Studies have shown that breastfeeding for longer time periods (up to two years) and among younger mothers (early 20s) may reduce the risk of premenopausal and possibly postmenopausal breast cancer (60-65);
- The risk of ovarian cancer may be lower among women who have breastfed their children (66-68).

Economic Benefits

Breastfeeding has economic benefits to individual families and health plans. For families who choose breastfeeding as the method of infant feeding, costs of infant feeding are substantially reduced. Even after accounting for the costs of breast pump equipment and additional food required by the nursing mother, families can save several hundred dollars over the course of the infant's first year (69).

Because breastfed babies are in general healthier than non-breastfed babies, breastfed babies typically require fewer sick care visits, prescriptions, and hospitalizations, particularly if they are breastfed exclusively or almost exclusively (70). Consequently, as noted in the *HHS Blueprint for Action*, total medical care expenditures are about 20% lower for fully breastfed infants than for never-breastfed infants (71).

Employers also reap benefits when their employees breastfeed. Because breastfed infants are sick less frequently, maternal absenteeism from work is significantly lower in companies with established lactation programs (72).

Breastfeeding as a Public Health Challenge

The short- and long-term benefits of breastfeeding for babies and mothers are well recognized, but the breastfeeding rates of American women remain low, particularly among racial and ethnic minority groups. The breastfeeding goals of *Healthy People 2000*—the precursor to the more recent *Healthy People 2010*—were to increase to at least 75% the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50% the proportion who continue breastfeeding until their babies are five to six months old (73). Unfortunately, the goals were not met and the overall rates for breastfeeding in the U.S. are low, especially at six months postpartum. In 1998, the year for which the most recent data are available, 64% of all mothers breastfed in the early postpartum period, and only 29% of all mothers were breastfeeding six months after their child's birth (74). In fact, many mothers choose formula and/or quit breastfeeding within the first few weeks after giving birth (75).

Minority populations, along with low-income families and less educated mothers, breastfeed their babies at even lower rates. According to 1998 data cited in *Healthy People 2010*, 45% of African-American mothers breastfed their infants in the early postpartum period; 66% of Hispanic mothers and 68% of white mothers breastfed. Only 19% of African-American mothers were still breastfeeding at six months, compared to 28% of Hispanic mothers and 31% of white mothers (74). In addition, only 54% of low-income Asian and Pacific Islander children and 59% of American Indian and Alaska Native children were ever breastfed (76). These statistics highlight the need for health plans and clinicians to address racial and ethnic disparities surrounding breastfeeding by targeting minorities and/or economically disadvantaged mothers.

Role of Health Plans

Health maintenance organizations (HMOs), preferred provider organizations (PPOs), point-of-service (POS) plans, and all other health plan types, share a common focus on disease prevention and health promotion along with a commitment to providing comprehensive services. Health plans are in a unique position to influence both health care consumers (women and their families) and health care providers through targeted educational interventions promoting breastfeeding.

Women are more likely to breastfeed and be more persistent in their endeavor when they are fully informed about the benefits. Physicians, and other healthcare providers, should educate all prospective mothers about the health benefits of breastfeeding (77). Education is critical because women decide whether or not to breastfeed early—either before pregnancy or, in most cases, by the end of the second trimester (78). Before the baby's birth, health plans can provide a variety of educational components that promote breastfeeding, including informative brochures and videos, regular discussion during prenatal visits, and lactation classes.

According to the *HHS Blueprint*, "a woman's ability to optimally breastfeed her infant depends on the support she receives from those around her…The overriding principle is to make breastfeeding as easy as possible for the mother rather than to discourage her from breastfeeding, either intentionally or unintentionally" (79). After birth, the health plan can offer specialized support—such as lactation consultation (in hospitals, doctors' offices and/or women's homes), postpartum visits, nurse advice lines, breast pump rental, and/or partial reimbursement for breast pump purchases—that help women solve problems and continue breastfeeding.

Health plans can work with providers to make women aware that breastfeeding may not come naturally, and to teach them the specific techniques and procedures that will help them be successful. Within the first hour following birth, or one-half hour is for best suckling reflex (58), so healthcare providers should be actively involved in initiating breastfeeding and facilitating breastfeeding techniques during that time. Lactation consultants should be easily accessible. Newly nursing mothers benefit from meeting with lactation consultants who can evaluate the mother-and-baby team and provide ongoing advice and encouragement. Mothers in the early postpartum period are especially sensitive as they adjust to common problems, such as insecurities, lack of sleep, engorgement, poor latch, sore nipples, or more rare occurrences such as inverted nipples or breast infections. Mothers need reassurance and support from doctors, nurses, and other healthcare providers, as well as partners and family members, in order to overcome what may be a temporary setback.

Returning to the Workplace

Returning to the workplace usually means separating from infants and can be very difficult for mothers, especially those who breastfeed. Many breastfeeding mothers choose to wean their babies rather than endure the added stress of working and expressing and storing their breast milk. Healthcare providers can help delay weaning by providing information in advance about ways to incorporate pumping and/or nursing into the working day. Expressing and storing breast milk is a skill that should be taught to all new mothers, in case of separation (80).

Preview of Monograph

This monograph highlights the outstanding programs of eight health plans that promote breastfeeding among enrollees.

- Health Net, Inc. has developed a Strategic Action Plan for the Promotion of Breastfeeding to address the decrease in breastfeeding prevalence among the Medicaid populations the health plan serves. The strategy is comprised of specific action plans to address breastfeeding through provider education, member education, provider network management services, public health coordination, and corporate commitment.
- HealthPartners provides comprehensive services, including prenatal education and support, discharge planning, postpartum lactation support, and assistance with rental or purchase of breast pump equipment, through its Breastfeeding & Parent Support Center.
- Independent Health has a Prenatal Case Management Program that targets members who are identified as high risk for pregnancy complications. Home visits by nurses form the centerpiece of this program. Breastfeeding is promoted in a variety of ways, including prenatal education, postpartum visits, and breast pump rental.
- Kaiser Health Plan of Georgia promotes breastfeeding through a series of educational components, including a specially-produced video, “Celebrate the Miracle”, educational handouts, no-cost breastfeeding classes, continuing education for providers, and postpartum lactation support.

- Kaiser Permanente Northwest has a Mother-Baby Program that incorporates prenatal education, inpatient lactation support, and outpatient lactation consultation services. In addition, through staff education efforts, Kaiser Permanente Northwest ensures that the health plan's strong commitment to breastfeeding promotion is demonstrated in all member services. In January 2000, Kaiser Permanente Northwest's hospital became one of only two dozen hospitals in the United States to earn the World Health Organization's official designation as "Baby Friendly."
- Kaiser Permanente of Southern California has a comprehensive program that includes prenatal education, inpatient lactation support, postpartum outpatient support, a breastfeeding information line, breast pump rental services, and provider education. The health plan has several Medical Centers, each of which serves a unique racial/ethnic membership composition. Educational programs, classes, and services are developed to meet the specific needs of the community.
- Keystone Health Plan East's Baby BluePrints (or Baby Footsteps as the program is called outside of Pennsylvania), is a comprehensive perinatal program including prenatal risk assessment, information dissemination, case management, and postpartum services for at-risk mothers and newborns. Specific breastfeeding promotion activities include prenatal education about breastfeeding, partial reimbursement for lactation classes and breast pump purchase, postpartum lactation consultations (including in-home visits), no-cost rental of breast pumps for medical necessity, and referrals to community resources.
- UCare Minnesota has a Breastfeeding Promotion Program featuring strong community partnerships with state and local public health agencies and educational components targeted to all Minnesota residents, with particular emphasis on pregnant Medicaid enrollees and their families. UCare has also provided funding for a breastfeeding intervention targeted specifically to the Hmong population in Minnesota.

Case Study I—Health Net, Inc. (Oakland, CA) Strategic Action Plan for the Promotion of Breastfeeding

Health Net, Inc., (formerly known as Foundation Health Systems, Inc.) is one of the nation's largest publicly traded managed health care companies. The company's HMO, insured PPO and government contracts subsidiaries provide health benefits to approximately 5.3 million individuals in 16 states through group, individual, Medicare risk, Medicaid and TRICARE programs. Health Net, Inc. subsidiaries also offer managed health care products related to behavioral health, dental, vision and prescription drugs, and offer managed health care coordination for multi-region employers and administrative services for medical groups and self-funded benefits programs.

Program Development and Implementation

Overview

In June 1999, Health Net developed a Strategic Action Plan for the Promotion of Breastfeeding to address the decrease in breastfeeding prevalence among the Medicaid populations the health plan serves. The strategy is comprised of specific action plans to address breastfeeding through provider education, member education, provider network management services, public health coordination, and corporate commitment. By integrating these efforts into existing prevention and public health programs, Health Net has successfully established a comprehensive approach to breastfeeding education, encouragement, and support for both providers and members.

Background

In 1996, Health Net developed a public health coordination department to be responsible for communication, coordination, and collaboration with state and local public health departments. This direct link to state and local public health departments and to the community has enabled Health Net to be aware of and involved in the public health issues important to the California Medicaid (Medi-Cal) population. In 1996, the California Department of Health Services' Breastfeeding Promotion Committee, of which Health Net is a member, released a report indicating that breastfeeding rates in California were declining. Health Net noted that in the counties where Health Net served the Medi-Cal population, the breastfeeding rates were among the lowest in the state. Furthermore, data from 1997 showed that while 78% of women from California hospitals were breastfeeding at discharge, only 43% were breastfeeding exclusively. In several counties that Health Net serviced, the rate of exclusive breastfeeding decreased dramatically in the 10 years from 1987 to 1997.

The Breastfeeding Promotion Committee report, "Breastfeeding, Investing in California's Future," identified several barriers to successful breastfeeding in California, including women's lack of knowledge and support for breastfeeding; distribution of formula samples; separation of mothers and infants in the early postpartum period; early discharge from hospitals and lack of follow-up; and inadequate support by health care professionals. These findings prompted Health Net to develop a Strategic Action Plan for the Promotion of Breastfeeding in June 1999 to identify opportunities to promote and support breastfeeding within preexisting health plan systems. This method to integrate breastfeeding promotion into various aspects of Health Net's services was designed to complement activities already underway in the State of California through existing organizational structure. The strategic action plan was written with the intention of further promoting partnerships and establishing new links with local public health departments and community-based organizations. Health Net developed the following policy statement as the basis for the health plan's initiative:

"Recognizing the significant health and economic benefits to mothers, infants, and society, Health Net endorses breastfeeding as the best infant feeding method and urges contracting providers to enthusiastically promote and support breastfeeding."

Through Health Net's Strategic Action Plan for the Promotion of Breastfeeding, the health plan integrates provider education and network management services, member education and benefits design, public health coordination, and corporate commitment to implement a comprehensive approach to breastfeeding promotion and support.

Goals

Health Net's Strategic Action Plan for the Promotion of Breastfeeding strives to increase member and provider awareness of the benefits of breastfeeding, specifically through the first year of life and thereafter as desired by the member. To achieve this goal, Health Net emphasizes the essential role of provider contracting in influencing infant feeding decisions by members.

Target Population

Health Net's breastfeeding initiative specifically targets pregnant Medi-Cal enrollees and the providers with which the health plan contracts to provide services.

Essential Program Elements

Provider Services

- Provider Contracting. Health Net requires all Medi-Cal prenatal care providers in its network to be DHS (Department of Health Services) certified Comprehensive Perinatal Services Program (CPSP)-providers or to develop formal agreements with certified CPSP providers. CPSP-certified providers receive technical assistance, education, and support from their local public health departments related to nutrition, psychosocial issues, and health education. This contracting strategy ensures that all Health Net Medi-Cal prenatal care providers are well educated about public health issues specific to the Medicaid population, including breastfeeding.

- Provider Education. Health Net's Provider Education Staff influence office practice systems by providing network providers with research materials about breastfeeding, discussing the role of physicians in promoting breastfeeding, and encouraging pediatric care providers to participate in the American Academy of Pediatrics' "Breastfeeding Promotion in Pediatric Office Practice" program. A provider education breastfeeding packet is available that includes reproducible patient education materials, clinician reference materials, information related to different cultural food habits and diet during pregnancy and lactation, and education resources. In addition, through a quarterly provider publication, "Physician News," Health Net provides information related to the health and economic benefits of breastfeeding, strategies to overcome common barriers to breastfeeding, inadequacies of artificial baby milk, and strategies for providers to promote breastfeeding. The health plan also encourages participation in educational opportunities offered by reputable Continuing Medical Education (CME) courses.
- Breastfeeding Protocols. Health Net worked with local health departments' maternal and child health (MCH) programs, Regional Perinatal Programs of California, and other agencies in Health Net's Medi-Cal counties to establish county-specific CPSP protocols that include breastfeeding promotion and support information and materials, and are distributed to all Health Net obstetrical care providers. Providers use answers to the Prenatal Combined Assessment/Reassessment Tool to determine what further actions are necessary, if any, and work with the patient to prepare an individualized care plan. Health Net's protocols provide culture-specific recommendations and suggestions for various ethnic groups. The protocols have been reviewed for cultural competency by cultural/linguistic specialists as part of a State DHS MCH grant, as well as by State Breastfeeding Promotion Committee members.

