

Characteristics of Current Hospital-Sponsored and Nonhospital Birth Centers

Amal J. Khoury, M.P.H.,^{1,4} Lisa Summers, C.N.M., M.S.N.,² and Carol S. Weisman, Ph.D.³

Objectives: (1) To describe contemporary birth centers in terms of the population served, organizational and financial characteristics, services provided, mission and philosophy, and planning and marketing techniques. (2) To compare hospital-sponsored and nonhospital models with regard to the above characteristics. *Method:* Data from the National Survey of Women's Health Centers conducted in 1994 are analyzed using *t*-tests and chi-square tests. *Results:* Contemporary birth centers serve a diverse population of women and provide a range of clinical and nonclinical services. Birth centers are both hospital-sponsored and nonhospital, with the former growing at a faster rate. Compared to hospital-sponsored centers, nonhospital centers serve a larger proportion of uninsured women, provide a broader range of clinical services, and are more committed to women-centered care. Centers utilize different marketing methods and are involved in a number of organizational changes to better position themselves in the changing health care environment. *Conclusions:* Birth centers offer an attractive option to consumers and are a viable model for delivering women-centered care. Given that all "birth center" facilities do not share the same philosophy and service mix, women need to have some assurance of what a "birth center" will, and will not, provide.

KEY WORDS: Birthing centers; maternal health services; women's health services; women's health; pregnancy; ambulatory care facilities; primary health care; holistic health; nurse midwives.

INTRODUCTION

Although birth centers are thought of as alternatives to traditional hospital-based childbirth, U.S. hospitals increasingly sponsor birth centers within their main facilities or off site. This paper describes contemporary birth centers, and considers whether differences exist between hospital-sponsored and

nonhospital centers on women served, organizational and financial characteristics, services provided, mission, and planning and marketing methods.

Birth centers originated in underserved rural areas prior to the 1970s, but the development of the modern birth center is traced to the founding of an urban childbearing center in New York City in 1975. These nonhospital birth centers grew in number during the 1970s in response to consumer demands for alternative childbirth experiences and to certified nurse-midwives' (CNMs') needs for career opportunities (1,2). The centers were intended to provide more family-centered childbirth environments, to return control of the birthing experience to the woman, and to offer low-technology alternatives to hospital-managed delivery. By 1987, there were about 160 freestanding birth centers nationwide (3). The National Association of of Childbearing Centers (NACC) was incorporated in 1983, and the Commission for Accreditation of Free Standing Birth Centers

¹Department of Health Policy and Management, Johns Hopkins University, School of Hygiene and Public Health, Baltimore, Maryland.

²Columbia University, School of Public Health, New York, New York.

³Department of Health Management and Policy, University of Michigan, School of Public Health, Ann Arbor, Michigan.

⁴Correspondence should be directed to Amal J. Khoury, MPH, Department of Health Policy and Management, Johns Hopkins University, School of Hygiene and Public Health, 624 N. Broadway, Room 406, Baltimore, Maryland 21205; e-mail: amal@merlin.ebicom.net

became the accrediting agency with specific standards for birth centers. According to the NACC, a facility is considered "freestanding" if it is separate from acute obstetrical and newborn care and has autonomy in policy formulation and operations. A hospital-owned or -operated birth center therefore can be accredited as "freestanding" if it maintains autonomy and meets other standards.

A number of factors contributed to the growth of hospital-sponsored birth centers in the 1980s and 1990s. First, research provided evidence that birth centers performed well and that women were satisfied with care received. Most notably, the National Birth Center Study, which examined birth outcomes for over 11,000 women served in freestanding birth centers, found that the centers were safe and provided an acceptable alternative for many pregnant women (3). Other research demonstrated that care by nurse-midwives was safe and was associated with lower cesarean section rates (4-6). Second, the Medicaid expansions between 1984 and 1990 provided a revenue stream and improved payment mechanisms for prenatal care and childbirth services for low-income women, and the proportion of U.S. births covered by Medicaid increased from 19% to 31% between 1987 and 1991 (7). This probably provided a financial incentive for the development of birth centers in some communities. Third, in response to an increasingly competitive health care environment, many hospitals marketed services designed for women, including alternative birthing services, often in the expectation that women served would seek other care for themselves and their family members within the hospital or its affiliated programs.

