

Effects of Hospital Economics on Maternity Care

By Susan Hodges with Henci Goer

On February 26, 2004, Henci Goer and Susan Hodges presented "Economic Disincentives for Mother-Friendly Care: How economic considerations shape conventional obstetric care" at the 2nd Mother-Friendly Childbirth Forum held by CIMS near Washington, D.C. This article is based on that presentation.

When two Austin, TX hospitals both got rid of the nurse-midwives practicing there, a news quote caught my attention:

"The closings, although not related, are being done for a similar reason: Midwife deliveries are not big moneymakers [my emphasis], people associated with the programs said."

- Midwifery Programs are Closing 05/14/02 Austin American Statesman

When many studies have shown conclusively that midwifery care is "cost effective," why are so many nurse-midwife practices being closed, and why were midwives being called "not big moneymakers?" These questions prompted me to start learning about the economics of health care, and especially of hospitals.

The Maternity Care Business

Maternity care is big business in the U.S., especially for hospitals. Of total hospital stays for women, 25% are for pregnancy and childbirth¹. In 1999, delivery accounted for about 270 hospitalizations for every 10,000 women². Obstetricians are important to a hospital's financial success for a number of reasons, including the fact that they influence around 11%, or \$30 million, of inpatient charges through referrals to other physicians within the hospital³. In other words, obstetrical care is still a major marketing tool for hospitals; when a woman needs hospitalization for herself or for a family member, she will tend to stick with the hospital where she gave birth.

When we think about costs and "cost effectiveness" we usually think about the cost to us, the consumers (or to our insurance carrier or HMO). We can see that our costs will vary by setting⁴:

- Home Birth \$2,300 - \$5,000
- Birth Center \$3,500 - \$8,300
- Hospital \$4,300 - \$16,000
- Cesarean Section \$9,300 - \$26,000 (includes 4-day hospital stay)

Consider that 99% of births occur in hospitals, of which more than a quarter are cesarean sections, and that home birth costs as little as one sixth the cost of an uncomplicated vaginal birth in the hospital.

Hospitals, on the other hand, are thinking in terms of their net income, of billings versus their costs.

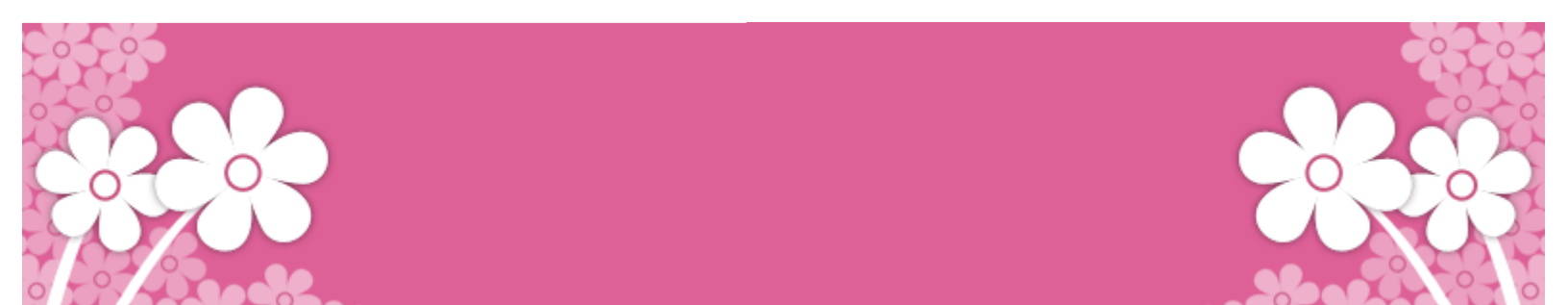
Every hospital needs to at least break even, but if it is a "for profit" hospital, there also are shareholders expecting a profit on their investment.