Member Services

- Member Education. Health Net's health education department provides new member packets, health education classes, and health education materials directly to enrollees or through providers. Health Net's member relations staff make personalized telephone calls to all new Medi-Cal enrollees to inform them about and assist with utilization of available Health Net services. Pregnant members are informed about the health plan's promotion of breastfeeding and encouraged to call a toll-free nutrition information line to speak with a lactation consultant. The member relations staff speak several languages, including English, Spanish, Vietnamese, Cantonese, and Hmong.

  In addition, with their consent, pregnant members are sent a prenatal packet of information specific to the county in which they live. Health Net also produces and distributes a quarterly newsletter for Medi-Cal enrollees, entitled "Being Well." Articles on health topics draw attention to important issues such as breastfeeding. The publication is produced in English and Spanish, and translation into other languages is available by calling the member relations department.

- Nutrition Information Line. A nutrition information line available for all Medi-Cal members has been in existence for the past two years. This free personalized phone service, offered in English and Spanish, is advertised statewide and provides direct access to a registered dietitian/lactation consultant who is available to answer all nutrition inquiries, including questions about breastfeeding. While most inquiries are not crisis calls, about 10-15% of calls are concerned with breastfeeding issues, such as maternal eating habits, breast pumping, or returning to work. Following each phone call, the member is asked if she would like to receive additional literature.
- Breast Pump Benefit. Health Net provides breast pumps as a covered benefit when medically necessary for mother or child, and for Medi-Cal enrolled mothers who are exclusively breastfeeding and returning to work or school. Lactation durable medical equipment does not require prior authorization for the first two months of use.
- Lactation Consultation. Under Health Net's benefits structure, referral may be made to lactation consultant services when medically necessary. The first two visits do not require prior authorization.

Community Efforts

- Public Health Coordination. A member of the public health coordination department represents Health Net on the California Breastfeeding Promotion Advisory Committee. In addition, staff work with local WIC programs on World Breastfeeding Week activities and seek opportunities to collaborate with the Regional Perinatal Programs of California on educating hospital staff about best practices for breastfeeding promotion. In this way, Health Net strives to build on existing breastfeeding promotion activities and works to incorporate successful strategies into member and provider services.

Evaluation and Outcomes

Health Net's Strategic Action Plan for the Promotion of Breastfeeding states, "Promoting breastfeeding requires a change in approach, not a capital investment."

Evaluation

Health Net acknowledges that breastfeeding outcome data are difficult to track over an extended period of time because of the transient nature of the Medicaid population. The health plan chooses rather to assess the community health overall using information from local breastfeeding coalitions and hospital discharge data. It is expected that new county and hospital-specific data will be available this year.

Cost

Health Net's approach to promoting breastfeeding is not financially intensive because much of the initiative is based on the incorporation of breastfeeding promotion into existing member and provider outreach efforts. While set-up and administration of the nutrition information line represents an expense to the health plan, Provider and member relations departments were already in existence to communicate with providers and members on a variety of health issues. The minimal costs directly related to breastfeeding promotion include staff time and expenses associated with mailings to both providers and members.

Lessons Learned

In the administration of a Medicaid-focused breastfeeding initiative, health plans struggle with competing priorities, limited resources, and providers' resistance. The presence of the Comprehensive Perinatal Services Program as part of Medi-Cal contributes to Health Net's ability to emphasize breastfeeding through provider contracting. This same association would not be present in a commercial population.

In addition, many providers are uninformed about the health benefits of breastfeeding. Even though a number of the State Breastfeeding Promotion Committee members are working with medical schools in California, breastfeeding and lactation support are not a focus of core residency training. To ensure that participating providers are aware of the policy and to promote the strategy, Health Net's Medi-Cal Medical Directors for both Northern and Southern California present information about the company-wide initiative during Medi-Cal physician meetings and Joint Operations meetings. Health Net has received multiple inquiries from other health plans about the industry-leading strategy and finds that providers are receptive to the approach which provides them with education and necessary resources to encourage breastfeeding for their patients.

Directions for the Future

In the future, Health Net will strive to publish at least one breastfeeding article annually in both the physician and member newsletters. The health plan also hopes to design and implement online continuing medical education courses and credits specifically addressing breastfeeding topics to encourage increased education and awareness about the health benefits of this feeding method. The public health coordination department will continue to work with government programs and community groups to promote and encourage breastfeeding throughout the counties Health Net serves. Additionally, Health Net corporately supports good nutrition, including breastfeeding, through partnerships such as its sponsorship of the California Association of WIC Directors' meeting in Spring 2001 in San Diego.

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Case Study II—HealthPartners (Minneapolis, MN) Breastfeeding & Parent Support Center

HealthPartners is a family of consumer-governed nonprofit Minnesota health care organizations. HealthPartners and its related organizations provide health care services, insurance and HMO coverage to nearly 650,000 members. More than 9,500 employees staff the various HealthPartners organizations. The HealthPartners family includes the HealthPartners Medical Group and Clinics, RiverWay Clinics, HealthPartners Central Minnesota Clinics, HealthPartners Dental Group and Clinics, Regions Hospital, Regions Hospital Foundation, HealthPartners Research Foundation, HealthPartners Institute for Medical Education, and Group Health, Inc.

Program Development and Implementation

Overview

HealthPartners has established a comprehensive, centralized approach to encouraging breastfeeding in the community as a whole. Through the HealthPartners Breastfeeding & Parent Support Center, experienced and knowledgeable staff provide a full range of breastfeeding services to pregnant women and their families, including prenatal educational services, discharge planning, postpartum lactation support, and breastfeeding equipment. The health plan has gone one step further by making services available to women represented by a majority of other local health plans and by educating other health care colleagues and institutions about the importance of breastfeeding as the best feeding option.

Background

In the 1980s, during a period of intense health plan growth, HealthPartners sought support within the health plan for innovative programs in health care delivery. A focus on breastfeeding was championed at HealthPartners' Como Clinic by a pediatric nurse practitioner (PNP) who had become a certified lactation consultant. She approached the head of HealthPartners' pediatrics department to discuss the development and implementation of a program to promote breastfeeding within the membership. Work began in January 1992 when lactation visits were incorporated into the PNP's pediatric schedules, and formal implementation of the HealthPartners Breastfeeding & Parent Support Center began in 1993.

Since that time, staffing has increased to include a director, several International Board Certified Lactation Consultants (IBCLCs) (both certified pediatric nurse practitioners and registered nurses), and support staff. Remodeling has allowed for four rooms in the Como Clinic to be dedicated to outpatient lactation support. In addition, HealthPartners has developed a consumer breastfeeding book, designed and offered classes to promote and encourage breastfeeding, developed lactation care and After Hours Care Nurse (AHCN) guidelines, designed a breastfeeding log and assessment sheet, collaborated on hospital discharge triage guidelines, and improved marketing efforts to include advertisements in the yellow pages, HealthPartner's newsletters, and a special website.

Target Population

While the program is targeted to all pregnant woman who are enrolled in HealthPartners health plans, all services are also available for the women represented by a majority of other payors in the area with a referral from the obstetric or pediatric provider or as fee-for-service. The clinic staff also serves an advocacy role in the community by being a resource for Twin Cities' health professionals. Since the development of a formalized program in the early 1990s, HealthPartners' staff have encouraged the hiring of lactation consultants at various Twin Cities' hospitals and presented information at other area venues, including didactic sessions and clinical fieldwork for all University of Minnesota pediatric residents and some PNP students, nurse-midwife students, and nurses.

While the breastfeeding initiative does not specifically target minority populations, all HealthPartners staff attend diversity training and years of experience have allowed them to learn about sensitive cultural issues by talking with the mothers. Teen mothers are targeted as high-risk in hospital discharge triage guidelines and staff work with them specifically to deal with returning to school or work.

Goals

The goals of the HealthPartners Breastfeeding & Parent Support Center are to provide education and assistance with the promotion, establishment, and maintenance of breastfeeding, including surpassing the *Healthy People 2010* goals.

Essential Program Elements

- Prenatal Education and Support. Breastfeeding is a major topic discussed in prenatal classes and seminars offered by HealthPartners, including the "Breastfeeding Your Baby" class. Obstetric providers discuss breastfeeding as a feeding option during prenatal visits. In addition, HealthPartners includes information about the services available through the Como Clinic's Lactation Center in prenatal packets distributed to all pregnant members. In an effort to identify potential problems before birth, the health plan also performs breast assessments on pregnant members.
- Discharge Planning. At about 32 weeks of pregnancy, a care coordinator nurse calls each pregnant woman to discuss feeding options and resources available through the program. This call also provides an opportunity for the health plan to seek information about whether the mother is planning to breastfeed, her family support system, and many other postpartum planning issues. HealthPartners has also developed discharge guidelines to assess the type of postpartum support a mother needs. A newly delivered mother may receive a home visit and/or be referred for a visit to the outpatient lactation clinic.
- Postpartum Lactation Support. All newly delivered mothers who are breastfeeding receive a lactation assessment over the phone three to five days postpartum. In addition, HealthPartners has designed a breastfeeding log and self-assessment sheet that are given to all breastfeeding mothers prior to discharge. Mothers are asked to bring the filled-in logs to the one- or two-week pediatrician visit. These forms allow pediatric providers to assess lactation in the first one to two weeks postpartum and identify any "red flags" that may require personal attention by a lactation consultant.

If necessary, a one-hour outpatient lactation consult is scheduled at the Como Clinic and includes education about effective breastfeeding techniques and a newborn physical assessment if the baby is less than one week old. If follow-up care is necessary, the Center's staff coordinate with primary care providers, home care, or other services. Strong communication between the Center and other facilities and providers is a key component to the success of the program. Office and phone consultation are available at the Breastfeeding & Parent Support Center Monday through Friday, 8:30 a.m. to 5:00 p.m.

Newly delivered mothers also receive HealthPartners' breastfeeding book, in its fifth edition, which includes comprehensive information about such topics as preparation during pregnancy, the mother's nutrition, breastfeeding positions, what to expect, returning to work, collecting breast milk, and weaning. This popular guide is offered in Spanish and is often inquired about by other Minnesota agencies.

Other postpartum services available through the program are a no-cost "Back to Work & Breastfeeding" class and an infant massage class with a nominal fee. These classes are offered twice a month and attendance is kept small to allow for individualized attention.

- Breastfeeding Equipment. HealthPartners offers both rental and purchasable breastfeeding equipment, including: electric, manual, and pedal breast pumps; slings; nursing pillows; washable bra pads; massage oils; and lanolin cream. The health plan charges a markup significantly less than that found in the community and the revenue generated through sales and rentals helps to provide viability for the overall program. Equipment demonstrations are provided daily by lactation consultants and the lactation support staff.

For low-income residents who are eligible for either Medicaid or MinnesotaCare, (a program for Minnesotans who do not qualify for Medicaid but are low-income and without insurance), HealthPartners provides pro-bono supplies and care.

Evaluation and Outcomes

Evaluation

In 1996, HealthPartners completed a survey of members from its medical group clinics to assess patient satisfaction and breastfeeding frequency. Results indicated high patient satisfaction with the Lactation Center services. The breastfeeding initiation rate was 80-85%; this frequency was nearly the same at five weeks postpartum. Breastfeeding frequency was approximately 65% at three months postpartum and approximately 40% at six months postpartum. (The national average is 29% at six months). Follow-up surveys continue to document extremely high patient satisfaction and high quality service.

Outcomes

Currently, all HealthPartners' medical group clinics combined have 3,200 deliveries per year and the Breastfeeding & Parent Support Center performs 2,000-2,500 consults per year at the Lactation Center, making it the largest non-hospital-based lactation facility in the United States. In addition, the staff responds to over 7,000 phone calls each year and about 20% of the patients called are subsequently seen in the clinic.

Cost

Although cost savings associated with medical benefits are a direct result of the initiative, the impetus for the HealthPartners' breastfeeding support program has always been patient satisfaction and a desire to promote the healthiest feeding option for both mother and child. The HealthPartners Breastfeeding & Parent Support Center generates a net revenue of $40,000 per year from equipment rentals and sales, making the program a profitable venture. The gross charges associated with lactation consults is approximately $250,000 per year and the staffing budget is about $150,000 per year. Fixed costs are negligible.