According to the annual surveys conducted by the American Hospital Association (AHA), the percentage of U.S. hospitals reporting that they had a "woman's health center" of some type increased from 19% to 32% between 1990 and 1994 (8). The AHA defines a woman's health center as an entity combining educational and treatment services, which might include obstetrics but cannot be limited to obstetrics. The presence of a birth center is not measured, however.

With more hospitals operating birth centers, concern has arisen that the hospital-sponsored centers might provide a different model of care than that provided in the original freestanding birth centers. This paper uses data from the 1994 National Survey of Women's Health Centers to describe birth centers operating in the U.S. in 1993-1994 and to investigate

differences between hospital-sponsored and nonhospital birth centers.

METHOD

The first National Survey of Women's Health Centers was conducted in 1994 by researchers at Johns Hopkins University to provide a comprehensive study of the universe of women's health centers in the U.S. (9). The target population for the survey was all women's health centers in operation during 1993-1994. Women's health centers were defined as organizations that provide clinical services designed for and marketed to women. Included were hospital-sponsored and nonhospital centers, as well as specialized centers and those providing comprehensive health care services. Hospital-sponsored centers had to be distinct from traditional hospital services to be eligible for the study (for example, hospital-sponsored birth centers had to be physically or administratively distinct from traditional hospital obstetrics services). Excluded were single-provider practices, centers offering referral or educational/informational services only, and women's hospitals (only 12 were in operation at the time of the survey).

Since no national listing of women's health centers was available, the sampling frame was constructed by merging 14 national lists of centers provided by different organizations during January-March 1994. The list provided by the AHA included 1400 U.S. hospitals reporting in the AHA's 1992 annual survey of hospitals that they had a women's health center. This was the most recent data on hospital-based women's health centers. In addition to the AHA, the following organizations provided lists: Family Life Information Exchange, Federation of Feminist Women's Health Centers, National Abortion Federation, National Alliance for Breast Cancer Organizations, NACC, National Association of Women's Health Professionals, National Consortium of Breast Centers, National Osteoporosis Foundation, National Women's Health Network, National Women's Health Resource Center, National Women's Mailing List, Planned Parenthood Federation of America, and Women's College Coalition. None of the organizations contacted refused to provide its list.

The above partial lists were prescreened to eliminate obviously ineligible organizations and duplications and were then merged into a master list

with over 6,500 organizations potentially eligible for the study. For sampling purposes, these were grouped into five mutually exclusive strata: birth centers, breast centers, reproductive health centers, hospital-based centers not otherwise classified, and nonhospital centers not otherwise classified. The birth center stratum included centers identified through several of the above lists. To be classified in this stratum, centers had to self-identify as "birth centers" and include the words "birth" or "childbearing" in their names.

A disproportionate stratified random sample, including 100% of identified birth centers was selected, with the larger strata having smaller sampling fractions. All centers in the sample were screened by telephone to verify the existence of an operational women's center. The main reasons for ineligibility were provision of nonclinical services only, serving men or children in addition to women, and among "hospital-based centers not otherwise classified," failing to have a women's center distinct from traditional obstetrics or gynecological services.

A 26-page self-administered questionnaire was developed covering seven topic areas: organizational structure, characteristics of women served, financing patterns, services provided (including clinical and nonclinical services), mission and philosophy (including commitment to specific core values), utilization of different quality assurance mechanisms, and planning and marketing methods (including organizational changes that were planned or underway). The majority of questions were closed-ended with some requiring reporting of numbers or percentages.