¹ *Care of Women in U.S. Hospitals, 2000*, HCUP Fact Book No. 3

² *Women's Health USA, 2002*

³ Hanold, K C, *OB/GYNs Offer a Rich Source of Referrals*, MHS Fall 2002

⁴ O'Mara, P. *Having a Baby, Naturally*. 2003. p. 322. Based on figures published in 1999



A number of economic factors affect hospitals, including some that are somewhat unique to hospitals compared to other businesses:

- High fixed costs (for expensive facilities, required staffing, special management needs for dealing with disease, etc.)
- Marketing (to attract patients who would otherwise use competing hospitals)
- Unpredictability (of medical events, use of services and facilities, etc.)
- Unpaid billings (a growing problem)
- Variable profitability among services

Illness, accidents and births are unpredictable, but a hospital must always be prepared for these. If one can make any of these events less random and more predictable, staffing can be more efficient. Childbirth has the potential for being made more predictable by manipulating labor (induction, active management of labor) or by scheduling cesarean sections. From 1989-1997 births have become more frequent on weekdays compared to weekends, and “Births delivered by repeat cesarean and vaginal births that were induced are especially likely to occur on weekdays”.⁵

Hospitals can increase their income by reducing their fixed costs (equipment, buildings, staff) and/or by increasing efficiency (more patients or billable events per unit of time). For maternity care, decreasing the amount of time each patient is in the hospital (hurrying labor along) and increasing the use of lab tests, drugs and other billable treatments are ways of increasing income for each birth. The more technology and the more tests and procedures that can be performed (and billed for), the greater the differential between costs to the hospital and what the hospital charges. In other words, as care gets more complex, the costs increase but the profit margin goes up even faster.

Hospitals compete for patients by marketing their services, and having the “latest technology” and services available around the clock is great for marketing. However, once a hospital has invested in the technology or must pay for specialized staff, there is a strong incentive to make as much use of the technology as possible, so that the fixed costs of having the technology or staff are offset by billing. For example, hospitals want to offer epidural anesthesia, so must incur the costs of having an anesthesiologist available around the clock, creating an incentive for the hospital and the staff to encourage “every” laboring woman to have an epidural whether or not she wants one. This also holds true for OBs who purchase expensive ultrasound equipment for their offices; the way to make that equipment pay off is to perform, and bill for, as many ultrasounds as possible, whether or not there is any medical need for them.

Obstetricians make the decisions about clinical care – both hospital protocols and individual decisions for each patient. Obstetricians need to maintain their hospital privileges, and to some extent the “health” of the hospital depends on clinical practices that result in maximum billing. Obstetricians also have to pay for their liability insurance coverage, and the rates have been increasing substantially in recent years. One way obstetricians can make more money (to pay for insurance while maintaining the standard of living to which they are accustomed) is to see more patients in the same amount of time. How to accomplish this? A planned cesarean section can be performed in 20 to 30 minutes, scheduled conveniently around office hours. In contrast labor takes hours or days and is unpredictable. There is no question that planned cesarean sections are more profitable for both the obstetrician (in most states OBs are reimbursed more for a cesarean section than for a vaginal birth) and the hospital (more technology, drugs, lab work, etc. can all be billed). In addition, scheduling cesarean sections makes it possible for the obstetrician to have more patients, more births per month, more income per month.

⁵ Trends in the Attendant, Place and Timing of Births and in the Use of Obstetric Interventions, United States, 1989-97. Vol. 47, No. 27. 16. pp. (PHS) 2000-1120.



Health Insurance and Maximizing Reimbursements

Health insurance (including Medicaid) generally pays a “global” fee to the hospital and to the obstetrician for each normal birth. This means that for many births, the doctor and the hospital are paid a set amount per birth, regardless of the amount of time. The hospital, OB, anesthesiologist and other departments (lab, radiology, Neonatal Intensive Care Unit (NICU), etc.) each charge separately. OBs generally are reimbursed more for cesarean sections and for “high risk” patients, and can “add on” for complications (the OB decides what a complication is).

The fact that more cesarean sections are performed when reimbursement is higher, shows that this intervention is done at least some of the time for economic reasons. For example, in 2000 cesarean sections were performed on 24.4% of patients covered by private insurance (which reimburses at the highest rates), on 20% of patients covered by Medicaid, and on 18.65% of women who were uninsured⁶.

According to a CNM who has practiced for many years, in Georgia in 1987 the global fee for the OB for maternity care was about \$900. That amount increased quite dramatically to around \$3700 in 1993-94, but Managed Care was successful in bringing down the costs – by 1997 the global fee was down to about \$1500, but by 2003 this amount has dropped to \$900 – the same as in 1987 not counting inflation or changes in care. In the past it has been common to set fees high enough to cover not only the costs for the private patient, but to “cost share” or take up the slack for patients on Medicaid or without insurance. However, HMOs have essentially eliminated this kind of cost-sharing, plus increasing numbers of people lack any insurance and Medicaid insurance reimbursement rates have decreased. Thus many hospitals and doctors are really feeling the squeeze. When insurance reimbursements do not cover costs, hospitals and doctors are going to look at increasing the number of patients they can “process” per unit of time in order to compensate. Some hospitals will simply close down or stop providing certain services, which usually ends up decreasing access to care disproportionately for low-income people.