Replicability

HealthPartners credits the success of its program to the depth of experience represented by the specialized staff and the consistent presence of a provider champion to promote the effort. The health plan also recommends that during initial stages of development, a centralized location for breastfeeding support is beneficial. HealthPartners' Breastfeeding & Parent Support Center is located within the HealthPartners' Como Clinic. The clinic is an easy 20-minute drive from most areas of the Twin Cities. Equipment and services are centralized, which facilitates the sharing of information among lactation specialists.

Lessons Learned

HealthPartners staff advise that corporate support for a breastfeeding program, including information services, marketing, and finance, is essential. In addition, community collaboration allows for increased efficiency. Science-based care delivery is also crucial for high quality of care, reproducible results, and credibility with health professionals. Interdepartmental interface and communication between pediatrics, obstetrics, and family practice is essential. Further, educational efforts must be constant and repetitive.

Directions for the Future

HealthPartners hopes to make the breastfeeding website more interactive and user-friendly in the future. Plans include offering e-mail capabilities to allow members to ask questions electronically, providing educational links, and allowing electronic class registration. Also, HealthPartners hopes to set-up an enhanced electronic tracking mechanism within the next year to observe breastfeeding rates, demographic and perinatal data, referral sources, diagnoses addressed, and utilization and productivity data. Such a system will contribute to piloting the program at other satellite offices by allowing all sites access to care guidelines and parent handouts, enhanced equipment inventory tracking, and billing oversight and collections assistance. This in turn will allow Lactation Center staff to spend more time with patients.

The health plan also hopes to increase call coverage to include the weekends and will develop new programs to target efforts to groups with low breastfeeding prevalence and/or longevity. They will continue to translate breastfeeding support materials into key languages and HealthPartners is interested in exploring clinical research opportunities and collaborations.

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Case Study III—Independent Health (Buffalo, NY) Prenatal Case Management

Independent Health is an independent practice association (IPA) model HMO serving 395,000 members in eight counties in Western New York State.

Program Development and Implementation

Overview and Goals

Independent Health's Prenatal Case Management Program is designed to assist members who are identified as high risk for pregnancy complications. The program facilitates access to and encourages appropriate use of prenatal healthcare services, which are important factors in improving the outcome of a pregnancy.

Two registered nurses, with vast OB experience, work directly with prenatal nurses from home care agencies to coordinate home visits and health education for high-risk pregnant members and those enrolled in MediSource (i.e., Medicaid). The overall goals of the program are to identify risk factors and provide appropriate interventions to decrease the incidence of premature and low birth weight babies. Specific goals are to:

- Identify early and manage all high-risk pregnancies;
- Increase gestational age to greater than or equal to 37 weeks;
- Increase birth weight to greater than or equal to 2,500 grams;
- Minimize antenatal hospitalizations; and
- Provide participants with education and linkages to community services.

Breastfeeding is one of the many topics discussed during home visits. Pamphlets and other educational materials are distributed to reinforce material covered at these teaching sessions. Every woman enrolled in the Prenatal Case Management Program receives one postpartum home visit. At this visit, breastfeeding mothers receive help with any nursing problems they might be experiencing.

The majority of Independent Health's pregnant members are considered to be low risk and therefore do not participate in the Prenatal Case Management Program. However, Independent Health recognizes that these women also need breastfeeding education. Combining efforts with various community-based organizations and vendors, the health plan offers members discounts on breastfeeding and parenting classes, breast pump rental, and lactation consultation.

Background

The impetus for Independent Health's development of a Prenatal Case Management Program in August 1996 was two-fold. One, health plan outcomes data revealed an increase in the incidence of low birth weight babies. Second, in order to expand into a Medicaid product line, the health plan had to comply with New York Department of Health regulations that require implementation of a prenatal case management program.

Independent Health's program focuses on identifying risk factors and helping women comply with recommended prenatal care. Emphasis is placed on education and prevention. A prenatal nurse from a participating home care agency visits each woman enrolled in the program and completes a nutritional, environmental, psychosocial, and physical assessment. Additional home visits are authorized as needed for each member and referrals to necessary community services are provided. The Prenatal Case Manager works closely with the physician and provider team in mutually supporting the needs of each high-risk pregnant member.

Target Population

The target population for the Prenatal Case Management Program includes both commercial health plan members who are identified as high risk for pregnancy complications and all pregnant MediSource members. In 1999, 750 women participated in the program.

Essential Program Elements

The heart of Independent Health's Prenatal Case Management Program is the identification of high-risk members and subsequent home visits by experienced prenatal nurses.

Identification of High-Risk Pregnant Enrollees

Women at high risk are identified three ways: physician referral, claims data, and hospital admissions data. Once the potential candidates have been identified, case management staff score their risk factors and identify those who will receive an in-home risk assessment from a home health nurse. Ideally, the first visit takes place within a week to 10 days of a physician referral and within the first 12 weeks of pregnancy if the woman is identified through claims or hospital admissions data. Of course, many women delay seeking prenatal care and therefore may not be identified and recruited until their fifth month of pregnancy or later.

Home Visits

At the first home visit, the nurse-who is a specialist in maternal/child health-does a basic health assessment (weight, blood pressure, urine check), addresses any special health concerns (diabetes, hyperemesis, or bleeding), assesses the housing/environmental situation (heat, electricity, general safety), and provides education, including information about breastfeeding. In addition, the nurse will provide referrals to appropriate community support (for example, in the case of domestic violence), make sure that an application for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is completed, and troubleshoot any transportation problems the woman might face.

The completed health assessment is then faxed to the Prenatal Case Management Program. A case manager summarizes it, attaches the nurse's notes, and forwards the entire report to the woman's doctor. However, if the nurse identifies a serious or potentially serious medical problem, she will immediately call the doctor. The two obstetric (OB) nurses who staff Independent Health's Prenatal Case Management Program will also be in contact with the physician's office to discuss a plan of care as necessary.

In general, most participants receive a second visit at 32 weeks and a third visit two to four weeks after the baby is born. Based on the nurse's assessment and/or the clinical course of the pregnancy, women may receive more visits as necessary. Conversely, if the physician's initial assessment suggests frequent visits, but the nurse determines that the situation is improving, the number of visits may be decreased. The idea is to meet the unique needs of each woman.

In that vein, there are no co-pays for these home visits, for either commercial or MediSource members. The health plan is aware that commercial members at high-risk might not be working because they must be at home on bedrest. Therefore the health plan has removed any potential economic barriers to those women receiving the in-home care they need.

Independent Health has a variety of activities focused specifically on breastfeeding:

- Once a woman is identified for the Prenatal Case Management Program, she receives a welcoming cover letter and a booklet that covers a lot of prenatal information, including breastfeeding.
- During the home health nurse visit, that booklet is referenced and the nurse encourages breastfeeding.
- Obstetricians also promote breastfeeding. The Prenatal Case Management Program communicates directly with obstetricians through educational articles stressing the importance of breastfeeding and regular communiqués about program components related to breastfeeding, such as breast pump rental discounts.
- A newsletter-one for commercial members and one for MediSource members-is mailed routinely to pregnant women. Articles about breastfeeding are included in that newsletter.
- After the baby is born, the nursing mother can receive help from a variety of sources. The home health nurses can go back into the home to provide support and guidance. Many of Independent Health's pediatricians have lactation consultants on staff and some hospitals have them as well. The health plan has contracted with a vendor, Care Connection, that deals specifically with breastfeeding. Care Connection provides pump rental, conducts classes, and also provides lactation consultation. Independent Health also offers telephone support through its 24-hour nurse triage line called TeleSource, as well as through a service that provides audiotaped recordings on demand, including one that addresses breastfeeding problems.
- Mothers and babies who meet certain medical criteria (preterm infant, multiple gestation, Down's Syndrome, cleft palate/lip, mother on medication) that can preclude nursing can rent breast pumps through the health plan. Depending on the members' plan, the copay is either 50% or 20%. There is no copayment for MediSource members.

Services Offered to Low-Risk Pregnant Members

In order to reach those low-risk women who represent the majority of Independent Health's pregnant enrollees, the health plan offers breastfeeding classes at a discounted rate through the plan's Feeling Fit Department. In addition, Independent Health asks hospitals to identify live births and then sends out a cover letter along with an educational packet on postpartum care that specifically encourages breastfeeding and provides the TeleSource hotline number.

Evaluation and Outcomes

Since the inception of the program in 1996, a total of 2,701 members have been recruited to participate and 2,116 of these members enrolled (a participation rate of 78%). Of the 2,116 who enrolled, 1,270 were MediSource members and 846 were commercial HMO members. Commercial participants had a mean age of 28 years old and 22% were minority. MediSource participants had a mean age of 24.7 years old and 38% were minority.

The mean gestational age for MediSource members at enrollment has increased since the launch of the program. In addition, the incidence of low birth weight babies dropped significantly between 1997 and 1998 and dropped non-significantly between 1998 and 1999. At this writing, data were not yet available for 2000. MediSource members who participated in case management were 40% less likely to deliver a low birth weight infant and 42% less likely to deliver pre-term.

For commercial members, the mean gestational age at enrollment into case management showed a statistically significant decrease over time. The incidence of low birth weight deliveries dropped significantly between 1997 and 1998, however increased significantly between 1998 and 1999. Data were not yet available for 2000. Health plan staff speculate that the increase in low birth weight babies among this population might be due to higher-order multiple births related to fertility treatments. Members who participated in case management were 45% less likely to deliver a low birth weight infant. There were no differences in the likelihood of delivering pre-term.

While Independent Health has excellent information about the efficacy of the program for both commercial and MediSource populations, it has not collected information specific to the breastfeeding promotion components of the program. Therefore, as of yet there are no outcomes data on the percentage of women who breastfeed, the success of their breastfeeding experience, or the length of time they continued breastfeeding.

In addition to outcomes data, Independent Health conducts a consumer satisfaction survey each year for case management participants. Overall, satisfaction is very high. For the seven specific satisfaction items on the survey, mean responses on the 4-point scale were between 3.74 and 3.98, indicating that the majority of respondents were very satisfied with the program. Overall ratings of the benefit of the program indicated that 75% rated the program as very beneficial and 99% of respondents felt the program was at least a little beneficial.

Cost

The health plan reports that on average, the two prenatal and one postpartum nurse home visits cost $210 and an additional $10 is spent on educational materials and postage for each member. Although the estimated program costs are $220 per member, this figure does not include the cost of prescriptions, additional visits that might be required, breast pump rental, or discounts offered on classes. Nor does it include the other direct and indirect costs required to staff and run the program.

Replicability

Independent Health is proud that their program brings health professionals directly into members' homes. The health plan sees those in-home visits as essential for replication of their Prenatal Case Management Program. Staff also note that waiving a co-pay for these visits is critical and that such a decision obviously requires significant management buy-in.

Program staff provide the following advice to other health plans seeking to follow in their footsteps: "Have previous years' birth outcomes data, set up a strong program description, and know what you want to accomplish. Expect resistance, but keep moving forward."

Lessons Learned

Past consumer satisfaction surveys revealed some member dissatisfaction with the written materials handed out by the nurses during the home visits. As a result, Independent Health has created a new comprehensive educational package on the topics of prenatal care, after delivery care, and newborn care. These educational packets will be available for all members in the case management program in early 2001.

Prenatal Case Management staff state that when the program began, some physicians were resistant to the program. Staff addressed this barrier by visiting each doctor's office, explaining the program, and giving examples about the costs of caring for premature babies and how they can be diminished by spending a few dollars upfront on this program. The job of convincing physicians to utilize the program has become easier now that there is evidence of program efficacy.

Directions for the Future

Starting in 2001, the Prenatal Case Management Program will introduce an "educational visit" to participants, so that even if a physician does not sign off on a skilled nursing visit, the program can still get a nurse into the home to do a psychosocial assessment and to figure out what other resources the woman might need.

In addition, program staff are planning for the enhancement of a pediatric case management program to follow babies born to high-risk mothers, and utilization of a new software program that could be used to track breastfeeding information.

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Case Study IV—Kaiser Health Plan of Georgia (Atlanta, GA) The Maternal/Child Health Lactation Program

Founded in 1945, Kaiser Permanente is a nonprofit, group-practice health maintenance organization (HMO) with headquarters in Oakland, California. Kaiser Permanente serves the health care needs of members in 11 states and the District of Columbia. It encompasses Kaiser Foundation Health Plan, Inc., Kaiser Foundation Hospitals, and the Permanente Medical Groups. Kaiser Health Plan of Georgia is a group/staff model HMO serving 270,000 members in Atlanta, GA.