After pretesting the survey instrument, the questionnaire was mailed to the administrative directors of the sampled eligible centers in May 1994. In general, the questionnaires were filled by the administrative directors. Centers not responding within four weeks received several reminder telephone calls and the option of completing the survey by telephone. The overall response rate was 56%, generating a final usable sample of 467 centers. Response rates varied by stratum and ranged from 48% among "hospital-based centers not otherwise classified" to 79% among "birth centers."

Responding centers classified themselves as primary care, reproductive health, birth, breast, or "other" centers. (Descriptive results from the survey have been published elsewhere (9).) For the purposes of this paper, we examine the 69 centers reporting in the survey that they are birth centers. The survey instrument also asked centers whether they

are owned or operated by a hospital (29 responding birth centers), jointly sponsored by a hospital (3 centers), or neither (37 centers). Given the small number of centers jointly sponsored by a hospital, we collapse the first two categories and call them "hospital-sponsored" centers (32 centers). Centers responding that they are neither owned, operated nor jointly sponsored by a hospital are called "nonhospital" centers. It is not possible to compare response rates for hospital-sponsored and nonhospital birth centers because comprehensive lists of such centers were not available.

To achieve the objectives of this analysis, descriptive frequencies are used to describe the experience of birth centers overall with regard to the variables examined. Also, chi-square tests or *t*-tests are used, as appropriate, to examine differences in the characteristics of hospital-sponsored and nonhospital birth centers.

ANALYSIS AND RESULTS

We examined the characteristics of 69 birth centers including 37 nonhospital and 32 hospital-sponsored centers. Twenty nine of the nonhospital centers are independent organizations, 4 are CNM or nurse-practitioner groups, 3 are joint ventures between a physician group and an organization other than a hospital, and 1 is a physician group practice. Twenty-two of the hospital-sponsored centers are physically located within the hospital (all but one have dedicated space), 8 are located in a facility separate from the hospital, such as an ambulatory care building, and 2 have locations both within and separate from the hospital.

Location and Population Served

Table I describes the location and population served at birth centers. Centers are located in all four regions of the country and serve different geographic populations including urban, suburban, and rural populations. The average birth center served 549 women in fiscal year 1993-1994, the majority of whom are age 18-29 and age 30-39. Centers reported that an average 44% of clients use them as their usual source of care, and that an average 27% belong to a minority group (including African American, Hispanic/Latina, Asian/Pacific Islander, or Native American). Birth centers serve a diverse

Table I. Location and Women Served at Birth Centers by Type of Hospital Sponsorship

Characteristic	Percent of centers by type of hospital sponsorship			<i>p</i> *
	Total (<i>N</i> = 69)	Nonhospital sponsored (<i>N</i> = 37)	Hospital sponsored (<i>N</i> = 32)	
Regional location				.00
Northeast	28	19	38	
North central	14	5	25	
South	38	54	19	
West	20	22	19	
Median no. of women served fiscal year 1993–1994	549	370	900	.04
Age distribution				
Under age 18	10	8	13	NS ^a
Age 18–29	46	48	44	NS
Age 30–39	32	36	29	NS
Age 40 and older	11	9	14	NS
Type of health insurance				
Medicaid	35	30	41	.07
Private managed care	13	11	15	NS
Other private/commercial	30	30	29	NS
None/self-pay	17	24	8	.00
Other	5	5	7	NS
Geographic population served				NS
Urban	36	43	28	
Suburban	38	40	34	
Rural	26	16	38	
Race/ethnicity				
White, non-Hispanic	73	73	72	NS
African American	9	7	12	.10
Hispanic/Latina	13	16	8	NS
Other	5	3	8	NS
Mean % of clients receiving reduced rates	20	25	14	.08

^aNS: not significant ($p > 0.10$).

*Based on chi-square tests or *t* tests, as appropriate.

population with regard to types of health insurance coverage. The two largest groups are women enrolled in the Medicaid program and women with private or commercial insurance coverage. Centers also serve women with no insurance coverage, women in private managed care plans, and women covered by public insurance programs other than the Medicaid program. An average 20% of clients of birth centers receive reduced rates due to financial need.

