

Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

# Future Trends in Women's and Children's Health Business Development White Paper

Vicki A. Lucas, Ph.D.

### Women's Health

Specialization, navigation, and integration are significant future trends that impact Women's Services. All three present unique challenges for health care executives. Specialization requires the knowledge and skills of super sub-specialists who are very expensive and difficult to recruit.

For example, it may take up to 3 years to recruit a board certified gyn-oncologist with a salary of \$450,000/year. In order to substantiate a reasonable return-on-investment (ROI), the specialist requires a large referral base to produce significant volumes of complex patients. Where will the patients originate from . . . the generalists and specialists who have traditionally cared for these patients and have grown accustomed to receiving the higher rates of reimbursement or from a pent up unmet need. Strategies to quantify an unmet need or promote a hub and spoke referral pattern and buy-in by referring physicians are unique to Women's Services. Also, patient throughput and productivity are unique to Women's Health subspecialists. Refer to Figure 1 for Women's Health specialty services across the lifespan.

Figure 1. Women's Health Specialties Across the Life Span

Adolescence 14 - 18	Young Women 18 - 44	Midlife Women 45 – 64	Senior Women 65+
Adolescent Gyn     Fertility Preservation for Cancer Patients     Women's Sports Medicine	Maternal Fetal     Medicine     Reproductive     Endocrinology     Infertility     Fetal Centers     Breast Specialists     Women's Sports     Medicine     OB ED     OB ICU     Laborists	<ul> <li>Uro- Gynecology</li> <li>Gyn-Oncology</li> <li>Breast Specialists</li> <li>Breast         Reconstructive         Surgery</li> <li>Cosmetic Surgery</li> <li>Minimally Invasive         Gyn Surgery</li> <li>Therapeutic         Cosmetologists</li> <li>Women's GI         Specialists</li> <li>Women's Cardiology         Specialists</li> </ul>	<ul> <li>Uro- Gynecology</li> <li>Gyn-Oncology</li> <li>Breast Specialists</li> <li>Breast         Reconstructive         Surgery</li> <li>Women's Orthopedic         Specialists</li> <li>Women's Cardiology         Specialists</li> <li>Women's GI         Specialists</li> <li>Therapeutic         Cosmetologists</li> <li>Women's Internal         Medicine Specialists</li> </ul>





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

Laborists are a new trend in Women's Health. They are OB/Gyn hospitalists who manage Labor and Delivery (L & D) and L & D triage 24/7 as well as care for all unassigned OB/Gyn patients and manage emergent deliveries and surgeries when the primary provider is not available. Hospitals who are already paying for OB/Gyn call or for OB/Gyn in-house coverage 24/7, have an opportunity to save money, increase revenue and improve safety and quality with laborists. Another OB opportunity is the conversion of L & D triage to an OB ED. This is definitely a proven OB revenue enhancement strategy. OB ICUs are rare but are being developed in very high acuity settings where providers have both ICU and OB skills.

The demographic trends in women of childbearing age demonstrate flat projections for OB with a small increase in high risk OB. Capturing the flat or declining OB market will become increasingly competitive, and harvesting the profitable high risk OB will require unique integration and provider development strategies.

The movement of surgeries from inpatient to outpatient is a significant trend in Women's Health. As much as 90% of breast and Gyn surgeries are performed in ambulatory surgery centers (ASCs) with only the most complex cases (10%) requiring an inpatient stay. This change has been made possible through minimally invasive surgery via the laparoscope and with the use of robotic surgery via the DaVinci robot.

In addition to surgeries moving to ASCs, many Gyn procedures that were once performed in ASCs are now performed in physician offices. Some of these procedures are: hysteroscopy, endometrial ablation, cone biopsy and Assure tubal ligation.

Midlife Women's Health is the biggest opportunity in Women's Health with the aging of the "baby boomers". The largest segment of the female population is women between 45 - 64, and they need comprehensive health screening and management of unique health problems. For example, 50% of women in this age group have pelvic health symptoms and 20%+ have urinary incontinence. Additionally, women's cardiac screening usually yields 35 - 40% follow-up versus 19% in the mixed gender population.

The specialization in Women's Health has led to the development of specialty centers. Refer to Table 1 for a list of Women's Health Specialty Centers.





