Maternity Care 2.0

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In the first decade of the 20th century, the newly emerging obstetrical profession recognized the value of a single standard of care for childbirth. Under the unique social circumstances of that time, the standard chosen and imposed by the obstetrical profession was the obstetrical model, with normal birth defined as a *surgical* procedure.

An important aspect of this obstetrically-defined standard was the idea that something could go wrong at any time in any birth. Therefore the prophylactic use of medical and surgical interventions or the 'pre-emptive strike' was thought to be the safest and most responsible plan of action. For this reason the medicalized model did not differentiate between the routine care of childbirth in healthy women with normal pregnancies and those who suffered from pre-existing diseases and complications of childbearing. The standard form of care provided to both groups was essentially the same. This initial attempt to standardize childbirth in the 20th century could be thought of as **Maternity Care 1.0.**

Science-based Maternity Care for the 21st Century

Classifying normal birth (or 'the delivery') as a surgical procedure is no longer necessary or functional in the 21st century. When birth is characterized as a surgical procedure it must be conducted in a highly specialized surgical environment by a surgical specialist and billed under a surgical code. This splits the care of healthy childbearing women between two different professions (nursing and medicine) and makes continuity of care impossible. It produces a very complex system that results in a large number of serious problems for all concerned – doctors, nurses, childbearing families and for society, especially considering the enormous expense of such a system.

Maternity Care 1.0 is not an *efficacious* system – safe & cost effective -- for providing childbirth services to healthy women with normal pregnancies. An illustration of the basic problem can be taken from the world of computer software. It is typical for the first or 'beta' version of a product to undergo a dramatic reconfiguration once it is put into general circulation. After being used in the real world for a while, problems begin to emerge and the program must be upgraded if it is to live up to its potential. Unfortunately the Beta version of our maternity care system, and the relationship it has with healthy childbearing population, has never under gone this type of re-examination.

The current configuration of maternity care was put in place in 1910. This system still routinely applies a fixed set of obstetrical interventions to both low and high risk women. Functionally-speaking, standardized obstetrics has changed very little, except for the ratio of induction and operative delivery. In 1910 the number of mothers suffering from serious disease or complications of pregnancy was very high but labor induction and the operative rate was well below 20%. Now, in the 21st century, the health of the childbearing population is generally excellent. Even for older women, the problems of delayed childbearing are primarily infertility and prematurity, neither of

which is associated with normal birth at term. Approximately 70% of childbearing women are still healthy and have normal pregnancies at the end of nine months, a statistic comparable to other developed countries. At this point in our history, the rate of pregnancy complications is low but surgical interventions have sky-rocketed. For this healthy population, a quarter of labors are induced. The surgical intervention rate in birth is over 70%, which reflects the combined number of episiotomies, forceps, vacuum extraction and Cesarean sections performed on healthy mothers.

A recent survey of childbirth practices in the US revealed that an average of seven serious medical and surgical interventions had become the norm for healthy women giving birth under obstetrical management. [Listening to Mothers Survey, MCA, 2002 & 2004]. These finding are confirmed by other sources, including data collected by the federal government. Through the use of obstetrical interventions, childbirth can easily be made more predictable by manipulating labor via induction or augmentation of labor or by scheduling cesarean sections. Since1989 births have become more frequent on weekdays compared to weekends.

The Cesarean section rate in 2004 was 29.1% at a cost of 14.6 **b**illion dollars. Every year Cesarean section is the *single most frequently performed hospital procedure*. Data from several sources identifies the cost of Cesarean surgery to be at least twice that of vaginal birth. The Obstetrical profession predicts that rate of C-section will double in the next generation. Hospitals are beginning to build or remodel their maternity units in anticipation of an expected 50% Cesarean section rate by the beginning of the decade.

Government figures currently identify health care expenditures in the US as 1/6 of our total GDP. The average ratio of GDP devoted to healthcare in other developed countries is significantly less – only 11 to 14%. Twenty percent of the healthcare budget in America is spent on obstetrical services. The most common reason for hospitalization among women is pregnancy and childbirth. About 4.4 million hospital stays each year are due to obstetric conditions (a 1/3 of all hospitalizations). Maternity care accounts for 3.4% of GNP. The cost of maternity care for the healthy portion of the childbearing population is **2.38%** of our total **GDP**.