Compared to nonhospital centers, the hospital-sponsored appear larger, with the average center serving 900 women in fiscal year 1993–1994 compared with 370 women served at the average non-hospital center. No differences in the age, racial, or geographic distributions of clients are observed between the two types of centers. Nonhospital centers, however, serve a larger proportion of uninsured clients and offer more women reduced rates due to financial need compared with hospital-sponsored centers.

Organizational and Financial Characteristics

Table II describes the organizational and financial characteristics of birth centers. Centers are mainly privately owned entities, including for-profit and not-for-profit organizations. All but 9 of the surveyed centers are overseen by a governing board or advisory council. An overall 58% of centers are NACC accredited.

In terms of their administrative structures, the majority of centers employ both an administrator and a medical director. Two-thirds employ CNMs and half employ one or more physicians, primarily obstetrician/gynecologists, on a full- or part-time basis. Centers also employ other types of nurses including registered nurses, licensed practical nurses, and nurse practitioners. Fewer than half utilize the services of counselors/health educators, social workers and nutritionists. Only 8 centers employ lay/licensed midwives, and only 2 have physician assistants.

Table II. Organizational and Financial Characteristics of Birth Centers by Type of Hospital Sponsorship

Characteristic	Percent of centers by type of hospital sponsorship			<i>p</i> *
	Total (<i>N</i> = 69)	Nonhospital sponsored (<i>N</i> = 37)	Hospital sponsored (<i>N</i> = 32)	
Ownership Type				.00
Private not-for-profit	54	32	78	
For-profit	41	68	9	
Public	6	–	12	
NACC accredited	58	89	22	.00
Administrative structure				.03
One position (Administrator or medical director)	21	11	32	
Two positions (Administrator and medical director)	79	89	68	
Administrator discipline				.10
Professional administrator	32	40	22	
Clinician	68	60	78	
Medical director discipline				.08
Physician	61	50	73	
CNM, licensed midwife, or registered nurse	39	50	27	
Staffing patterns				
Center employs CNMs	65	86	41	.00
Center employs physicians	48	49	47	NS ^a
Center employs nurse practitioners	23	30	16	NS
Center employs registered nurses	84	81	88	NS
Center employs licensed practical nurses	44	32	56	.05
Center employs counselors	32	32	31	NS
Center employs social workers	20	16	25	NS
Center employs nutritionists	16	11	22	NS
Center employs lay/licensed midwives	12	22	–	.00
Center employs physician assistants	3	–	6	NS
Revenue sources fiscal year 1993–1994				
Medicaid insurance	34	30	41	.09
Private managed care insurance	12	10	15	NS
Other private/commercial insurance	31	30	33	NS
Out-of-pocket payments	17	23	8	.00
Public and private grants	6	7	3	NS
Fiscal year 1993–1994 financial performance				NS
Net profit/surplus	41	35	48	
Net loss/deficit	31	35	26	
Broke even	28	30	26	

^aNS: not significant ($p > 0.10$).

*Based on chi-square tests or *t* tests.

Birth centers received their startup funding from different sources. Among hospital-sponsored centers, the majority were supported by the sponsoring hospital, and only 7% received financial support from government or private grants to get started. Among nonhospital centers, however, 68% used private owner funds, 27% used government or private grants, and only 2 centers depended on funding from a parent organization to establish the center.

Revenue sources of birth centers reflect clients' insurance coverage. The Medicaid program is an important source of revenue and accounts for one-third of total revenues. Other revenue sources include

managed care, other private insurance, direct (out-of-pocket) payments, and government or private grants. More than half (54%) of birth centers had managed care contracts with health maintenance or preferred provider organizations in 1994. The income statements of 41% of centers showed a net profit/surplus in fiscal year 1993–1994; the remaining centers were equally divided between those who had a net loss/deficit and those who broke even.