Hospitals and OBs have found any number of ways to maximize reimbursements. One way is to inappropriately designate pregnant women as “high risk,” based on demographics (Columbia- Presbyterian Hospital used this tactic to eliminate most pregnant women from being eligible for midwifery care at delivery) or for other reasons. Terminology also can be a tool, one example being the common use of the disease term “gestational diabetes” which “communicates the need for high-risk surveillance to providers of third-party payments”⁷.

Other Ways to Increase Hospital Income

Increasing cesarean sections is another way to increase revenues, and performing fewer cesareans loses money. In the 1980’s, Mt. Sinai hospital instituted a program that successfully cut the cesarean rate from 17.5% to 11.5% in two years. However, “The drop in cesarean sections cost the hospital and physicians approximately \$1 million in lost revenues over the two-year program”⁸. According to one mother-friendly obstetrician, who works to help her patients NOT end up with a cesarean section, it is relatively easy for an OB to “set up” a patient so she will end up with a cesarean without even realizing she was set up.

Admitting babies to NICUs is a money-maker, especially if the babies are not very sick. A Ross planning associate said: “We can do a better job of budgeting our staff with these longer stays and increased numbers of patients. . . . And we’re doing procedures—highly technical procedures that cost a lot and can generate higher revenue based on the same occupancy.”⁹ In fact, data on newborns in intensive care shows that primarily only very low birth weight babies, about 3 to 4 percent of babies, actually benefit from NICU admission; about 60% of NICU admissions are low risk or mildly ill and unlikely to

⁶ *Care of Women in U.S. Hospitals*, 2000 HCUP Fact Book No. 3

⁷ Gabbe SG. *Definition, detection, and management of gestational diabetes*. *Obstet Gynecol* 1986;67:121-125

⁸ Koska MT. *Reducing cesareans – a \$1 million trade-off*. *Hospitals* 1989;63(5):26

⁹ Shearer MH. *The economics of intensive care for the full-term newborn*. *Birth* 1980;7(4): 1980. p 235



benefit. In the 1990's in one academic NICU unit newborns admitted for "evaluation" accounted for 2% of work hours in the unit, but for 7% of its revenues¹⁰.

Increasing the use of epidurals increases profits by increasing billing, both for the procedure itself and for the increased needs for tests and treatments due to complications from the epidural itself. Hospitals also work to increase market share. Having the latest technology is a marketing tool, but once the technology is in place, there is a strong incentives to use the technology as much as possible in order to cover its costs.

Maximizing patient flow also helps profits. For maternity care, this includes having prenatal visits of minimal length, inducing labor, and scheduling cesarean sections. As Dr. J Caillouette commented on a study of the merits of elective induction: "It is no longer feasible for individual physicians who have invested 12 years in training at a cost of hundreds of thousands of dollars to dedicate extended periods to observing one normal woman in labor."¹¹

Hospitals can also try to save money by reducing staff costs. Induction of labor, epidural anesthesia and scheduled cesarean sections can help. Electronic fetal monitoring, especially where one staff can keep an eye on multiple monitors at a central location, also reduces staffing needs. "Active management of labor" calls for artificial rupture of membranes for all women to speed up labor; oxytocin if progress is not at least "average", and a cesarean section if dilation is not complete within 10 hours of admission. "The newfound ability to limit the duration of stay [on the labor and delivery unit by using active management of labor] and therefore to quantify the number of patient-hours to be serviced has transformed the previously haphazard approach of planning for labor."¹² Recently, some hospitals have eliminated lactation consultants to "save money."