Program Development and Implementation

Overview and Goals

Kaiser Health Plan of Georgia's Maternal/Child Health Lactation Program is a service provided by nurse educators and lactation consultants in coordination with the OB/GYN practitioners, who include physicians, nurse-midwives, nurse practitioners, and physician assistants. The primary focus of the program is education. Kaiser Health Plan of Georgia has created several unique educational pieces—including a video called "Celebrate the Miracle"—that form the core of a comprehensive prenatal education program.

The Goals of the Lactation Portion of the Program are to:

- Provide enrolled pregnant women with the information to make decisions about breastfeeding their newborns;
- Provide education to women planning to breastfeed;
- Provide support services to breastfeeding women; and
- Provide continued education to practitioners on lactation topics.

Kaiser Health Plan of Georgia's overarching goal is to reach pregnant women early and often with pro-breastfeeding messages from a variety of sources. As a result, the health plan has created a number of prenatal educational opportunities and expanded access to postpartum support by engaging a variety of providers, including lactation consultants and nurse-midwives, in counseling efforts.

Background

Nurse-midwives have been essential to the development of the health plan's breastfeeding promotion activities. In the early 1990s, when nurse-midwives were becoming part of Kaiser Health Plan of Georgia, they saw the need to make hospital practices more conducive to breastfeeding. As champions of the program, they worked hard to establish programs and practices that would encourage enrollees to breastfeed. While they did not conduct a formal needs assessment, they drew upon their knowledge of the literature that clearly demonstrates the benefits of breastfeeding to mother and baby. Within the last several years, the health plan has more purposefully developed and expanded the program through the efforts of the

assistant manager for OB/GYN—who is herself a certified nurse-midwife—and two lactation consultants. OB/GYN and pediatric practitioners were consulted in the development of the program.

The program now includes special prenatal education for members, postpartum support services, and continuing education for providers. While Kaiser Health Plan of Georgia has not conducted an evaluation of the program, and therefore does not have outcomes data, staff of the Maternal/Child Health Lactation Program believe that they are making a difference in the lives of mothers and babies by consistently sending clear messages and providing the skills and encouragement that support breastfeeding.

Target Population

The target population for the Maternal/Child Health Lactation Program is all pregnant women enrolled in Kaiser Health Plan of Georgia. Each year, the health plan provides between 4,000-5,000 new OB visits, which result in approximately 3,000 births. (The difference between the two numbers reflects miscarriages, other fetal deaths, and women leaving the plan prior to delivery.)

Essential Program Elements

Prenatal Education

An award-winning video called "Celebrate the Miracle" was produced by the health plan specifically for its members. This video, which is shown to all women during their first obstetric visit, begins the process of prenatal education. "Celebrate the Miracle" covers basic information about prenatal care, nutrition, exercise, and preparation for parenting. The video introduces the health plan's concept of prenatal care, encourages women to attend classes—including breastfeeding classes—and delivers a strong message about the positive health aspects of breastfeeding.

The Healthy Mother/Healthy Baby Notebook is a manual that provides additional prenatal education materials and includes an extensive section on breastfeeding. "Expectations" is a series of 16 educational handouts designed as interactive tools. At each prenatal visit, the woman and her practitioner review the contents of a specific handout. Breastfeeding is one of the topics discussed.

Breastfeeding classes are offered in the evenings at no cost to members. Classes help both to assist women with the decision to breastfeed and to teach the basics of breastfeeding. Additional breastfeeding support is provided through ongoing counseling and discussion during prenatal visits with either nurse-midwives or OB/GYNs. Prenatal appointments with lactation consultants are also available for women with special needs, such as twin gestations.

Postpartum Breastfeeding Support Services

A variety of lactation support services are offered. Women can bring their babies in for a one-on-one visit with a certified lactation consultant that lasts anywhere from 50 minutes to an hour-and-a-half, depending on the mother's needs and the baby's cooperation. These visits are coordinated for the mother's convenience so that she can meet with a lactation consultant in an office near her home, without necessarily having to travel to her own doctor's office.

Kaiser Health Plan of Georgia is also planning to begin offering office visits with nurse-midwives. Starting this year, the plan is to schedule breastfeeding consultations with the nurse-midwives, which means that breastfeeding women can choose to meet with the same provider who counseled them prenatally and helped with the start of breastfeeding. The health plan believes that expanding access to professionals who can provide breastfeeding support is essential to helping women continue with breastfeeding.

For women who are in need of support after hospital discharge, including all teen mothers, women who have had Cesarean sections, and other women identified by the physicians or nurse-midwives as meeting certain medical criteria, the health plan offers home visits from perinatal community nurses. The home health nurses have specialized training in lactation support. Some of the nurses are employed directly by the health plan while others work for an agency with which Kaiser Health Plan of Georgia contracts. In addition, women whose babies are in the Neonatal Intensive Care Unit (NICU) automatically receive a follow-up phone call from a lactation consultant within one week. The lactation consultants continue to monitor these mothers and babies through regular phone calls, as necessary.

For those mothers who are unable to come in for a lactation consultation or who have questions, the health plan offers telephone consultations with certified lactation consultants. Breastfeeding mothers can talk on the phone with a lactation consultant Mondays through Fridays during office hours and can leave messages 24 hours a day.

The lactation consultants also call all breastfeeding women at one and three weeks after delivery.

In addition, Kaiser Health Plan of Georgia's pediatric department has begun a trial of group medical appointments for new mothers and their babies at the time of the two-week appointment. The group appointment provides new mothers the opportunity to meet, in a group, with a pediatrician to discuss newborn care, breastfeeding, and other relevant issues.

Continuing Education for Providers

In order to increase providers' knowledge about breastfeeding and to augment their abilities to support breastfeeding women, the health plan offers continuing education courses. Most recently, the nurse-midwives had four hours of continuing education. Health plan OB/GYNs, nurse practitioners, physician assistants, and advice nurses will also be offered this program.

Cost

Staff of the Maternal/Child Health Lactation Program are not able to report on costs of the program, partially because it is impossible to disaggregate the cost of the breastfeeding promotion/support activities from the cost of the entire prenatal education program. Some expenses include production/printing of the educational materials, lactation consultant salaries, continuing education costs, and personnel costs for perinatal community nurses.

Senior managers at Kaiser Health Plan of Georgia are in full support of the Maternal/Child Health Lactation Program and provide ongoing budgetary support for all components of the program.

Replicability

Kaiser Health Plan of Georgia representatives advise that health plans planning to replicate this program must first have administration and staff commitment. The program must be designed so that breastfeeding promotion is a concerted effort by all staff who interact with pregnant women; it cannot be the responsibility of just one person, or even just one type of provider. Pro-breastfeeding messages must be laced throughout the prenatal program and be provided in different formats, including print, video, didactic learning sessions (such as breastfeeding classes), and one-on-one sessions with providers.

The midwifery component is very important. Nurse-midwives have been providing care to pregnant women at Kaiser Health Plan of Georgia for almost a decade. Enrollees have the choice of either an OB/GYN or a nurse-midwife. Even in high-risk pregnancies, in which an OB/GYN must be involved, nurse-midwives may co-manage the pregnancy. The nurse-midwives meet with all women during the initial obstetric visit, whether or not an OB has been selected for prenatal care. They are also at the hospital and provide immediate postpartum lactation support to most women.

Lessons Learned

Staff have learned some important lessons that have led to changes in the Maternal/Child Health Lactation Program. First, breast pump rental for women with babies in the neonatal intensive care unit (NICU) was discontinued recently after it became clear that the lack of a good system for tracking the pumps resulted in the loss of pumps each year. Staff note that there are many ways for women in Atlanta to rent breast pumps and so they did not feel this was a good use of health plan resources.

Faced with consistently low attendance at daytime breastfeeding classes, staff made the decision to discontinue those classes and focus instead on the evening classes. However, despite being no cost to participants, the frequency of the class offerings, and the geographic diversity of class locations, it is still a challenge to encourage women to attend class. Kaiser Health Plan of Georgia staff believe that the primary reason is that women's lives are so busy. Therefore, the solution has been to infuse breastfeeding messages throughout the prenatal care and educational components of the program and to provide ample access to knowledgeable providers.

Directions for the Future

Staff of the Maternal/Child Health Lactation Program have several plans for the future, including:

- Conducting an outcomes study to verify what they believe to be true about the value of this program in improving breastfeeding rates among enrollees;
- Improving hospital practices, including having women see a nurse-midwife soon after birth and helping hospital staff gain the knowledge and expertise they need to support women who want to breastfeed;
- Expanding the breastfeeding components of all the educational materials; and
- Considering the reasons that so many women seem to stop breastfeeding after the first few months and then designing services to support them in continuing.

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Case Study V—Kaiser Permanente Northwest (Portland, OR) The Mother-Baby Program

Founded in 1945, Kaiser Permanente is a nonprofit, group-practice health maintenance organization (HMO) with headquarters in Oakland, California. Kaiser Permanente serves the health care needs of members in 11 states and the District of Columbia. It encompasses Kaiser Foundation Health Plan, Inc., Kaiser Foundation Hospitals, and the Permanente Medical Groups. Kaiser Permanente Northwest serves more than 450,000 people in Northwest Oregon and Southwest Washington, and provides dental care to about 185,000.

Program Development and Implementation

Overview

Kaiser Permanente Northwest has been educating members and providers about the health benefits of breastfeeding for more than 10 years. The health plan's innovative program incorporates prenatal education, inpatient lactation support, and outpatient lactation consultation services, forming a comprehensive approach to breastfeeding promotion that spans a woman's pregnancy, birth, and postpartum care. In addition, through staff education efforts, Kaiser Permanente ensures that the health plan's strong commitment to breastfeeding promotion is demonstrated in all member services.

Background

In the mid-1980s when post-birth length of stay was at a minimum and new mothers were requesting discharge as early as 12 hours after birth, pediatricians at Kaiser Permanente Northwest expressed concern about the medical wellbeing of newborns. As is standard, a follow-up visit did not occur until two weeks after the baby's birth. This made it difficult to promote breastfeeding, as a new mother might abandon the attempt before the first doctor's visit.

At the same time, research about the health benefits associated with breastfeeding for both mother and newborn was gaining prominence. Kaiser Permanente's first lactation consultant helped establish the health plan's lactation support services and breastfeeding education. The newly-created Mother-Baby program was added to routine postpartum care. It brings mother, baby, and family back to the hospital within three days of discharge to monitor feeding techniques, with an emphasis on breastfeeding, and answer any questions new parents may have.

In 1992, Kaiser Permanente Northwest applied for the World Health Organization's (WHO) letter of intent to become "Baby Friendly," and in January 2000, became one of only two dozen hospitals in the United States to earn the official designation.

Goals

Kaiser Permanente's goals are to educate the mother-to-be and new mother, to educate providers so that they can answer questions and offer support, and, most importantly, to support the new mother to help her be successful at breastfeeding.

Target Population

All pregnant enrollees are targeted for Kaiser Permanente Northwest's breastfeeding program. The first visit after a woman informs the health plan she is pregnant is a group childbirth class. Breastfeeding is highly encouraged during this initial visit and in all educational efforts throughout the pregnancy.

All literature is designed to be culturally sensitive. The program also encourages breastfeeding in minority populations by offering educational materials in Russian, Spanish, and Vietnamese and by ensuring that the bilingual instructors for the Russian and Spanish childbirth classes understand cultural as well as lactation issues. Lactation telephone counseling is also available through an interpreter. A prenatal clinic offered for teens includes a breastfeeding education component.

Essential Program Elements

Prenatal Breastfeeding Classes

The health plan begins educating pregnant women about breastfeeding from the initial prenatal visit and continues to reinforce the health benefits through postpartum follow-up. Newsletters provided during preparation for childbirth classes reinforce the health benefits of breastfeeding to both mother and baby. In addition, the fifth class in the six-class series concentrates exclusively on providing information to parents about feeding options. This class strongly emphasizes the importance of breastfeeding and includes such areas as benefits, anatomy/physiology, positioning, social issues, sexuality, support systems, and breastfeeding resources. A class specifically devoted to breastfeeding for working mothers is also offered.

Inpatient Lactation Support

Kaiser Permanente Northwest's Sunnyside Hospital offers full inpatient lactation support. When the mother is admitted to the hospital prior to birth, she is given a packet of information that includes detailed information about breastfeeding. Closed circuit television available in her room also includes video presentations about various postpartum topics, including breastfeeding. All mothers are visited after birth by International Board Certified Lactation Consultants (IBCLCs) to allow breastfeeding issues to be identified and corrected early on. It is important to note that in all prenatal and postpartum contact with mothers, educators and nurses ask, "Will you be breastfeeding?" rather than offering the option of formula-feeding. Staff certainly do not criticize or offer diminished services for those mothers electing to formula feed, but rather strive to encourage breastfeeding in all contacts with members.