Hospital-sponsored and nonhospital centers vary with regard to a number of organizational and financial characteristics. Hospital-sponsored centers tend to be newer: 55% of them were founded after 1985

Table III. Provision of Clinical Services at Birth Centers by Type of Hospital Sponsorship

Characteristic	Percent of centers providing services			p*
	Total (N = 69)	Nonhospital sponsored (N = 37)	Hospital sponsored (N = 32)	
Inpatient/outpatient service mix				.00
Outpatient only	38	54	19	
Mainly outpatient	23	32	12	
Mainly inpatient	39	14	69	
Pregnancy-related services				
Contraceptive counseling	75	95	53	.00
Contraceptives (one or more types)	68	89	44	.00
Preconception counseling	65	86	41	.00
Pregnancy tests	75	100	47	.00
Prenatal counseling and exams	75	97	50	.00
Ultrasound	52	43	62	NS ^a
Vaginal deliveries	100	100	100	NS
Alternative birthing	74	95	50	.00
Basic primary care services				
Physical exams	58	81	31	.00
Cholesterol screening	51	68	31	.00
Tuberculosis screening	38	46	28	NS
Immunizations	25	32	16	NS
Stool guaiac tests	30	40	19	.05
Digital rectal exams	41	51	28	.05
Physical breast exams	75	95	53	.00
Instruction in breast self-examination	86	92	78	.10
Nutritional counseling	64	78	47	.01
Weight control counseling	36	40	31	NS
Exercise counseling	33	46	19	.02
Routine gynecological exams	67	95	34	.00
Diagnosis and treatment of menstrual problems	55	76	31	.00
STD screening and treatment	67	86	44	.00
Pap smears	75	97	50	.00
Menopause counseling	54	65	41	.04
Smoking cessation counseling and/or treatment	16	11	22	NS
Screening for anxiety or depression	12	14	9	NS
Surgical services				
Cesarean sections	45	14	81	.00
Surgical removal of uterine fibroids	26	11	44	.00
Hysterectomies	30	11	53	.00
Sterilization	28	14	44	.00

^aNS: not significant ($p > 0.10$).

*Based on chi-square tests.

compared to 43% of nonhospital centers. The majority of nonhospital centers are private, for-profit, whereas the majority of hospital-sponsored centers are private, not-for-profit organizations. While 33 of our sampled nonhospital centers are NACC accredited, only 7 of the hospital-sponsored centers have this accreditation. In terms of their administrative structure, hospital-sponsored centers are more likely to combine the responsibilities of administrating and clinical directing in one position. While no variation in the administrator discipline is observed between the two types of centers, hospital-sponsored centers

are more likely to have a physician than a nurse or a CNM as director compared with their nonhospital counterparts. The majority of nonhospital centers use the services of CNMs, compared with fewer than half of hospital-sponsored centers. Also, the 8 centers employing lay/licensed midwives are all nonhospital.

A significant difference in revenue sources between the two types of centers appears in the proportion of revenues from direct (out-of-pocket) patient payments, which account for 23% of all revenues of nonhospital centers and only 8% of revenues of hospital-sponsored centers. This reflects the

higher proportion of uninsured women at nonhospital centers.

Services Provided

The survey measured provision of specific clinical services at the responding centers. Eight pregnancy-related, 18 basic primary care, and 4 surgical services are examined here and described in Table III. (The primary care services examined are not meant to represent the totality of primary care, but rather basic services that birthing centers may be expected to provide). Overall, centers appear to be providing a broad range of pregnancy-related and primary care services. With regard to pregnancy-related services, a majority of all centers provide contraceptive counseling, different options in contraception, prenatal care, and alternative birthing services. All provide vaginal deliveries. There is more variation in the provision of primary care services, however. Only 10 out of the 18 services examined are provided by more than half of all centers. Surgical services—including cesarean sections, surgical removal of uterine fibroids, hysterectomies, and sterilization—are provided by fewer than half of all centers.