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

**Table 1. Women's Health Specialty Centers** 

Midlife Women's Health Center
Women's Heart Center
Women's Pelvic Health Center
Breast Center
Women's Orthopedic Center
Women's Sports Medicine Center
Infertility Center
Endometriosis Center
Eating Disorders Center
Menopause Center

These specialty centers may be virtual centers where services and providers are integrated through protocols, processes or technology, or they may be physical facilities either within a hospital or free standing. Services may range from screening and diagnosis to management and rehabilitation. The scope of services depends on the vision and purpose of the center which dictates the comprehensive nature of services. Refer to Figure 2 for an example of a comprehensive women's pelvic health center.

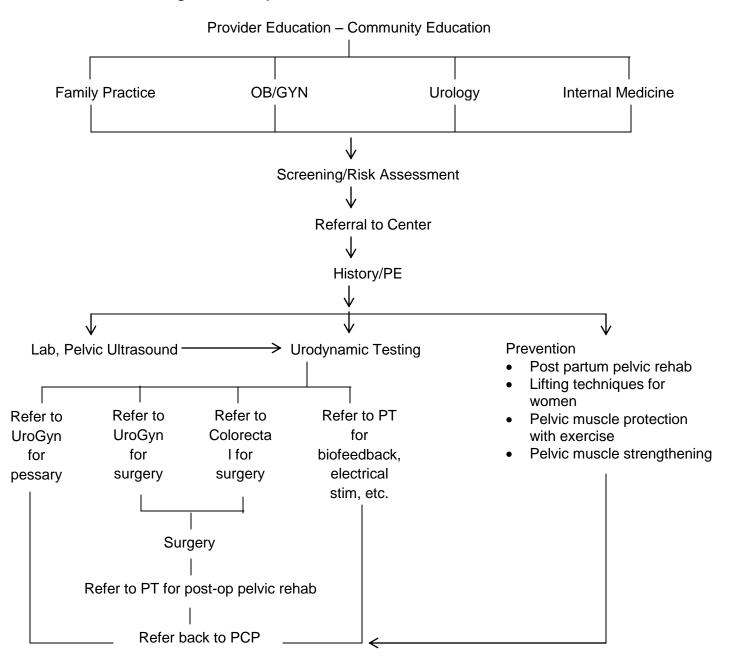




Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

Figure 2. Comprehensive Women's Pelvic Health Center





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

There are several reasons that specialization is a significant trend in Women's Health. Consumerism in health care plays a major role in women's desire for specialists. Women expect the very best quality in health care and the most accomplished providers. Nothing but the best will do for the "baby boomers" and the "Generation Xs and Ys". Women also expect excellent outcomes both clinically and in customer service.

Other reasons for specialization are improvements in surgical supplies and techniques such as robotic surgery, mesh for pelvic slings, breast reconstruction at the time of the mastectomy and laparoscopic surgery. Women do not want scars, so "band-aide" laparoscopic/minimally invasive surgery is a huge selling point. Several other reasons for specialization are:

- Gender differences in prosthetics (female knee replacement artificial joints)
- Improved science and technology to manage infertility and high risk pregnancies such as fetal centers and infertility centers
- Significant unmet need in women's health such as pelvic health and heart health
- Significant differences in outcomes based upon generalists versus specialists. For example, Uro-gynecology surgery performed by a generalist historically has a 50% resurgery rate.
- Gender predominance in certain diseases. Women are five times more likely to be diagnosed with an auto-immune disorder such as MS, fibromyalgia, scleroderma, etc.
- Female only disorders related to the female reproductive organs such as Gyn cancers
- Physician life:work balance. In general, super sub-specialization results in less on-call time, fellows to assist with the work and a significantly higher salary.
- Accountability for quality outcomes by payers and consumers

In summary, younger and midlife women prefer women providers and are even more preferential toward women sub-specialists especially if they have a problem, such as breast cancer. They prefer women only if there is equal quality and competence. For primary Women's Health Care, they consistently prefer women to men providers. Within the next ten years, the majority of doctors will be women as a result of the female majority of medical students. Currently, there are not enough female providers to meet the demand, especially in sub-specialties. An effective strategy to bridge this gender gap is to pair female mid-level providers with male physicians or to utilize female navigators for complex cases.