Newborns stay in the room with mothers after birth and rocking chairs and sofas provide comfortable positioning for breastfeeding. Private rooms and breast pumps are available in the nursery for mothers whose babies require special attention. Maternity ward nurses provide additional support and assist with breastfeeding technique.

Mother-Baby Program

While the mother and baby are still in the hospital, an outpatient lactation consultant schedules return visits for mothers, babies, and family members within three to five days after birth. In some non-Kaiser facilities, although hospital staff provide inpatient support, a Kaiser Permanente nurse individually visits each Kaiser Permanente patient to personally schedule her follow-up visit and invite her to participate in the Mother-Baby Program.

The one-on-one outpatient meeting with a board-certified lactation specialist is scheduled for one hour. During this time, the lactation consultant conducts a physical assessment of the baby, verbal assessment of the mother, and a breastfeeding assessment to observe the mother's technique and identify problems early on. Additional follow-up visits are scheduled if necessary.

Participation in the Mother-Baby Program is not exclusive for breastfeeding mothers. All mothers are invited to participate and an overall feeding and baby assessment is conducted. In fact, this initial outpatient visit has been accepted to qualify for the well-child visit measure for the National Committee on Quality Assurance's (NCQA) Health Plan Employer Data and Information Set (HEDIS). Lactation consultants offer appointments and are available for telephone consult seven days a week. A breastfeeding hotline is also available.

Breast Pump Rental or Purchase

Resources for breast pump rental or purchase are available to guide mothers to quality equipment. Vendors who provide pump rentals offer discounts to Kaiser Permanente members. In fact, those Kaiser Permanente members whose employers have included durable medical equipment coverage in their benefits package and who require a breast pump because of medical reasons may rent or purchase a breast pump under the coverage. Additionally, those who are returning to work after birth may qualify for similar coverage.

Staff Education

In addition to the expertise of lactation consultants who come into contact with mothers and their newborns on a daily basis, Kaiser Permanente requires breastfeeding education for all new inpatient hires-from new staff physicians to clerical staff who come into contact with members through telephone appointment bookings. This ensures that every Kaiser Permanente staff member is aware of the health plan's commitment to and promotion of breastfeeding. The health plan also offers coordinated training for nurses who want to become certified lactation consultants.

Evaluation and Outcomes

Evaluation

Kaiser Permanente Northwest is able to track the success of its breastfeeding program through its electronic medical record system, EpicCare, which captures detailed information about each mother's visit. Descriptive information fields within this specialized system allows detailed information for all mothers and babies to be captured both prenatally and postpartum. Nurses and physicians can also be prompted by the system to conduct necessary follow-up.

Outcomes

Overall assessment demonstrates high patient and physician satisfaction with Kaiser Permanente Northwest's breastfeeding program. In 1999, 3,342 mothers (about 60% of pregnant members) participated in Kaiser Permanente's prenatal class series, including those mothers who have given birth before. Over 90% of new mothers participate in lactation follow-up with the Mother-Baby Program. Currently, nearly 90% of mothers who deliver at Kaiser Permanente Northwest facilities or contracted hospitals breastfeed at discharge, compared to 60% in 1995. Kaiser Permanente has also noticed improved health of breastfed babies as shown by decreased readmits and transfers. Mothers who breastfeed are likewise healthier.

Cost

Total annual expenses for the Mother-Baby Program, including the follow-up well-child visit with a certified lactation consultant and all lactation support services, are less than $400,000 for approximately 5,000 births per year. In working with contracted hospitals that are non-Kaiser facilities, expenses incurred, such as those associated with predischarge visits by Kaiser Permanente staff, are necessary to ensure the success of the health plans' breastfeeding promotion program. In addition, because Kaiser Permanente no longer accepts donations of free formula, it incurs an annual expense of approximately $30,000 for formula when it is medically necessary for supplemental feeding. Although many aspects of Kaiser Permanente Northwest's breastfeeding initiative are cost intensive, return on investment is evidenced in decreased readmissions and office visits for illness and lactation concerns.

Replicability

Facilitators of Kaiser Permanente Northwest's breastfeeding program recommend that, to be successful, any similar initiative in another health plan would require a physician and non-physician champion to serve in leadership roles. The key to overall program success is consistent research-based provider education to gain physician and nurse buy-in and coordination of the efforts of all caregivers, especially in non-group model health plans. Kaiser Permanente believes that it is important to ensure that all employees actively support the health plan's commitment to breastfeeding promotion.

Lessons Learned

When Kaiser Permanente closed its Best Kaiser Hospital in 1996 and decided to contract with three other non-Kaiser hospitals in addition to Kaiser's Sunnyside facility, Senior Neonatologist Gunnar Waage, MD recognized the difficulties the health plan would encounter in coordinating care in non-Kaiser facilities. While the health plan could exact control over staff actions at its own Sunnyside Hospital, gaining the cooperation of independently contracted hospital staff could be a challenge.

In answer to this challenge, Dr. Waage initiated the development of a Neonatal Committee to coordinate services among facilities. This committee is comprised of a physician representative from each facility with which Kaiser Permanente contracts, OB/GYNs and pediatricians, the chief of pediatrics, and the pediatric subspecialities service manager. Kaiser Permanente's commitment to the promotion of breastfeeding

is embedded in a long-term program. Despite the retirement and departure of initial program champions, the Mother-Baby Program flourishes.

Another difficulty Kaiser Permanente Northwest encountered was formula company's marketing strategies to encourage formula use through the distribution of gift bags to new mothers. Kaiser Permanente eliminated this distribution in their Sunnyside Hospital and works to ensure that members who give birth at non-Kaiser facilities do not receive these promotional packages.

Directions for the Future

In keeping with the American Academy of Pediatrics' recommendation to continue breastfeeding for the first year of life and in recognizing that breastfeeding methodologies change when babies begin solid foods, Kaiser Permanente will begin to offer a two-hour class about solid feeding and the changes in breastfeeding that will occur when solid feeding is initiated. This education will include a recommendation to delay the introduction of solid foods until six months.

In addition, Kaiser Permanente will continue to encourage staff nurses to become certified lactation consultants to increase their level of expertise and allow for increased coordination of care. Kaiser Permanente's on-site research capacity will continue to identify barriers to breastfeeding and strategies to remove them.

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Case Study VI—Kaiser Permanente Southern California (Pasadena, CA) Lactation Promotion

Founded in 1945, Kaiser Permanente is a nonprofit, group-practice health maintenance organization (HMO) with headquarters in Oakland, California. Kaiser Permanente serves the health care needs of members in 11 states and the District of Columbia. It encompasses Kaiser Foundation Health Plan, Inc., Kaiser Foundation Hospitals, and the Permanente Medical Groups. Kaiser Permanente Southern California provides health care services to 2.9 million members.

Program Development and Implementation

Overview

Kaiser Permanente Southern California's integrated health delivery system allows the health plan to emphasize the importance of breastfeeding through services provided across a woman's pregnancy. From prenatal education through postpartum assessment, and through inpatient care and outpatient services, the health plan's program to encourage breastfeeding offers a wide-range of services. Medical Centers offer many, if not all, of the following options: prenatal education classes, inpatient lactation consults following birth, group-setting postpartum lactation clinics and support groups, individualized outpatient problem-solving appointments, a 24-hour breastfeeding information line, and breast pump rental and purchase. In supporting such a wide geographic area, the various Medical Centers that compose Kaiser Southern California uniquely tailor program components to meet the specific needs of the diverse racial and ethnic populations each serves.

Background

Kaiser Permanente Southern California realized in the early 1980s that a breastfeeding program targeted to new mothers could encourage improved health of members. Needs assessments conducted at various Medical Centers demonstrated excellent breastfeeding initiation rates followed by dramatic decreases within the first two weeks. Breastfeeding initiation rates dropped as much as 26% between the time of hospital discharge and the first scheduled newborn visit. In addition, the health plan realized significant use of urgent care, visits to the emergency room, and contact with advice nurses in the early postpartum period. Between 35-56% of patients visited their doctor prior to the first scheduled newborn visit and up to 60% sought phone advice within 60 hours of discharge. A 1.5% readmission rate for preventable problems existed despite feelings that this could be reduced with early follow-up and intervention. Also, patients complained that caregivers in inpatient and outpatient care settings provided inconsistent information.

Caregivers also recognized that with the busy hospital stay following birth, there was limited time to reinforce prenatal education, observe breastfeeding, and teach patients what to expect.

Formal programs to address these concerns and promote breastfeeding started in Kaiser's San Diego, Sunset, and Fontana facilities in the early 1980s, with other Medical Centers to follow until all Kaiser Permanente Southern California facilities had initiatives in progress. In 1988, the health plan developed a regional consensus statement on principles of perinatal care, with breastfeeding as one of the major foci. In the early 1990s, Kaiser's progress gained more momentum when the American Academy of Pediatrics' (AAP) and the State of California issued guidelines which required access to medical personnel in the early days after discharge. It is in those early days that lactation support is so crucial. In early 1998, local coordinators of breastfeeding programs at the various facilities began to meet to share information and to develop consensus on methodologies addressing breastfeeding concerns.

Goals

Although each Medical Center is under the auspices of the Kaiser Permanente Southern California health care system, each center addresses breastfeeding concerns in a unique way to best meet the healthcare needs of its population. In general, however, each initiative strives to:

- Meet or exceed *Healthy People 2010* goals for breastfeeding initiation and increase breastfeeding duration (including educating, assisting, and supporting working mothers to continue breastfeeding after return to work);
- Improve utilization of a clinic devoted exclusively to postpartum follow-up and breastfeeding issues, rather than use of emergency room or urgent care facilities;
- Decrease hospital readmission rates; and
- Improve patient satisfaction by increasing continuity of care and consistency of information given to new patients.

Target Population

Kaiser Permanente Southern California's breastfeeding initiatives are targeted to and available for all newly delivered mothers. Special attention is devoted to pregnant teens through special teen OB clinics. In addition, the health plan is committed to providing culturally competent care and education in all areas, including this one. Therefore, Kaiser offers region-wide training for all caregivers, including a class devoted exclusively to educating providers about varying cultural beliefs surrounding breastfeeding. Challenges such as health beliefs, family hierarchy, learning styles, and privacy issues are addressed to educate providers and nurses about providing culturally competent care.

Each Medical Center serves a unique composition of racial and ethnic groups. Educational programs, classes, and services are developed to meet specific needs of the community. For example, to serve the breastfeeding needs of the Latino membership (over 40% in some areas), Kaiser provides culturally and linguistically appropriate educational materials in Spanish. Rather than providing direct translation of information, care is taken to translate into a conversational terminology specific to each culture. Readability is aimed at a fifth grade reading level to help ensure comprehension. Interpreters are utilized whenever possible to ensure clear and concise communication and understanding. In addition, the health plan has realized that some ethnic groups prefer hearing or viewing educational materials rather than reading them. To ensure the learning needs of the various ethnic populations are

being met, the health plan offers a toll-free, 24-hour a day, seven days a week recorded health phone message service. Breastfeeding education videos are also available for loan from an extensive video library.

Essential Program Elements

Prenatal Education

The health plan offers no-cost local prenatal class series for members every four to eight weeks, depending on the facility. Breastfeeding is integrated into these classes, which address the entire continuum of care for the prenatal mother. The series is offered in Spanish in many Medical Centers and can be specifically targeted to teen mothers in the Teen Pregnancy Clinic. Prenatal information sheets and packets provide information about various aspects of pregnancy and childbirth, including advantages and tips about breastfeeding.

Inpatient Lactation Support

Many Kaiser hospitals provide lactation consultants or educators to offer hands-on lactation support and education on basic management techniques to postpartum women. Specialized information, referral, and support are provided when breastfeeding problems are encountered. Some Medical Centers offer an inpatient mother's class that includes breastfeeding instruction and information.

Postpartum Outpatient Support

The "Great Starts" Mother-Baby Follow-up Program, also referred to as "Breastfeeding Clinic" or "Lactation Clinic" in other Medical Centers, is a service open to all mothers and babies during the first days after discharge. Appointments are booked prior to hospital discharge or within 24-48 hours of discharge by phone. In addition to general medical assessment of the newborn and mother during the one-hour consult, all clinics provide breastfeeding assessment along with assessing newborn hydration status; evaluation for breastfeeding effectiveness; and correction of inefficient or incorrect suckling. Depending on facility, the clinics are operated five to six days per week and many Medical Centers do assessment/evaluation over the phone when patients do not schedule in-person appointments.