Significant differences in service mix between hospital-sponsored and nonhospital centers are observed. Nonhospital centers are providing a more comprehensive range of primary care and pregnancy-related services, whereas hospital-sponsored centers are more likely to provide surgical services. Twelve out of 18 primary care services and 6 out of 8 pregnancy-related services examined are more likely to be provided by nonhospital centers. A different trend is observed for the provision of surgical services; sizable proportions of hospital-sponsored centers provide these services compared with few non-hospital centers.

We also examined provision of nonclinical services (data not shown) and found that a majority of all birth centers provide childbirth education classes (88% of centers), community agency referral service (78%), physician referral service (74%), speakers bureau (74%), support groups (67%), and printed health information (all but one center). Parenting skills programs are provided by half of all centers. Also, a majority of birth centers (88%) open evening and/or weekend hours in addition to weekday hours, and more than half (54%) provide translator/interpreter services. Few centers, however, provide transportation to or from the center (14%) or on-site child care services (10%). Overall, no differences be-

tween hospital-sponsored and nonhospital centers are observed with regard to the provision of the above services.

Mission and Philosophy

Respondents reported the original motivation for founding the center, as well as the center's commitment to 16 different core values or guiding principles that are part of the mission (Table IV). The most prevalent original motivation reported by centers is offering a woman-centered approach to care (41%). Other motivations include attracting women to the sponsoring organization, providing needed services at a reasonable price, filling a market niche, and serving the poor. The 5 most commonly reported core values are a sensitive/caring attitude toward women, shared decision making between women and health professionals, empowering women to take control of their health, provision of low-cost services, and provision of primary care services.

Nonhospital centers appear more committed to women-centered care than hospital-sponsored ones. They are more likely to report that they were founded to offer a women-centered approach to health care compared with hospital-sponsored centers (46% and 36%, respectively, $p < .05$). They are also more committed to such core values as shared decision making, empowering women, holistic approach to care, provision of care by women providers, women's reproductive rights, a feminist ideology, and conducting women's health research. The remaining core values are equally adopted by the two types of centers, except for "attracting women to the sponsoring organization," which is more likely to be reported by hospital-sponsored centers.

Marketing and Planning

Table V lists the 10 marketing methods that the survey measured. Seventy percent of all centers use the services of marketing professionals, either by employing their own marketing personnel or outside marketing firm or by using the marketing services of the sponsoring organization. Different marketing methods were utilized by birth centers within the five years preceding the survey, primarily paid advertising in print or broadcast media, monitoring local demographic trends, providing free screening or information at community sites, and monitoring services

Table IV. Mission and Philosophy of Birth Centers by Type of Hospital Sponsorship

Characteristic	Percent of centers by type of hospital sponsorship			<i>p</i> *
	Total (<i>N</i> = 69)	Nonhospital sponsored (<i>N</i> = 37)	Hospital sponsored (<i>N</i> = 32)	
Commitment to specific core values				
Sensitive/caring attitude toward women	98	100	97	NS ^a
Shared decision making between women and health professionals	90	100	77	.00
Empowering women to take control of their health	88	100	74	.00
Providing low-cost services	82	89	74	NS
Primary care and preventive services	79	81	77	NS
Multidisciplinary team approach to health care	71	78	61	NS
Holistic approach to health care	73	89	53	.00
Serving a diverse population	65	65	64	NS
Provision of care by women providers	60	86	29	.00
Women's reproductive rights	59	70	45	.04
Women's health care throughout life span	56	65	45	.10
Enhanced profitability	44	43	45	NS
Attracting women to sponsoring organization	35	22	52	.01
Feminist ideology	28	38	16	.05
"One-stop shopping" for women's health care	28	32	23	NS
Conducting women's health research	24	35	10	.01

^aNS: not significant ($p > 0.10$).

*Based on chi-square tests.

provided by other local health care organizations. An additive index of the 10 marketing methods shows that the average birth center utilized five methods within the five years preceding the survey.