Navigation is another major trend in Women's Health. Women prefer to have one-stop shopping, but if that is not possible, they at least expect their care to be navigated by a professional. Navigators have gained popularity in cancer care due to the complex coordination that must occur between multiple specialists. Most navigators are nurses and are women who have superb communication and coordination skills. Women's health navigators have gained popularity within the last several years and are utilized to coordinate the care of complex women's health patients in urogynecology, gynecology, gynoncology and high risk OB. Occasionally they are utilized in well women care in the role of a "personal health concierge" but





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

it is difficult for this strategy to not be perceived as a competitive threat by the primary care providers (PCPs). Therefore, the navigators who coordinate complex cases are perceived as an extension of the specialist's staff and are not perceived as a competitive threat in any way.

Women don't mind going to multiple locations and providers in order to receive the best of care, but they want their provider to navigate the "health care maze" for them. They also expect all providers to be familiar with their story and on the "same page". Telling their story numerous times, completing multiple sets of redundant paper work and receiving conflicting information is a huge dissatisfier for women and makes them question the professional competency of the providers. Navigators provide a personal layer of coordination that insures the best experience for the patients and the providers.

Integration is another major trend in Women's Health Care. As mentioned previously, women prefer one-stop shopping for all of their health care needs and expect to be treated as a total person rather than the sum of their reproductive organs and breasts. Therefore, the integration of services and providers across the female life span and across all dimensions of care is critical to success. Women desire services and information that are unique to their personal history and their age and stage in life. They want "just in time" information when they need it. In other words, they want a customized plan of care that addresses their risk factors, dictates appropriate screening, and culminates in a plan that maximizes their physical, psychological, sexual and social well-being. Integration at this level is extremely complex and requires sophisticated technology as well as provider buy-in. A number of payers are providing this type of personalized service as a health maintenance strategy and some have internet and mobile applications for this service.

There is often significant debate over "ownership" of the patient which is counter productive to integration as the goal. Breast health is a perfect example of this issue which may be in direct opposition to the integration of care. Comprehensive Breast Centers should have a scope of care that encompasses screening through diagnosis in order to integrate care in a timely manner. For example, a woman may have an abnormality on a screening mammogram and should have the opportunity to receive additional diagnostic testing immediately and see a surgeon on the same day as needed. This is what women want! Although, this integration philosophy is often challenged by PCPs who want to be in charge of prescribing follow-up referrals for abnormal mammograms and surgical referrals, and by radiologists who don't want to take the time to provide immediate reading of mammograms, surgical referrals, immediate diagnostic follow-up, and take responsibility for prescribing and referring patients. Women want and expect integration and will seek services elsewhere if it is not provided.

Integration may occur by housing services together in a Women's Center or it may occur through integration staff, processes, policies or technology. Women want one-stop internet central scheduling, registration, check-in and payment. They do not want to "waste time" by scheduling on the phone with several offices or having to complete redundant paper work on-





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

site which results in excessive wait times. Women consider greater than 10 minutes as an excessive time to wait and consider it extremely disrespectful and insensitive.

Integration across multiple providers and offices may be managed with a common electronic medical record (EMR) and a common scheduling, registration and billing system. If the providers are not employed by the health system, they may need to be leased by the health system in order to implement integrating technology. Many issues around "ownership" of the patient, HIPPA regulations and STARK laws must be negotiated before true integration can occur. Accountable care organizations (ACOS) are a formal mechanism to move toward the integration of care and the accountability for outcomes.

Integration of care across the life span is critically important for Women's Health and for the financial health of the health systems. In general, obstetrics (OB) is perceived as a "loss leader" by most health care executives because the margins in low risk OB are small. Usually OB is high volume and high visibility with a low margin. There are proven OB revenue enhancement strategies that elevate OB to a competitive margin. These include OB ED, coding strategies, billing strategies, revenue cycle strategies, documentation strategies, laborists and clinical throughput strategies. Hospitals invest heavily in OB as their "front door" or first encounter with women. In order to harvest the downstream revenue from OB, a hospital must maintain a lifelong relationship with the women. Refer to Table 2 for the estimated OB downstream revenue. The goal for hospitals should be 100% share of the women and her family. There are proven strategies to maintain lifelong integration with women and become their partner for life.