Kaiser Permanente Southern California also offers one-on-one lactation support to mothers who are experiencing difficulties with breastfeeding. Referral or coordination of services with pediatricians and/or OBs is arranged as needed when evaluation does not meet established norms. A care plan is developed for each specific situation with follow-up until breastfeeding problems are resolved. Approximately 20-25% of all babies and mothers are seen more than one time.

At many facilities, a breastfeeding support group offers weekly or monthly information and support to new parents during the early months of parenting. Some programs include education on many basic parenting issues as well as breastfeeding services. In addition, breastfeeding and returning to work/school classes teach mothers how to maintain a milk supply when they need to be separated from their baby on a regular basis.

Breastfeeding Information Line

Kaiser Southern California also offers an automated breastfeeding information telephone line 24 hours a day/seven days per week. Up to 20 of the most commonly asked questions about breastfeeding are addressed in areas such as mother concerns, infant concerns, milk supply problems, dietary concerns, and breast pump information.

Breast Pump Rental Services

Kaiser offers reduced rates for breast pump rental or purchase through its Medical Center Health Stores. In addition, mothers participating in Medi-Cal (California's Medicaid system) or who have coverage for durable medical equipment enjoy breast pump provision as a covered benefit when the baby cannot breastfeed or the mother has complications that affect breastfeeding.

Provider Education

At least annually, providers attend in-services on the latest research, current practices, policies, and programs in breastfeeding. In addition, they attend classes about cultural diversity issues,

Evaluation and Outcomes

Evaluation

Kaiser tracks improvements in breastfeeding rates, utilization rates, and patient satisfaction through patient surveys and chart review. The Woodland Hills facility has established a lactation support database to capture prenatal information, postpartum assessment about mother and child as provided through outpatient lactation support, as well as tracking of advice nurse inquiries. This database is accessible across the entire health plan's area network.

Outcomes

Kaiser Southern California has observed significant improvements in breastfeeding initiation and long-term breastfeeding rates since the inception of their health plan-wide focus on breastfeeding. Currently, 64-87% of mothers are breastfeeding at hospital discharge and 61-77% are breastfeeding at two weeks. The Panorama City facility has studied long-term breastfeeding rates for three consecutive years, starting from the year prior to the initiation of a breastfeeding clinic through the first two years of clinic operation. Their results are on the next page.

Infant Age	Long-Term Breastfeeding Rates	Improvement
2 weeks	1997 - 54% 1998 - 61% 1999 - 74%	20% breastfeeding rate increase in three years
2 months	1997 - 33% 1998 - 42% 1999 - 56%	23% breastfeeding rate increase in three years
4 months	1997 - 22% 1998 - 27% 1999 - 40%	18% breastfeeding rate increase in three years
6 months	1998 - 17% 1999 - 30%	13% breastfeeding rate increase in two years

In addition to improvements in breastfeeding rates, Kaiser Permanente Southern California has also observed reduced hospital readmission rates (the most dramatic being a decrease from 1.5% per year to .5%) and reduced clinic utilization.

Cost

The resource intensity of Kaiser's breastfeeding initiative is low. One estimate put start-up costs for the program at approximately $56,000, but most of the programs have developed out of grassroots efforts. Facility costs are negligible because existing medical center space is utilized. Maintenance costs for one facility are estimated at $65,000-$85,000 per year. It is also estimated that in the first year of operation, Kaiser saved $91,000 by reducing unscheduled emergency room visits. Long term return on investment translates into healthier babies, children, and mothers and increased patient satisfaction.

Replicability

Kaiser Permanente Southern California has already demonstrated the replicability of its breastfeeding initiatives within the region it serves. Since the early 1980s when only three of the Medical Centers originally initiated breastfeeding programs, all of the Medical Centers have adopted similar programs with variations to cater to the specific healthcare needs of the populations they serve.

Program administrators believe that the success of a similar program in another healthcare setting necessitates firm health plan dedication to the importance of breastfeeding, determination to hire well-trained and dedicated staff to operate and guide the program, and ongoing member and provider education.

Lessons Learned

Kaiser Permanente Southern California has learned a great deal during the development, implementation, and continuous quality improvement of its breastfeeding initiative. In response to observed outcomes, the health plan made some enhancements to continue to meet its membership needs. Motivating mothers to return to the Medical Center for outpatient lactation consultation soon after delivery has been a challenge. To address this, some centers added inpatient lactation support. Other centers increased access to the outpatient breastfeeding clinics by increasing hours of operation or days of coverage.

Another difficulty encountered has been the newness of the lactation consultant field as an integrated part of mainstream American medicine. This has resulted in a variation in skill levels and scope of practice between lactation consultants. A lactation consultant website was created to facilitate better sharing of resources and knowledge between disciplines and medical centers. In addition, a Southern California Lactation Consultant Committee, comprised of representatives from all the facilities, held its first meeting in November 2000.

Kaiser also began working with formula manufacturers in the mid-1990s to meet competing needs of both parties. The formula manufacturer agreed to provide "breastfeeding support bags" to those mothers who have decided to breastfeed. The company includes water bottles and breast pads for the mother instead of baby bottles and coupons for formula. The one concession the health plan had to make to continue the relationship, however, was the inclusion of a four-ounce container of powdered milk with a label advising mothers to consult a physician prior to use. This product is the only item in the package that promotes formula-feeding. Likewise, Kaiser avoids distributing literature that advertises pharmaceutical products and educates families about marketing ploys in prenatal classes.

The health plan acknowledges that the group/staff model makes it easier to identify and follow patients and optimize resources. The critical components of Kaiser Southern California's approach are the integration of breastfeeding services to follow mothers from the prenatal through the postnatal experience; the integration of services across disciplines to ensure consistent information and support; and the inclusion of education, support, and hands-on teaching in breastfeeding promotion and encouragement.

Kaiser Permanente Southern California makes the following specific recommendations to a health plan seeking to implement a similar program:

- Plan Well. During initiation phase, involve key players in the design of the program;
- Secure support and referrals from health care providers discharging mothers and babies to home;
- Design prenatal education components that complement and support the inpatient component while continuing to refer to outpatient support services;
- Facilitate open communication between all staff members, with quarterly staff meetings of all involved members to adjust and fine-tune all programs;
- Frequently review any educational materials being disseminated to patients for cohesiveness;

- Design or use an existing database for outcome and statistical tracking purposes; and
- Review the quality of service of the program for risk management and quality improvement opportunities.

Directions for the Future

Kaiser Permanente Southern California hopes to utilize a consistent data collection tool in the future so that all programs collect the same information and enter it into a regional database to be used by all medical centers. Facilities will continue to share information and lessons learned through the Southern California Lactation Consultant Committee. In addition, Kaiser hopes to provide outpatient coverage seven days a week, if necessary, to ensure that mothers and babies have access to the information and support they need.

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Case Study VII—Keystone Health Plan East (Philadelphia, PA) Baby BluePrints/Baby FootSteps

Keystone Health Plan East is an IPA model HMO offered by Independence Blue Cross (IBC), a member of the Blue Cross and Blue Shield Association. IPC also offers PPO and indemnity products and serves a total of 4.5 million members in southeastern Pennsylvania, as well as in regional and national markets through subsidiaries and affiliates.

Program Development and Implementation

Overview and Goals

Baby BluePrints (or Baby Footsteps as the program is called outside Pennsylvania), is a comprehensive perinatal program including prenatal risk assessment, information dissemination, case management, and postpartum services for at-risk mothers and newborns. The program includes a strong emphasis on breastfeeding education and support for all pregnant members. Specific breastfeeding promotion activities include prenatal education about breastfeeding, partial reimbursement for lactation classes and breast pump purchase, postpartum lactation consultations (including in-home visits), no-cost rental of electric breast pumps for medical necessity, and referrals to community resources.

Keystone Health Plan East's goal for breastfeeding promotion is "to inform women about the benefits of breastfeeding and to support those who decide to do so, without in any way making formula-feeding mothers feel guilty for making that choice."

Background

Promotion of breastfeeding has always been a part of Baby BluePrints/Baby Footsteps. The program began in June 1993 with Keystone Health Plan East's HMO population, after it was launched earlier in the indemnity product of Independence Blue Cross (Keystone's parent company). At that time, two well-respected perinatologists worked with Plan nurses to assess the interest of participating network OB/GYNs in a "high-risk obstetrics program." The nurses visited a number of OB/GYN offices and gathered information about possible program components. A panel of Keystone OBs approved the eventual design. This OB panel has been maintained and continues to oversee the program and vote on any changes. The program was first offered to the PPO population in 1994.

Between 1994 and 1996, when the program was gaining momentum, Plan network staff visited many physicians' offices to explain the program individually. Program staff and Medical Director also provided formal presentations about the program at participating hospitals' OB/GYN department meetings and at formal Plan annual OB/GYN office staff updates. These presentations were supplemented with educational materials mailed to OBs, including newsletter articles and special mailings. In later years, in order to create additional opportunities for the identification of program participants, staff have provided education to Keystone's

pre-certification and concurrent review staff. As a result, those staff members have gained heightened awareness about the need to refer women who have been hospitalized or who have complications identified during an office visit to the program. Input from providers is fostered through a variety of ongoing activities, including quarterly OB panel meetings and with the OB office managers advisory group.

The program has changed over time. In the beginning, registration was voluntary and fewer than 50% of eligible mothers were enrolled. After several iterations of the registration process, the health plan changed focus and began to tie program registration to preauthorization for prenatal care. Linking program registration to preauthorization came about initially through Keystone's Medicaid program. Relying on Medicaid members to sign up would have yielded extremely low numbers, so the health plan was challenged to devise a method for identifying eligible women through a passive process. The solution was to use preauthorization as a way to find those women. This proved so useful that the health plan has since expanded it to the commercial population as well. The improved process has increased program participation to 92% of eligible mothers.

While Keystone Health Plan East served the Medicaid population in the mid-1990s, the health plan transferred its Pennsylvania Medicaid business to another subsidiary, which is independently managed. The staffs of the two health plans cooperate extensively on their prenatal case management programs, sharing expertise and experience.

The Baby BluePrints/Baby FootSteps program has become more systematized over time, with the creation of detailed written protocols. These reflect the input and approval of the Plan's OB advisory committee, a group of network perinatologists and generalist obstetricians representing all geographic areas and practice types of the tristate business area (Pennsylvania, New Jersey, and Delaware).

Target Population

The target population for this program is all pregnant women who are members of the commercial HMO and PPO lines of business, and at-risk traditional business subscribers. The plans have more than 30,000 births each year and more than 80% of mothers are enrolled in the program.

Essential Program Elements

Identification of Eligible Members and Invitation to Participate

At their first prenatal visit, all women fill out a detailed questionnaire which is forwarded to the Baby BluePrints/Baby Footsteps staff within 30 days of a confirmed pregnancy test. A perinatal a nurse case manager screens the questionnaire for risk according to an algorithm approved by the OB committee. Clerical staff data enter clinical information into the case management database and administrative information into the utilization management database for the delivery admission.

Program Components for Low-Risk Pregnancies

The essential program elements vary for low-risk and high-risk pregnancies. Women with normal, low-risk pregnancies:

- Receive educational mailings, including a copy of the commercially-available book, *What to Expect When You Are Expecting*, and a tri-fold card produced by Baby BluePrints/Baby Footsteps that highlights important topics, including nutrition and breastfeeding;
- Receive a phone call from a program staff member with a follow-up questionnaire at 28 weeks gestation to ascertain any change in risk status;
- Have access to a 24-hour telephone service that is answered by a nurse during business hours and is staffed by an answering service that connects to an on-call nurse during off hours;
- Are eligible for partial reimbursement for any antepartum class, including breastfeeding classes ($40 per member) and battery or manual breast pump purchases ($100 per member);
- Can access lactation consultants after delivery and are referred to community resources; and
- Will be provided rental of a heavy-duty electric breast pump for as long as medically necessary if they or their babies develop a medical problem that requires the use of a pump.

Program Components for High-Risk Pregnancies

For high-risk pregnancies, the list of services includes all of the above, plus comprehensive case management by the program's experienced perinatal nurse case managers. Services are initiated when the case manager assesses the pregnant member to be at risk for pregnancy complications via formal risk assessment, hospital admission, or a phone call from the obstetrician or the patient herself. The case manager contacts both the member and the woman's obstetrician. The goal is for physician and case manager to work together to provide the expectant mother with optimum support and services. If necessary, a wide range of assistance and resources can be utilized, including:

- Skilled nursing visits (and provision of IV fluids, total parenteral nutrition [TPN], and medications at home) by nurses who have at least three years of perinatal experience;
- Consultations with registered dietitians;
- Visits by home health aides to offer additional home care support (for example, if the mother is on bedrest and there is no other way to assist her);
- Regular telephone contact with the nurse case manager;
- Referrals to relevant social service and community agencies, as appropriate; and
- Provision of durable and disposable medical equipment as required.