With regard to planning activities, two factors are examined: development of a strategic plan and involvement in six different organizational changes (centers were considered "involved" if the organizational change was underway at the time of the survey or planned for the following two years). Overall, 68% of centers had developed a strategic (or long-term) plan within the last five years preceding the survey. Centers were involved in organizational changes to varying degrees. A majority were acquiring managed care contracts and developing alliances with community organizations. Fewer than half were developing joint ventures with hospitals or physician groups, joining a multiorganizational system or chain, and merging with another organization.

In general, hospital-sponsored centers are more likely to use the services of marketing professionals and to utilize different marketing techniques. Almost all hospital-sponsored centers use the services of marketing professionals compared to 46% of nonhospital centers. Among hospital-sponsored centers, 94% report that they use marketing services of the sponsoring organization, and only 3% say they employ an

outside marketing firm. Among nonhospital centers, however, 19% employ their own marketing director, another 19% employ an outside marketing firm, and only 8% use marketing services of sponsoring organization. Hospital-sponsored centers market their services more aggressively than their nonhospital counterparts. Out of the 10 marketing methods, five were utilized by a larger proportion of hospital-sponsored than nonhospital centers. Based on an additive index of all 10 methods, hospital-sponsored centers use an average of 6 methods compared to an average of 4 used by nonhospital centers ($p < .01$).

Overall, the two types of centers behave similarly in terms of preparing for the future. They are equally likely to have developed a strategic plan within the last five years preceding the survey. They are also equally likely to be involved in four of the organizational changes measured. Hospital-sponsored centers are marginally more active with regard to two other changes: developing joint ventures with physician groups and joining a multiorganizational system.

DISCUSSION

The results of this study show that birth centers in the 1990s provide care to a sociodemographically

Table V. Marketing and Planning Activities at Birth Centers by Type of Hospital Sponsorship

Characteristic	Percent of centers by type of hospital sponsorship			<i>p</i> *
	Total (<i>N</i> = 69)	Nonhospital sponsored (<i>N</i> = 37)	Hospital sponsored (<i>N</i> = 32)	
Marketing methods utilized within 5 years prior to survey				
Advertising in print/broadcast media	86	84	88	NS ^a
Monitoring local demographic trends	68	57	81	.03
Providing screening/information in community	67	62	74	NS
Monitoring services of local health organizations	65	62	69	NS
Community surveys to assess women's needs	45	30	62	.01
Surveys of local physicians' practices	45	27	66	.00
Advertising by direct mail	44	35	53	NS
Focus groups to assess women's needs	36	14	62	.00
Monitoring population morbidity/mortality	35	27	44	NS
Advertising on billboards	19	8	31	.02
Strategic plan developed	68	68	68	NS
Organizational changes underway/planned				
Acquiring managed care contracts	87	89	84	NS
Developing local alliances	78	76	81	NS
Developing joint ventures with hospitals	48	49	47	NS
Developing joint ventures with physicians	45	35	56	.08
Joining a multinstitutional system	25	16	34	.08
Merging with another organization	17	16	19	NS

^aNS: not significant ($p > 0.10$).

*Based on chi-square tests.

diverse population using the services of different health care professionals. A wide range of clinical services, including pregnancy-related and basic primary care services, are provided by the average birthing center. In addition, a majority of centers have integrated education, information, and referral services into their programs. Care is delivered in an environment where personnel report that they are committed to mutual respect between women and health professionals, shared decision making, and empowerment of women to take control of their health. Birth centers in the 1990s also appear to be actively involved in the changing health care environment. Large proportions of centers are developing alliances with community organizations and acquiring managed care contracts, and almost 70% report developing strategic plans to help guide future operation. Also, 70% of centers use the services of marketing professionals and utilize different techniques to market their services.