Table 2. Downstream Revenue from Obstetrics

		Revenue
1	Vaginal Birth	\$5,000
1	C-section	\$7,500
1	Norman Newborn	\$1,000
1	NICU Patient	\$250,000
1	Gyn Surgery	\$12,000
1	Uro Gyn Surgery	\$25,000
1	Gyn Oncology Surgery	\$45,000
1	Woman for life	\$50 - \$100k
1	Woman + Husband	\$150 - \$250k
1	Woman + Husband + Children	\$250 - \$500k
1	Woman + Extended Family	\$500k - \$1M

In summary, Women's Health is the most valuable service line for all hospitals and health systems because women utilize more health services than men across all age groups, women are the "Chief Purchasing Officers" for health care for their families, and women are the major





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

influencers for all health care choices for their extensive network of friends and family. Women are also the majority participants in: in-patient care, out-patient care, ambulatory care, cardiology, orthopedics and oncology. The major trends impacting women's health care are specialization, navigation and integration. These concepts manifest themselves in numerous challenges for health care systems. It is critical for the long term survival of hospitals/health systems that they invest the resources necessary to develop robust strategic, business, facility and provider plans in Women's Health. Most markets are becoming increasingly competitive in Women's Health, and the first in the market to truly embrace specialization, navigation and integration in Women's Health Care and brand it, will win the hearts, minds and pocketbooks of the women in their community.

#### Children's Health

The major trends in Children's Health are expansion of the continuum of care, navigation and integration. Specialization has long been a standard in Pediatrics due to the super subspecialty skills needed to care for sick children. Refer to Table 3 for a list of pediatric specialties.

**Table 3. Pediatric Specialties** 

Neonatology	Pulmonology	Cardiac Surgery
Critical Care	Endocrinology	NICU
Dermatology	Neurology	PICU
Psychiatry	Neuro-surgery	Gastro-enterology
Anesthesiology	Oncology	ENT
Radiology	Urology	Hematology
Nephrology	Transplant Surgery	Gynecology
Cardiology	Infectious disease	Orthopedics
Surgery	Fetal Surgery	Opthalmology

Many children's hospitals have opened within the past two decades as a result of the specialty movement in Pediatrics. There are many children's hospitals within a hospital as well as free standing children's hospitals. The specialization of Pediatrics has resulted in the regionalization of pediatric care into a hub and spoke model. Refer to Figure 3.

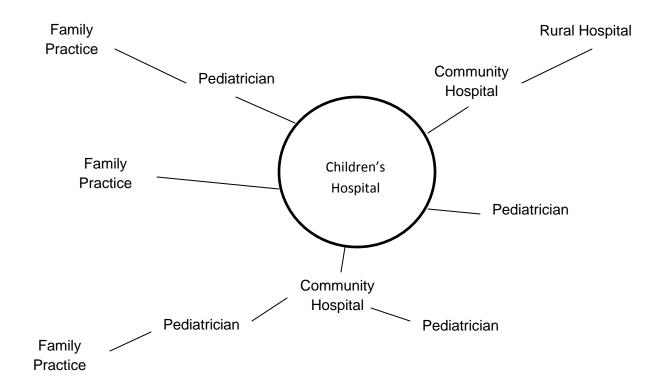




Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

Figure 3. Pediatric Specialization Hub and Spoke Model



Specialization in Pediatrics have resulted in many community hospitals closing their general pediatrics inpatient units due to their lack of access to pediatric coverage and pediatric subspecialty services. Most pediatricians prefer to transfer the care of inpatients to Pediatric Intensivists/Hospitalists rather than try to manage the inpatient care as well as their ambulatory practices. Many pediatricians only have hospital privileges in order to provide care to their normal newborns. An increasing trend is that the normal newborns are cared for by hospital based providers such as neonatologists, hospitalists or nurse practitioners rather than private pediatricians. Increasingly, general pediatrics is becoming an ambulatory only practice.