Results and Conclusions

The results of all these economic factors leaves us with the following anomalies and paradoxes:

- Fully 85% of U.S. women enter labor at "low-risk" for problems¹³, but virtually 100% of U.S. women have at least one intervention.¹⁴ Every intervention has the potential of doing harm as well as good. If a woman has an intervention she doesn't need, then she runs the risks with no counterbalancing benefit.
- There is no justification for cesarean section rates over 10 to 15%¹⁵, but the U.S. Cesarean section rate is 26.1%¹⁶. The Maternity Center Association (MCA) conducted a systematic review of the research on cesarean versus vaginal birth and found 33 outcomes for which cesarean section introduced excess risk compared with vaginal birth, some of which were life-threatening or held the potential for permanent damage.
- WHO recommends an induction rate of 10% or less, but in the Listening to Mothers Survey, induction was attempted 44% of the time (and worked more than 1/3 of the time). In addition to increasing the likelihood of fetal distress, inducing labor roughly doubles the chances of cesarean section in first-time mothers.¹⁷
- Continuous electronic fetal monitoring (EFM) does not improve outcomes in either low risk or high risk births, but in the Listening to Mothers survey 93% of women had continuous EFM. Compared with intermittent listening,

¹⁰ Perkins BB, *The Medical Delivery Business*. Rutgers University Press, 2004. P 130

¹¹ Macer JA, Macer CL, and Chan LS. *Elective induction versus spontaneous labor: a retrospective study of complications and outcome*. Am J Obstet Gynecol 1992;166:1690-7

¹² O'Driscoll K and Meagher D. *Active Management of Labour 2nd ed*. London: Bailliere Tindall, 1986. p 101


¹³ *Healthy People 2010*

¹⁴ *Listening to Mothers Survey*. Maternity Center Association 2002. www.maternitywise.org/listeningtomothers/index

¹⁵ Recommendations WHO Consensus Conference on Appropriate Technology, 1985

¹⁶ *National Center for Health Statistics*, June 2003

¹⁷ Goer. *Elective Induction of Labor 2002*. www.hencigoer.com/articles/electiveinduction



continuous EFM increases the likelihood of cesarean section and vaginal instrumental delivery.¹⁸ MCA's systematic review found 15 outcomes where assisted vaginal delivery introduced excess risk compared with spontaneous vaginal birth.

Compared with women seeing only obstetricians, women receiving hospital-based midwifery care spent less time in the facility, experienced fewer cesarean sections, experienced fewer vacuum or forceps assisted vaginal deliveries, had fewer episiotomies, were less likely to be induced, and experienced less technical intervention.¹⁹ Given these results, midwifery care clearly would result in less income for the hospital which would lose billings for epidurals, cesarean sections and other interventions, and would have fewer babies going to NICU. Care that is “cost effective” is less expensive for you, but almost always hurts the hospital’s bottom line.

Given these economic considerations, should it come as any surprise, therefore, that some hospitals have: refused permission for CNMs to attend births; counted CNM births as doctor-attended, then argued that midwives didn’t do enough births to make the program cost-effective; or created hospital rules that made CNMs “too expensive,” such as requiring an OB and anesthesiologist to be present at each CNM birth (doubling professional charges)?

Hospitals and obstetricians are making clinical and management decisions for economic reasons, which is neither honest nor good medical care. When a pregnant woman in labor goes to a hospital and is told she needs this procedure or that intervention, how is she to know if the treatment is actually being recommended for real medical reasons? Or for purely economic reasons? No agency or government authority is asking any questions such as “Has the increase in cesarean sections resulted in better outcomes for mothers and babies?” There is an unspoken assumption that physicians’ decisions should not be questioned, so there is no regulation by disinterested parties. There is virtually no consumer pressure. There are no restraints on anti-competitive practices. There are no meaningful consumer protections. There is no accountability for the health and well-being of mothers and babies.

The end result is that women are being cut and drugged and their babies harmed every day for economic and other non-medical reasons. How much longer are we going to tolerate a health care system that allows doctors to perform unnecessary cesarean sections and other interventions for economic reasons, while withholding access to preventive care (like midwives and lactation consultants) that improves the health and well-being of mothers and babies???

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¹⁸ Thacker et al., *Continuous electronic heart rate monitoring for fetal assessment during labor [Cochrane Review]*. The Cochrane Library, Issue 3, 2004). www.cochrane.org/cochrane/revabstr/AB000063

¹⁹ Jackson et al. *Outcomes, Safety, and Resource Utilization in a Collaborative Care Birth Center Program Compared With Traditional Physician-Based Perinatal Care*. *Am J Pub Health* 2003; 93:999-1006.