Each member is assessed initially and again at 28 weeks through a formal risk assessment form. The initial form is generally completed by the patient at her first obstetrical visit. The second is administered telephonically by Baby BluePrints/ Baby Footsteps staff members.

Mother's Option Program

In addition, all mothers have the opportunity to participate in the Mother's Option program. Through this program, women whose vaginal delivery and postpartum recovery are uneventful are given the choice of staying in the hospital for two days or going home after one day and receiving two home visits—one 24 hours after discharge and the second 72 hours after discharge. The second postpartum visit provides an excellent opportunity for the home health nurse to provide assistance with breastfeeding. All of the home health nurses are Registered Nurses (RNs) and are specialists in maternal and child health. Women who have had a Cesarean section have the choice of spending four days in the hospital or leaving after three days and receiving a visit 24 hours post discharge. Additional visits are authorized as medically necessary. Lactation consult is also available with IBCLC (International Board Certified Lactation Consultants) certified registered nurses.

If the baby has jaundice and requires phototherapy, Independence Blue Cross will provide the therapy at home upon request of either the pediatrician or hospital. A home health nurse will set up the equipment, teach the family how to use it, draw bloods for bilirubins, and will return for visits as needed. By keeping the baby at home, it is easier for the mother to continue regular breastfeeding.

In an effort to serve its diverse member population, Keystone provides translator services for telephone calls and home visits. Languages covered include Chinese, Russian, Vietnamese and several dialects of Spanish.

Evaluation and Outcomes

The Baby BluePrints/Baby Footsteps program has computer systems that use claims information to generate automatic operations reporting. The system also includes demographic risk information that makes it possible for Keystone research and evaluation staff to evaluate the program. Two separate studies have demonstrated a dramatic drop in the number of OB medical days (admissions without deliveries) since the inception of the program. High-risk women are being maintained in the home and not at the hospital. While no studies have focused exclusively on breastfeeding rates, in the future, the program plans to track use of breast pump reimbursement and compare it with the demographic and outcomes data to understand who is breastfeeding and focus efforts on populations who are not.

Cost

Program staff report that the Baby BluePrints/Baby Footsteps program is a resource intensive program, but cannot give a specific per/member cost because of the difficulty in evaluating the multiple systems of care involved in the program. Anecdotally, staff report cost effectiveness on a case-by-case basis, but they have not yet been able to capture costs to demonstrate savings on a system-wide basis. Data are forthcoming on the cost of breast pump rentals and reimbursements to the health plan.

Replicability

According to program staff, components of the Baby BluePrints/Baby Footsteps program important for replication in other health plans include commitment from health plan administration, in-house knowledge and expertise, ability to "sell" the program to network physicians, hospitals, and staff; and the availability of many

perinatal home care agencies and lactation consultants in the area with which to contract.

Lessons Learned

One of the major lessons learned involved the breast pump reimbursement program. Initially there were some difficulties with paying the claims when the program was introduced to the PPO population. Whereas when the program was just available to HMO members, all those members had to do was buy a pump from an approved pharmacy and get reimbursed. When the program was rolled out to PPO members, however, they were told to buy their pumps from the plan's durable medical equipment (DME) companies. Unfortunately, the health plan then learned that the DME did not supply breast pumps. To solve this problem, the health plan changed the policy so that PPO members can also buy the pumps at approved pharmacies and still receive reimbursement.

Another challenge was that the health plan built demand for breast pumps and lactation consultants but then the supply of both was too limited to meet the need. Program staff suggest, "survey your equipment vendors and also know who and where the lactation consultants are. You may need to give both the vendors and lactation consultants a heads-up before the program is implemented."

Independence Blue Cross serves a widespread geographic area that includes some areas that do not have lactation consultants or supplies of breast pumps. As a result, the plan's nurses have had to give a great deal of telephone support to women in those areas and have also searched the network to find pumps for these members.

Directions for the Future

The health plan is exploring whether to partner with vendors that can provide a good selection of pumps at a discounted rate to solve some of the problems related to breast pump availability.

In order to address the growing concern about food allergies in children, program staff are adding information about the scientific basis for recommending breastfeeding in all Baby BluePrints educational materials.

In addition, program staff are beginning to work with Keystone Health Plan East's healthy lifestyles employer partner program to disseminate information to employers about the benefits of breastfeeding and why it is important to make it possible for employees to express and store breast milk during the day.

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Case Study VIII—UCare Minnesota (Minneapolis, MN) Breastfeeding Promotion Program

UCare Minnesota is a nonprofit, IPA model health maintenance organization serving more than 66,000 Minnesota government program enrollees in 73 Minnesota counties. It was established in 1984 by the Department of Family Practice and Community Health at the University of Minnesota Medical School. The UCare provider network has grown to include 468 primary care clinics, 125 hospitals, and 10,000 providers. UCare Minnesota is now the fourth-largest HMO in Minnesota.

Program Development and Implementation

Overview

The success of UCare Minnesota's Breastfeeding Promotion Program is based on the development of strong community partnerships with state and local public health agencies, as well as implementation of health plan policies to provide support for mothers who breastfeed. The health plan has demonstrated a strong commitment to community support for breastfeeding by funding new and existing breastfeeding promotion efforts. In addition, policy changes to increase access to breastfeeding education, lactation support, and breast pumps demonstrate the health plan's dedication to breastfeeding support and encouragement among its membership. Through this strategy, UCare Minnesota continues to increase awareness of the benefits of breastfeeding, support mothers who choose to breastfeed, and promote social support for breastfeeding in the community.

Background

In 1996, Ross Labs' National Mothers Survey indicated that only 67.4% of Minnesota mothers breastfed their infants in the hospital; the breastfeeding rate decreased to 23.5% at six months after birth. In response to these startling findings, the Minnesota Department of Health included two breastfeeding-related objectives in its Public Health Improvement Goals for 2004:

- Increase the proportion of mothers who breastfeed their babies in the early postpartum period to at least 75%; and
- Increase the proportion of mothers who continue breastfeeding until their babies are aged five to six months to at least 50%.

UCare Minnesota was already aware of the mounting evidence indicating the multiple health and economic benefits of breastfeeding for infants, mothers, and society. The health plan also realized that breastfeeding rates were lowest among low-income populations, younger mothers, recent immigrants, and some minority populations.

Beginning in July 1998, UCare took a proactive approach to encouraging breastfeeding within its membership and the community as a whole by initiating the "Breastfeeding Promotion Program." That same year, UCare partnered with the Minnesota Department of Health (MDH) on its "Loving Support Makes

Breastfeeding Work" campaign and met with representatives of other local public health organizations to discuss strategies for collaboration. UCare Minnesota's resulting initiative provided financial support to build on programs implemented by partner agencies, and also included health plan-specific interventions, including prenatal education and breastfeeding promotion; postpartum assessment and follow-up care; and improved access to breast pumps.

Target Population

It is UCare Minnesota's belief that community support for breastfeeding will increase initiation and maintenance rates overall. For this reason, the educational components of the health plan's Breastfeeding Promotion Program are targeted to all Minnesota residents, with particular emphasis on pregnant Medicaid enrollees and their families. UCare has also provided funding for a breastfeeding intervention targeted specifically to the Hmong population in Minnesota.

Goals

The goal of UCare Minnesota's Breastfeeding Promotion Program is to promote breastfeeding among members through increased awareness of the benefits of breastfeeding, improved access to breast pumps as needed, and promotion of social support for breastfeeding mothers.

Essential Program Elements

With the realization of the positive benefits of breastfeeding and the MDH's emphasis on breastfeeding promotion, UCare Minnesota sought ways to incorporate breastfeeding education and promotion into existing member services, as well as strategies to contribute to other public health agencies' efforts.

Member Services

- Prenatal Breastfeeding Education. The health plan has added breastfeeding information to the prenatal packets sent to all pregnant members. These materials include a pamphlet describing the benefits of breastfeeding, as well as an easy-to-understand guide to getting started. Both documents are written in simple conversational language to ensure comprehension. Subsequently, all pregnant women receive a call once a trimester and postpartum from a health information company contracted by UCare to ensure that members have received the information sent and to identify any potential problems. To encourage enrollee attendance at childbirth and pregnancy education classes, including classes on breastfeeding, UCare designed an incentive program that makes mothers eligible for gift certificates by attending all the classes.
- Postpartum Support. After birth, UCare Minnesota continues promoting breastfeeding within its membership by reimbursing universal home visits for all mothers after delivery to address any concerns, including breastfeeding. The health plan has established a full-time maternity case manager position to handle all high-risk births and problem pregnancies. This case manager can arrange for referral to a lactation consultant if necessary (a service reimbursed by UCare Minnesota). The health plan also includes articles about breastfeeding in the member newsletter, distributes new parent information packets that encourage breastfeeding, and refers parents to a 24-hour medical resource telephone line for more breastfeeding information.

- Breast Pumps. In 1997, UCare Minnesota contributed several hundred dollars to the Ramsey County WIC program to increase their stock of foot pedal breast pumps. In addition, effective July 1998, UCare expanded its policy on breast pumps to allow full coverage of pumps less than $250 without prior authorization (only a physician's order is required). When medically necessary, pump rental over $250 can be authorized.

Community Partnerships

- Social Support. UCare Minnesota prides itself on its willingness and ability to collaborate with state and local agencies to provide needed services for enrollees. An assessment by the Minnesota Institute of Public Health, for the Minnesota WIC program in the 1990s showed that reasons for not breastfeeding included lack of medical and familial support, inconvenience, and embarrassment. The WIC program decided a strategy to promote community acceptance of, and support for, breastfeeding was an important component in encouraging more women to breastfeed and developing a community that would support both the initiation and continuation of this healthy feeding option.
- The United States Department of Agriculture, Food and Consumer Service also recognized the need for developing community support for breastfeeding. This recognition lead to development of the WIC National Breastfeeding Promotion Project via a cooperative agreement with Best Start Social Marketing. The "Loving Support" campaign was unveiled and welcomed in 1997. While USDA supported development of the campaign, individual states needed to fund program rollout. The Minnesota WIC Program purchased pamphlets, posters, and Loving Support Kits for use in WIC clinics, promoted the campaign to other organizations, and encouraged purchase and use of the materials within their organizations. WIC also purchased Loving Support vinyl banners, which were shared with other organizations via the Minnesota Department of Health library. No funds were available to implement the media component of the campaign. MDH obtained $10,000 from the MCH block grant and challenged other organizations to match this amount. UCare Minnesota stepped forward as the only health plan to contribute to the initiative by donating $10,000 to the "Loving Support Makes Breastfeeding Work" campaign in 1998.

  These funds, combined with matching funds by WIC and generous public service contributions, allowed the purchase of 25 billboards placed throughout Minnesota in 1999; four vinyl bulletins rotated throughout the Minneapolis/St. Paul area for the year 2000; the purchase of additional banners for display in public health arenas; purchase of posters for distribution to community members and providers; and purchase of television and radio spots which were made available to individual communities if they could obtain placement for the spots. Materials depict families of various ethnicity and proclaim, "Give a breastfeeding mom your loving support." The number 1-877-214-BABY is included on all materials for mass media. Callers to this line can obtain phone numbers for sources of breastfeeding support in their communities.

- Hmong Intervention. In 1997-1998, UCare Minnesota financially supported a breastfeeding promotion project for Hmong women with the St. Paul/Ramsey County Department of Public Health. The project interviewed Hmong women at the Refugee/Preventive Medicine Clinic to identify barriers to breastfeeding and implemented interventions to encourage Hmong women to breastfeed. One-on-one interviews with refugees demonstrated that barriers to breastfeeding, such as lack of information, language barriers, lack of adequate time with hospital staff, easy access to formula through hospitals and WIC programs, limited reimbursement for home visits, and social and environmental barriers, existed within the female Hmong population. Hmong cultural beliefs also presented a unique challenge.

  With these barriers in mind, the clinic staff designed several key interventions to improve breastfeeding rates among the Hmong women. Strategies such as one-on-one counseling and education from a respected community member, inclusion of family members, and brief daily home visits from a public health nurse allowed staff to build trust with clients through shared dialogue and provided counseling for mothers and families. In addition, culturally-specific educational materials were distributed.

Evaluation and Outcomes

In 1999, UCare Minnesota reached out to over 1,700 pregnant enrollees by providing breastfeeding brochures in all prenatal packets. Through the health plan's expanded breast pump payment policy, 336 women received breast pumps free of charge in 1999. This number is nearly three times the number of pumps distributed in 1997, prior to the policy change in July 1998.