This trend is problematic for the hospitals because usually a large number of children are seen in the Emergency Department (ED), and if they need to be admitted, they have to be transferred to a children's hospital. Also, there is significant liability with a large pediatric ED population if the hospital doesn't have designated pediatric ED coverage, specially trained pediatric staff in





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

the ED or physicians trained in pediatric emergency care. ED providers must be able to provide a broad spectrum of pediatric care from neonates to adolescents. This requires age appropriate knowledge and skills as well as specialized equipment to fit each age and stage. For example endotracheal tubes must be specific to the size of the child, and medication dosages must be adjusted as well.

Hospitals are also challenged with general surgeons, ENTs and orthopedic surgeons performing outpatient surgeries on children. Again, the concern is appropriate knowledge, skills and equipment to provide care for children of various ages and stages. JCAHO has very strict regulations related to the care of children including pediatric back-up coverage. Pediatricians do not want to be on call for the ED, OR or unassigned newborns, therefore many of them are dropping their hospital privileges. As a result of these challenges, many hospitals have found alternative providers for the care of their newborns as well as coverage for the ER and OR. A growing provider segment is private enterprise neonatology, pediatrics and laborist groups who contract with the hospitals to provide hospital based specialty care. This is similar to the trend of contracting with emergency care physician groups. Hospitals find it difficult to limit the care for children and insist that all hospital based pediatric care takes place at a Children's Hospital. This is considered unacceptable to the parents, the community, and the medical staff. Clearly a balance needs to be struck between community needs, safety and regulations related to pediatric care.

Another trend is that several children's hospitals have expanded their continuum of care to include pre-conception care through delivery. Refer to Figure 4 for the expanded continuum of pediatric care. Children's Hospitals are heavily financially dependent upon their NICUs for viability. Over the past two decades, community hospitals have gotten into the NICU business. This has taken its toll financially on Children's Hospitals and has resulted in this innovative strategy to harvest the downstream NICU and fetal center cases. There are a number of Women's and Children's Hospitals across the US but the previous trend was to add pediatrics to a Women's hospital rather than to add Women's Services to a Children's hospital. The quality argument is that babies are the outcome of OB, therefore to insure the best outcome for the babies, fetal and maternal specialists should be involved in the care of pregnant women. This sounds logical although 90%+ of all OB is considered normal. Certainly this model does improve integration across the perinatal period, but at what cost.