The US spends far more on childbirth services than any other country in the world. Despite this unusual outlay of money and professional attention, the US is unable to match the better outcomes enjoyed by many other industrialized countries at a *far less* cost. We are 28th in perinatal mortality and 14th in maternal mortality. The top five countries all employ physiological management as the standard for providing maternity care to the healthy portion of their population.

Taken together, this double-whammy puts American companies at a distinct *disadvantage in the global economy*. Both sources of expense must be added to the cost of the finished product – higher insurance premiums to cover the high rate obstetrical interventions and the cost of treating the larger number of mothers and babies with chronic conditions or permanent disabilities. Unfortunately, the increasing rate of Cesareans over the last 30 years has not improved perinatal outcomes. A 50% Cesarean section rate (which is 2 to 10 times more costly than physiological birth) will not benefit the manufacturing and service industries the US in their attempt to compete in the world market.

In light of the extraordinary expense and many sources of new information on ways to increases the rate of normal, uncomplicated childbirth, our 1910 Beta system of medicalized maternity care should be reexamined. With this inquiry, many problems that have lead to excessive levels of

obstetrical intervention and overuse of Cesarean surgery will become clear. A better understanding will permit us to reverse the current upward spiral of costly obstetrical interventions, such as routine induction of labor and elective Cesarean section.

Maternity Care 2.0 ~ Already the Evidence-based Standard World-wide

Physiological management is the evidenced-based model of maternity care used world wide. Physiological is: …"..in accord with, or characteristic of, the normal functioning of a living organism" (Stedman's 1995 Medical Dictionary definition of "physiological"). The principles of physiology can be used by all birth attendants and in all birth settings.

Physiological management of labor and birth is associated with the *lowest* rate of maternal and perinatal mortality and is *protective* of the mother's pelvic floor. It has the *best* psychological outcomes and the *highest* rate of breastfed babies. Dependence on physiological principles results in the *fewest* number of medical interventions, *lowest* rates of anesthetic use, obstetrical complications, episiotomy, instrumental deliveries, Cesarean surgery, post-operative Cesarean complications and delayed or downstream complications of Cesareans in future pregnancies.

Physiological management is both *safe and cost-effective*. It takes into account the **positive influence of gravity** on the stimulation of labor, dilatation of the cervix and decent of the baby through the bony pelvis. Maternal mobility not only helps this process move along but also diminishes the mother's perception of pain, perhaps by stimulating endorphins. Effective labor support always addresses the mother's pain, her fears and privacy needs so that labor can progress spontaneously, reducing or eliminating the need for medical interventions, pain medication and anesthesia. Maternity Care 2.0 acknowledges the right of healthy, mentally-competent childbearing women to have control over the manner and circumstance of normal labor and birth.

A long over-due and much needed reform of our national health care policy would integrate these physiological principles with the *best advances in obstetrical medicine* to create a single, evidence-based standard for all healthy women. Physiological management should be the foremost standard for all healthy women with normal pregnancies, used by all practitioners (physicians and midwives) and for all birth settings (hospitals, homes, birth centers). This model of normal childbirth includes the *appropriate use of obstetrical intervention for complications* or at the mother's request.

In a rehabilitated system, obstetricians, family practice physicians and professional midwives would all enjoy a mutually respectful relationship that acknowledged each other as players on the same team – that of cooperatively providing safe and cost effective care. Under this system, the individual management of pregnancy or childbirth would be determined by the *health status of the childbearing woman and her unborn baby,* in conjunction with the mother's stated preferences, rather than by the *occupational status of the care provider* (physician, obstetrician, or midwife). At present, *who* the woman seeks care *from* (doctor vs. midwife) determines *how* she is cared for. This is illogical in the extreme, just as it is irrational to impose a single standard of obstetrics by uniformly exposing healthy women to interventionist practices.