As the project with Hmong women has continued, it has resulted in a breastfeeding rate increase from 42% in January 1998 to 60% in December 2000.

Cost

By collaborating with state and local public health agencies to financially support existing efforts, the health plan is able to monitor expenditures. There are minimal costs associated with communicating the revised breast pump reimbursement policy to providers and with mailing educational materials to enrollees.

Lessons Learned

According to health plan staff, many aspects of UCare Minnesota's Breastfeeding Promotion Program are highly replicable. Through development of partnerships and collaborations with state and local agencies such as WIC, the health plan has been able to effectively build on existing efforts and incorporate specific breastfeeding promotion strategies into its own benefits structure. Coordination of health plan efforts with such groups is essential to creating a synergistic improvement in overall community breastfeeding rates. In addition, UCare Minnesota's involvement with the Minnesota Department of Health demonstrates the importance for all levels of the community to consistently voice support and encouragement for women to breastfeed. Likewise, member education efforts can easily be replicated by other health plans, although resources for development and dissemination are necessary.

Directions for the Future

UCare Minnesota is committed to continuing its partnerships that support breastfeeding among members and to continually educating members and providers about the essential components to successful breastfeeding.

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Health Plans, as Employers, Supporting Breastfeeding Mothers Who Return to Work

Introduction

A woman who wants to continue breastfeeding her baby after she returns to work faces two challenges. First, maintaining an adequate milk supply requires that she either nurse or pump during working hours because milk supply is directly related to how often the breasts are stimulated by either a nursing infant or a breast pump's suction. If she is not able to either nurse or pump, the woman's milk supply will diminish and might cease prematurely.

Second, without nursing or pumping, the woman will likely experience painful breast engorgement which can cause plugged ducts and potentially lead to mastitis or a breast infection. Not surprisingly, according to the Washington Business Group on Health, "for many new mothers, the return to work following maternity leave is often cited as a significant barrier to continuation of breastfeeding "(81). Employers' policies and practices that support nursing mothers can make the difference between continued successful breastfeeding and premature or unwanted weaning.

The health benefits to mother and baby conveyed by breastfeeding translate into reduced costs to employers due to lower health care costs, decreased abstenteeism, enhanced productivity, improved employee satisfaction, and a better corporate image. In a 1995 study of two corporate lactation programs, infants who were breastfed had 33% fewer illnesses than formula-fed infants and 21% fewer illnesses that led to a parent's absence from the workplace. The programs' overall impact led to a 28% decrease in absenteeism and 36% reduction in sick child health care claims (82).

It is becoming increasingly common for employers to provide support for nursing mothers. That support can range from simply providing adequate breaks and a private room for pumping, to development of a more comprehensive program. As noted in the *HHS Blueprint for Action on Breastfeeding*, employers can choose from a broad range of options to support breastfeeding mothers, including:

- Prenatal lactation education specifically tailored for working women;
- Corporate policies providing information for all employees on the benefits of breastfeeding and services available to support breastfeeding women;
- Education for personnel about why their breastfeeding co-workers need support;
- Adequate breaks, flexible hours, job sharing, and part-time work;
- Private "Mother's Rooms" for expressing milk in a secure and relaxing environment;
- Access to hospital-grade, autocycling (i.e., electric) breast pumps at the workplace;
- Small refrigerators for safe storage of breast milk;
- Subsidization or purchase of individually-owned portable breast pumps for employees;

- Access to lactation professionals on-site or by phone to give breastfeeding education, counseling, and support during pregnancy, after delivery, and when the mother returns to work;
- Coordination with on-site or near-site child care programs so infants can be breastfed during the day; and
- Support groups for working mothers with children (81).

While health plans are most often recognized for their role in promoting enrollee health, health plans are also employers, and as such have a tremendous opportunity to make a difference in the lives of the women who work for them.

Examples of Health Plan Programs for Employees

As part of the research for this monograph, in the summer of 2000 AAHP invited its members to submit information on their corporate breastfeeding promotion programs. From the responses, AAHP selected three examples to illustrate the range of current approaches.

Aetna Inc.

Corporate Lactation Program

Aetna Inc., headquartered in Hartford, Connecticut, has almost 44,000 employees, 76% of whom are female. Aetna has been providing prenatal education to its employees since the early 1980s. In the mid-1990s, a multidisciplinary group-including representatives from the worklife, disability, employee assistance program, wellness, and fitness units-joined forces to create a "one-stop shopping" program that encompasses all the benefits available to employees around the "maternity life event." The resulting New Child Program promotes the health of both Aetna-employed mothers and their babies. In 1996, as part of an ongoing quality improvement effort, the multidisciplinary group identified a gap in maternity-related services: helping women return to work following birth. To help fill that gap, Aetna launched the Corporate Lactation Program.

The Goals of the Corporate Lactation Program are to:

- Ease the transition of Aetna mothers returning to work after a maternity leave;
- Help sustain breastfeeding for six months or longer;
- Help minimize healthcare costs and days lost from work due to infant illness;
- Support employee productivity and improve employee satisfaction; and
- Provide a supportive workplace culture and help position Aetna as an "employer of choice."

Aetna's Corporate Lactation Program is designed to help new mothers make informed choices and provides the information and skills they need to breastfeed their babies.

This comprehensive program provides services that help new mothers balance the demands of career and motherhood, and includes the following components:

Prior to delivery

- Two classes taught by a certified breastfeeding consultant to help new mothers make infant feeding choices and learn the "how to's" of breastfeeding; and
- Access to a breastfeeding consultant to answer questions and prepare new mothers for a successful breastfeeding experience.

During maternity leave

- Ongoing telephone support from the breastfeeding consultant to help ensure the breastfeeding experience is a positive one; and
- Further support from the breastfeeding consultant to help new mothers prepare for a smooth return to work.

Upon return to work

- Access to a state-of-the-art electric breast pump in a clean, private room at the worksite;
- A personal accessory carrying case with bottles and a refrigeration compartment to store breast milk safely; and
- Unlimited consultations with a breastfeeding consultant to help new mothers meet personal goals.

In addition, Aetna provides other return-to-work measures, including the availability of flextime and job sharing, as well as encouragement to work with supervisors on job design.

The program is growing. Each year since the program's inception, more women have taken advantage of it. In 1997, 200 women participated. By 1999, that number grew to 505 women and in 2000, 629 Aetna women took advantage of the program. The program is available in 34 corporate locations, meaning that 80% of Aetna's full-time and part-time female employees have access to the program. (The remaining 20% work largely in sales sites where employees are on the road or work from home.)

Aetna's program is successful. According to program staff, a recent survey with a high 57% response rate revealed the following results:

- 59% of those who responded breastfed for 6 months or longer, which is significantly higher than the national average of 21.1% of working mothers who maintain breastfeeding for that long;
- 95% said the program contributed to the baby's general state of health;
- 89% of the women reported that the program had a positive impact on their general state of health;
- 90% reported that the program helped with a smooth transition back to work;
- 87% reported that the program contributed to their ability to balance career and motherhood; and
- 88% said it contributed to their satisfaction with working at Aetna.

Aetna conservatively estimates that the return on investment (ROI) for the Corporate Lactation Program is 2.18 to 1. This figure is based on a cost model used in industry research which has demonstrated a reduction in medical costs and time lost from work due to infant illness in the first year following a baby's birth.

Program staff credit the program's success to three factors: management support, the comprehensiveness of the service, and the program's communication strategy. Aetna routinely includes information about the Corporate Lactation Program in e-mails that are regularly sent to all employees. Information includes a link to an internal website so that employees can quickly and easily self-enroll in the program. The website also includes an educational component about the value of breastfeeding to mothers and babies-because not all women who explore the site are necessarily already committed to breastfeeding. In addition, the site includes a section that addresses concerns that managers may have so that they can have their questions answered.

Humana, Inc.

HumanaBeginnings NursingMoms

Humana Inc. is headquartered in Louisville, Kentucky and has more than 16,000 employees, approximately 79% of whom are women. The NursingMoms program was first rolled out in October, 1999 in those markets with the greatest number of employees. Sixty-five (65) mothers enrolled in 1999. By the end of 2000, the remaining markets were in operation and an additional 70 new mothers participated.

While currently administered by the human resources department, the NursingMoms program was initially developed by the corporate education department. In focusing on women's health, staff reviewed the data on the benefits of breastfeeding. One disease in particular captured their attention: otitis media. Those ear infections are among the top 30 claims for Humana. In addition, conversations with participants in Humana's prenatal program for enrollees—HumanaBeginnings—revealed that one of their major concerns is back-to-work. As a result, Humana decided to start providing breastfeeding services to their own employees.

The Goals of NursingMoms Include to:

- Provide encouragement and support to mothers wishing to breastfeed their babies and wanting to continue breastfeeding upon return to work;
- Increase the breastfeeding initiation rate among new mother employees;
- Provide mothers with the necessary tools to increase the success and duration rates of breastfeeding;
- Meet the *Healthy People 2010* goals for breastfeeding duration rates of 50% of women breastfeeding for six months and 25% for one year.
- Demonstrate a lower healthcare cost of breastfed infants in comparison to infants not in the program;
- Show a decreased absence rate among breastfeeding mothers (due to illness of mother or child); and
- Reveal an increase in productivity for mothers in the program.

The NursingMoms program is based on the belief that early education and preparation are keys to a successful breastfeeding experience. For that reason, expectant mothers are encouraged to enroll in a breastfeeding class, taught by a certified lactation consultant/educator. In many Humana markets, these classes are

offered on-site and are free to moms wishing to participate in the program. These classes not only help to prepare an expectant mom for the breastfeeding experience, but also help her to establish a relationship with a lactation consultant/educator. This contact can encourage the mother to ask questions after the class has ended or while she is on maternity leave and still working through any uncertainties of breastfeeding. By having access to a knowledgeable expert, the mother may be more likely to continue breastfeeding through problems she may experience, instead of simply deciding to discontinue.

All moms in the NursingMoms program who attend either an on-site or a community breastfeeding class are given incentives for their participation. Humana currently provides each participant with a copy of *The Nursing Mother's Companion* by Kathleen Huggins, RN, MS. In addition, Humana also presents the mothers with a $25.00 coupon toward the purchase of a breastfeeding kit and/or insulated carrying bag from Medela®. These kits hook up to the hospital-quality Medela® double breast pumps provided in the many lactation rooms provided at the workplace. In addition, the private rooms contain educational material on breastfeeding, as well as information on women's and children's health, wellness, and safety issues.

The NursingMoms program monitors participant satisfaction as well as measurable outcomes and tracks all participants in a specially designed database. When a mother completes the program by discontinuing breastfeeding, she is asked to complete an exit survey. Upon turning it in, she is given the book, *What to Expect in the Toddler Years*, as a "thank you" for her participation in the program.

Humana is evaluating NursingMoms primarily through participant surveys to demonstrate participation, satisfaction and self-reported health information. Claims data will be necessary to validate health outcomes.

Staff list the following components as essential for any other employer that wishes to replicate the program:

- Commitment and desire of management to help and encourage mothers returning to work to continue to breastfeed their baby;
- Significant female population of childbearing age;
- Schedule flexibility so that women can express their milk two to three times per day
- Building services available for ongoing room maintenance; and
- Program coordinator to oversee the program, facilitate data collection and promote and gather feedback.

In addition, staff note that the following are beneficial but not essential:

- Employee newsletter (or intranet site) to promote the program; and
- In large companies with multiple facilities a database is extremely helpful for measurement and tracking

Physicians Health Plan of Northern Indiana, Inc.

Lactation Program

Physicians Health Plan of Northern Indiana is a small company with 104 employees, 80% of whom are female. The health plan is located in Fort Wayne, Indiana. The Lactation Program began in 1995, spurred by the company's generally family-friendly orientation. The health education department was already working to promote breastfeeding to its employer groups so it was a natural step to offer a program to the health plan's own employees. 1995 was also a good time to start; design for the "mother's room" could be built right into the plans for the company's brand-new building.

The goal of the program is to provide encouragement to mothers to continue breastfeeding when returning to work by having a room that creates a comfortable and functional environment in which to accomplish this. The "mother's room" has a lock for privacy, a comfortable recliner, and an electric breast pump. Designed for use by one woman at a time, the room has a sign-in sheet so that nursing mothers can coordinate their schedules. Managers work with employees to schedule pumping sessions during the day. Attachments for the breast pump and coolers for storing expressed milk are available to employees for purchase at cost.

While no formal evaluation of the program has been conducted, staff of Physicians Health Plan of Northern Indiana report that women who use the room are very satisfied and that some even use it for an entire year, which suggests that its existence promotes continued breastfeeding.

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Appendix A:
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Appendix B: Breastfeeding Monograph Review Committee

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