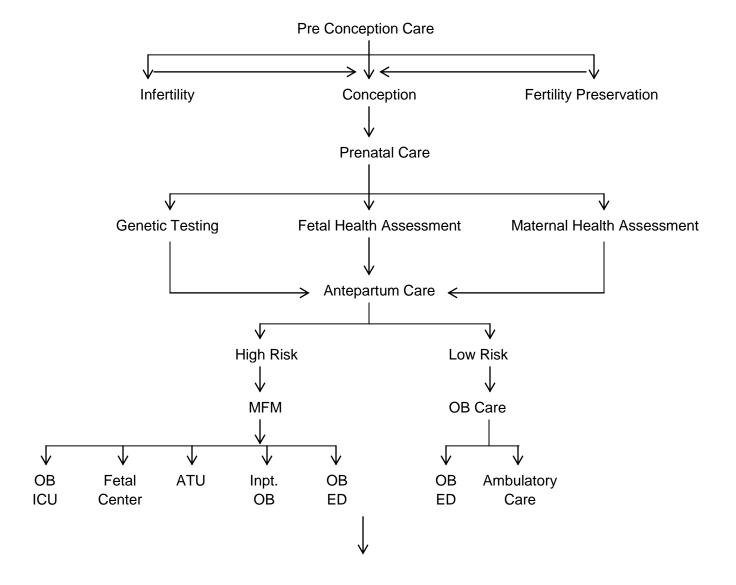




Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

Figure 4. Expanded Continuum of Pediatric Care

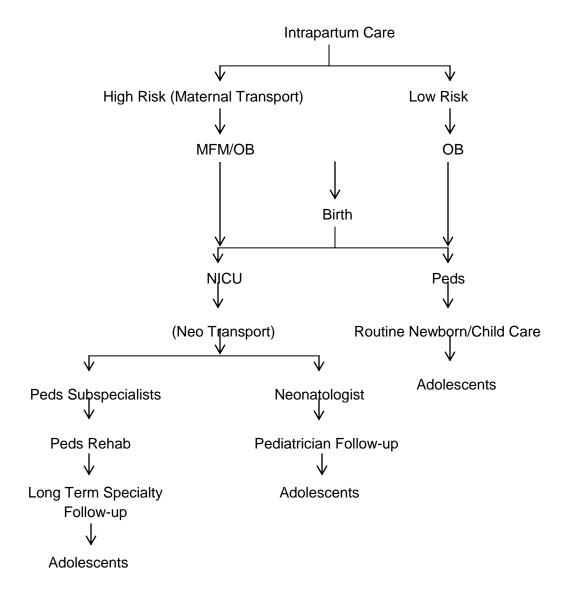




Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

Figure 4. Expanded Continuum of Pediatric Care (continued)



## Key:

ATU = Antenatal Testing Unit





Vicki, A. Lucas @ Comcast, Net

410 615 0062 T 410 785 7661 F

Navigation is another Children's Health trend and it is most commonly seen in the form of Case Managers in Pediatrics. Most specialty units in children's hospitals, PICU, Fetal Center and NICU, have Case Managers who coordinate the care of complex pediatric and neonatal cases. They also work with the payers to obtain authorization for services, with social services to receive needed resources, and with utilization review to manage length of stay. The mothers rely heavily on navigation services to help them find and secure necessary services for their sick children. Navigation will continue to be a critical element of success for all children's health programs, and will become increasingly important to harvest the high risk, high revenue cases.

Integration is also a trend in Children's Health. Women prefer one-stop shopping for their children and, as a result, many pediatric practices have evolved into large groups with a lab and xray on site and evening and weekend appointments. Another trend is for large children's hospitals to purchase general pediatric practices and form large primary care pediatric groups and networks that refer their business exclusively to that hospital. This does provide for better integration between ambulatory, outpatient and inpatient services through shared interfaced technology and aligned business structures. It also promotes the further movement of pediatricians away from inpatient practice.

Another example of integration is with the expanded continuum of care model. For example, in this model, all infertility patients who conceive get an immediate referral to MFM services and all high risk MFM patients get an immediate NICU and/or Fetal Center consult. This results in better coordination of care for the patient and prevention of leakage of high revenue patients from the system.

ACOS will require integration across the continuum of perinatal and neonatal care. The new continuum of care model is one step closer to the ACO model. Also a successful integration strategy that involves integration and navigation of services is the formation of a perinatal consortium. This is a group of multispecialty physicians and multidisciplinary providers who meet on a regular basis to discuss and plan the care of complex perinatal patients.

In summary, the new trends in Children's Health Services are the expansion of the continuum of care from preconception care to adolescents, navigation in the form of case managers and integration through pediatric practice acquisition and network development as well as perinatal consortiums. Specialization has been a strong trend in pediatric services over the past two decades which has resulted in more children's hospitals, less community hospital inpatient pediatric units and fewer pediatricians on staff. Children are still major consumers of ED services which has resulted in community hospital pediatric EDs, night time pediatric urgent care centers and pediatric fast tracks in the ED. Also, as a result of NICU services, some pediatric long term care hospitals have developed to manage long term ventilator dependent babies who out grow the NICU. Lastly, pediatrics has increasingly become an ambulatory only practice where inpatients are managed by Pediatric Hospitalists or Pediatric Intensivists.





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

### **Summary**

Women's and Children's Services have changed dramatically over the past twenty years and will continue to change at an exponential pace over the next decade as a result of consumer demand, greater childhood morbidity, the aging population, technology, regulations such as ACOS and medical specialization. Refer to Tables 4 and 5 for a summary of business opportunities in Women's and Children's Health. Investment in Women's and Children's Services is critical to the long term success of all hospitals and health care systems.