One crucial factor in the rehabilitation of our maternity care system would be a new, non-surgical billing code for physiologically-managed labor and birth, one that recognizes the value of

continuity of care and fairly compensated the caregiver for his or her time. This is in contrast to the current billing code that rewards *procedure-intensive* care and penalizes the kind of time-intensive, one-on-one care that prevents complications, improves outcomes and thus lowers the overall cost of birth-related care and ultimately, the cost to the insurer. The 1910 Beta version of insurance reimbursement is penny-wise but pound foolish.

At present, care during labor is billed primarily by the hospital for the nursing staff's time. Birth (billed as 'the delivery') is coded as a surgical procedure performed by a medically licensed attendant. Care during the 30-60 minute vaginal birth 'procedure' is disproportionately rewarded, reimbursing the birth attendant many times more than the professional who provided care during the long hours of labor. And yet, without effective care during labor, a safe normal birth is unlikely to occur. The reimbursement system is out of balance. It needs to be re-examined and corrected.

A second pervasive problem with our 1910 Beta version is a tort law system that currently provides life-long immunity from being sued when an elective Cesarean delivery is performed. The family's right to recover damages for surgery-related complications or death is waived by the patient when she consents to the surgery. Unless the physician commits an *egregious surgical error*, everything else in the cascade of 'normal' intra-operative, post-operative, delayed and downstream complications, including post-Cesarean complications in a subsequent pregnancy, is off limits to litigation. This oxymoronic situation needs to be re-examined and incentives build into the legal system that favors normal birth *instead* of granting special immunity for performing elective interventions.

Systematic reform is also a major economic issue. In order to retain their competitive edge the global economy, the vast majority of societies depend on the use of physiological principles -- high-touch, low-tech -- and other cost-effective methods to facilitate normal childbirth. The US must also utilize these safe and cost-effective forms of normal childbirth services in order to compete in the world-wide economy. Unfortunately, the art of normal birth was lost in the US, discarded a hundred years ago by an obstetrical profession that saw little value in the physiological process. This situation was made worse by the malpractice crisis and 30-plus years of defensive medicine.

In addition, the number of obstetricians who no longer attend births is sharply rising, as a result of aging doctors and out of control malpractice costs. The new crop of medical students is choosing specialties with bankers hours and dramatically reduced 'on-call' time. The steady attrition of obstetrical providers is here to say. In another decade, the few obstetricians left and the many perinatologists will be approaching professional midwives, inquiring about a partnership to cover the normal births. We urgently need to upgrade the 1910 Beta version to MaternityCare2.0.

Maternity Care 2.0 by the year 2020

Physiological principles, in combination with the *best advances in obstetrical medicine,* would create a single, evidence-based standard of maternity care for all healthy women, to be used by all practitioners -- physicians and midwives -- and in all birth settings -- hospitals, homes, birth centers

Changes necessary to bring about physiological management as the foremost standard of care:

- **Acknowledgement that normal labor and birth is a single contiguous biological** process that benefits most from the principles of physiological management and continuity of care, unless the *mother herself* requests a medical model of intervention
- A **non-surgical billing code for physiological management** of normal intrapartum events that values the professional's time as highly as it does the performance of medical and surgical procedures
- **Third party payers that fairly reimburse all practitioners** for time spent facilitating normal childbirth, as this type of direct care helps avoid the need for medical and surgical intervention, as well as added costs and complications of medical and surgical procedures
- **Medical educators must teach the principles of physiological management**, in conjunction with experienced professional midwives, to medical students, interns and residents; practicing physicians to routinely utilize these principles and technical skills
- **Hospital labor & delivery units to be primarily staffed by professional midwives**, with spontaneous normal births primarily attended by the hospital midwives; national incentives for experienced L&D nurses who wish to retrain for hospital-based midwifery practice to do so at minimal expense to themselves
- **Tort law (medical malpractice) reforms to be enacted,** so that professional birth attendants are not inappropriately judged by outdated criteria that is not evidence-based; formulation of a new and realistic guidelines for caregiver liability for normal birth

The challenge for the 21st century is to bring about a fundamental **restructuring of maternity care** in the United States that benefits all it citizens, taxpayers and national goals.