Contemporary birthing centers are both hospital sponsored and nonhospital. Hospital-sponsored centers are relatively newer and appear to be growing at a faster rate than nonhospital centers. Hospital sponsorship has provided exposure for the birth center concept, has helped establish its credibility, and

to some degree, may have helped legitimized the concept. Hospital-sponsored centers also offer a setting in which women can deliver their babies in a home-like environment yet be close to acute or emergency services, if needed. The analysis shows some important differences between hospital-sponsored and nonhospital centers, however, specifically with regard to service to uninsured women, clinical service mix, and mission. Nonhospital centers serve larger proportions of uninsured women and provide a broader range of clinical services. They are also more committed to women-centered care, as evidenced by their founding motivations and core values. These results suggest that hospitals may be establishing birth centers as a competitive strategy in a financially threatening environment.

Nonhospital centers are more likely to approach the "one-stop shopping" model for maternal health services relative to hospital-sponsored centers. The provision of a range of primary care services, including reproductive and nonreproductive services, by nonhospital centers suggests that more of their clients' health care needs may be met on site. This minimizes the need to refer women outside the center which, facilitates service delivery and coordination. Hospital-sponsored centers do benefit, however,

from the clinical (and other) resources of the hospitals with which they are affiliated. Thus, services that may not be available within the physical space of the birth center may be offered in the hospital outpatient center or in physicians' offices. The challenge in this case is to coordinate services so as to maximize the convenience of communications and the health benefits to the patient and to minimize the possibility of fragmentation of care.

The provision of surgical services in birth centers, particularly cesarean sections within nonhospital centers, may be surprising. It is possible that these findings reflect some measurement error, although the questionnaire clearly stated that a service should not be reported as being provided by the center if it is offered only through referrals (including referrals to the sponsoring hospital). The significantly higher rates of providing surgical services at hospital-sponsored centers compared with nonhospital centers may reflect the greater "medical" services capacity of hospital-sponsored centers, or their greater attention to the bottom line (since surgical care typically is well-reimbursed relative to other services), or differences in the philosophical core values impacting surgery rates between hospital-sponsored and nonhospital centers.

The finding that almost one-fourth of the clients of nonhospital centers are uninsured, pay out-of-pocket, or receive reduced rates is worth noting in light of a growing uninsured population nationwide. The ability of these centers to continue to provide access to this traditionally underserved segment of the population is questionable given the growth of managed care and restructuring of the Medicaid program. At the time of the survey, more than one-third of nonhospital centers reported a recent net loss/deficit, and the proportion of centers experiencing financial losses is likely to increase as resources become further constrained.

While this study contributes to our understanding of the characteristics of birth centers, as well as the similarities and differences between hospital-sponsored and nonhospital models, the results are limited in two ways. First, the complex survey design, involving merging 14 source lists into a master list from which five sampling strata are defined, may not have identified all birth centers in the U.S., and those not identified may differ systematically from those on the source lists. Second, the survey instrument was not developed to examine birth centers specifically, but rather to survey different types of women's

health centers including primary care, reproductive health, and breast care centers. Had the questionnaire been developed specifically for birth centers, questions could have been tailored to address specific birth center issues in more depth.

Overall, the results of the analysis provide information on the contributions of birth centers to maternity care. Throughout the country, centers are using the services of different types of health care providers to address the health care needs of a diverse clientele in women-centered settings. Also, many centers are providing a range of reproductive and nonreproductive services, in addition to pregnancy-related services.

The results also indicate that not all birth centers are alike. There appears to be two kinds of centers: those that provide a range of services to a diverse population in a setting committed to empowering women in childbirth, and those that market their services to insured patients and do not necessarily have a women-centered philosophy. Given that all facilities that currently call themselves "birthing centers" do not share the same philosophy and vary in terms of client mix and service mix, women need to have some assurance of what a "birth center" will, and will not, provide. At present, consumers can be easily overwhelmed by choices between traditional hospital labor and delivery services, birthing rooms, Labor, Delivery, Recovery, and Postpartum rooms (LDRPs), and different types of birth centers. Women's and families' interests will be better served if the meaning of the term "birth center" is more clearly understood and communicated to the public.

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