Table 4. Business Opportunities in Women's Health

- Uro-Gynecology
- Gynoncology
- Orthopedics
- CV
- GI
- Brain Health (Dementia)
- Laborists
- Sports Medicine
- Minimally Invasive Surgery
- Loyalty Programs
- Women's Centers
- Breast Centers
- High Risk Pregnancy
- Infertility
- Anti-aging
- OB ED
- Midlife Women's Health

## Table 5. Business Opportunities in Children's Health

- Integration of Women's and Childrens Health
- Primary Care Pediatric Networks
- Fetal Centers
- Pediatric ED
- Pediatric Urgent Care Centers
- Private Enterprise Specialty Groups

- Full Service Pediatric Practices
- Sports Medicine
- Genetics
- Fertility Preservation
- Adolescent Gynecology
- Endocrinology

Women are: the majority stakeholders in health care, empowered and educated consumers, our most demanding customers and the source of our most precious resource – new patients. What other specialty than OB has one patient enter the hospital and exits the hospital with two patients? Enough said!





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

## About Vicki Lucas, LLC

Vicki Lucas, LLC is the market leader in Women's and Children's Health business development. With a Ph.D. in health care administration and finance, and certified as a Women's Health Nurse Practitioner, Dr. Lucas has over thirty years experience effectively working with "all stakeholders across all levels of health care organizations. Our clients include Johns Hopkins, Texas Children's Hospital, University of Iowa, Catholic Health Care West, Memorial Hermann Health System and many other top ranked hospitals and health systems. We have a proven track record of saving our clients time and money while insuring their success. Women's and Children's Services is a unique specialty that requires expert knowledge and analysis to effectively plan and grow the business. Vicki Lucas, LLC has access to national experts in all areas of Women's and Children's health as well as the largest benchmarking data base in the US. For additional information on our consulting services, please refer to <a href="https://www.vickilucas.com">www.vickilucas.com</a>.

#### References/Resources

Advisory Board Company, 2006, Future of Women's Services Gold Book. Washington: Advisory Board, Inc, 2006.

www.BurstMedia.com: "Research on Male and Female Internet Users" (Http://www.burstmedia.com/research/current.asp)

Business Week February, 2008

CDC Office of Women's Health – www.cdc.gov/women

Emma L. Carew, "New Medical Ad Focuses on Speed and Convenience" Star Tribune, Minneapolis – St. Paul, MN (http://www.startribune.com/business/19933084.hrml?page-1&c-y)

Fara Warner, The Power of the Purse. How Smart Businesses are Adapting to the World's Most Important Consumers – Women (Pearson Prentice Hall)

FDA Office of Women's Health – www.fda.gov/forwomen





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

Gallop Management Journal, March, 2005

Graf, MA (2010).

Women's Health Strategies for Superior Service Line Performance.

Danvers, MA: HealthLeaders Media.

Hospital Statistics, 2003 Edition. Chicago Health Forum, LLC, 2003.

Ireland Report on Succeeding in Women's Health. Quarterly Newsletter. Englewood, CO: 1992 – 2009. www.snowinst.com

Lucas, V. (2007)
Operational Efficiency and Patient Flow in Women's Services
The Ireland Report on Succeeding in Women's Health. March/April pp.1-19.

Lucas, V. and Breslin, E. (2003) AWHONN's Women's Health Nursing: Toward Evidence-Based Practice Philadelphia, PA: Saunders Publishing

Lucas, V. (2006)
Taking Advantage of Uptrend in Obstetrics.
The Ireland Report on Succeeding in
Women's Health. July/August pp. 5-7

Lucas, V. (2005)
Successful Obstetrics Risk Reduction: A
Strategic Business Decision
The Ireland Report on Succeeding in
Women's Health. September/October pp
1-4

Lucas, V. et al (2000). Desperately Seeking Synergy in Women's Health. Washington, DC: Jacobs Institute Publications





Vicki.A.Lucas@Comcast.Net

410 615 0062 T 410 785 7661 F

Marti Barletta, Marketing to Women: How to Increase Your Share of the World's Largest Market (Kaplan)

Miichele Miller and Holly Buchanan, The Soccer Mom Myth – Today's Female Consumer: Who she really is. Why she really buys (Wizard Academy Press)

National Women's Health Network – www.NWHN.com

Office On Women's Health – US Dept of Health – www.womenshealth.gov/owh

Office of Research on Women's Health – http://orwh.od.nih.gov

Snowmass institute on Women's Health, Conference Resources on Women's Services. www.snowinst.com

Spirit of Women Hospital Network. www.spiritofwomen.org

.

