

Models of Excellence

Building a Sustainable Comprehensive Women's Health Program: The Michigan Model

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ABSTRACT

The Women's Health Program at the University of Michigan was established in 1993 and has developed into a successful, federally supported program that links clinical research and education activities across the University. It has focused on human resource capacity building, sustainable financial support and infrastructure, and adaptability to change and opportunities. Widely accepted standards, demonstrated value, committed leaders/champions, and participatory culture have contributed to its success and are important to its future.

INTRODUCTION

THE 1990s SAW AN EXPLOSION of interest in women's health issues and a subsequent focus on specialized women's healthcare initiatives at community hospitals and academic medical centers.¹⁻³ Advocacy and lobbying efforts intensified during the decade and resulted in increased funding for and media attention to women's health issues. Celebrities and politicians responded and participated with philanthropic and programmatic support, directed mostly at the very high profile causes of finding cures for women's cancers, especially breast cancer.

These issues were not new to university and healthcare communities. Beginning in the 1970s and increasingly during the 1980s, empowered consumers and sophisticated patients were already pushing for improved services, better co-

ordination of care, and clearer communication between care providers and their patients. As coordinators of care not only for themselves but also for their families, women led the revolution toward a more service-driven, preventive, and comprehensive approach to healthcare.

The Michigan Women's Health Program was developed within the University of Michigan Hospitals and Health Centers (UMHHC), an 865-bed health system with five hospitals (University Hospital, C.S. Mott Children's Hospital, Women's Hospital, Comprehensive Cancer Center, Turner Geriatric Center) and over 30 community health centers providing outpatient services from routine preventive healthcare to ambulatory surgery and eventually reached across the University (Fig. 1). Planning began in the mid-1980s, when the associate hospital director for women's and children's services brought together 30 clinical care leaders

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University of Michigan Women's Health Program

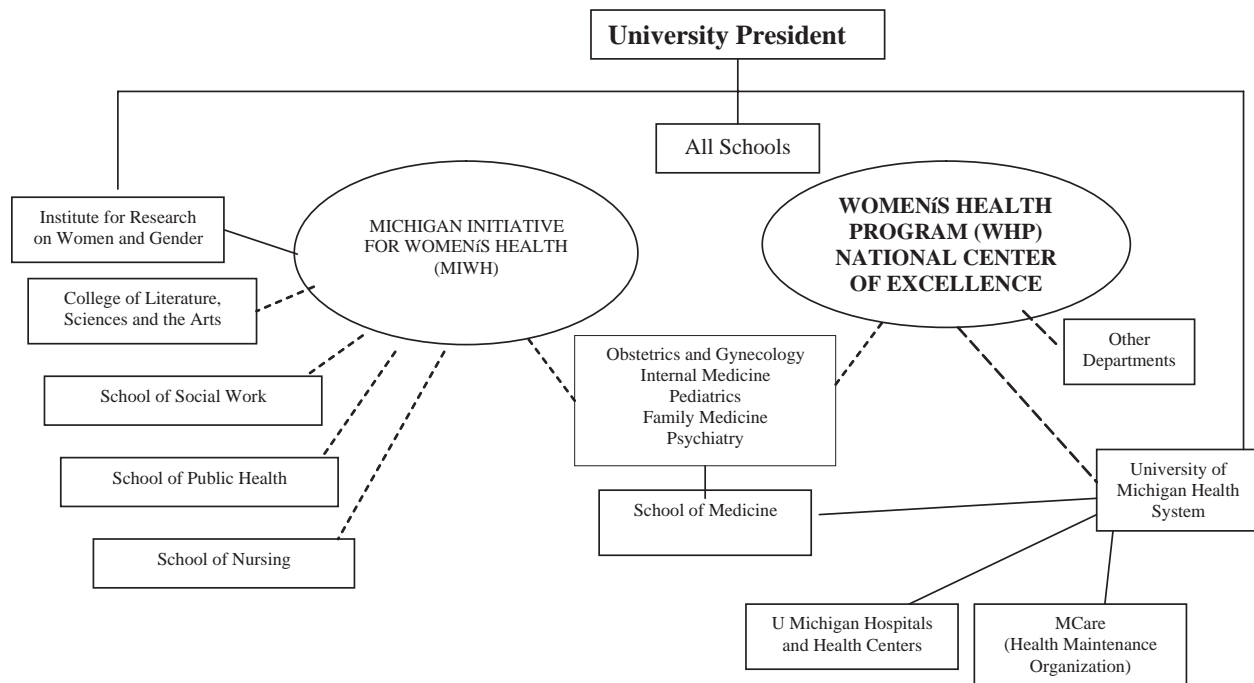


FIG. 1. Women's Health Program institutional interrelationships at the University of Michigan.

to discuss enhancing maternity care services by moving to a single room maternity model. This initial meeting led to discussions of a broader vision for women's healthcare at the UMHC, gaining internal support for development of a comprehensive women's health program. The University of Michigan Women's Health Program preceded the National Centers of Excellence (CoE) in Women's Health, a model developed by the Office on Women's Health at the Public Health Service, U.S. Department of Health and Human Services.⁴ The CoE program began designating model centers for the delivery of comprehensive women's healthcare in 1996 and now includes 21 designated academic centers and 12 designated community hospital centers of excellence. Each center used a model based on five integrated components of clinical care, research, education, outreach, and leadership.⁵ The University of Michigan (Michigan) received the CoE designation in 1997, 4 years into the internal development of Michigan's comprehensive approach to women's health.

Sustaining the centers beyond the time-limited funding attached to the federal CoE designation is proving challenging for the designated centers. Those in the best position to sustain the model and its components beyond the funded years are

those centers that have integrated the model successfully into their institutional infrastructure or culture. The Michigan model is one of these centers. All five of the CoE components (clinical care, research, professional education, community outreach, and leadership development) were in place prior to receiving federal funding, making it more likely to think that the model will be self-sustaining in the years that follow the conclusion of the federal program support.

The foundation of the Michigan model is a three-pronged approach to building a program: institutional championing, unified vision, and demonstrated value. This three-pronged approach resulted in a solid, sustainable infrastructure that allows the program to grow into new areas, expand existing initiatives, and continue to meet the needs of the community and the goals of the faculty without heavy reliance on outside funding and support.

INSTITUTIONAL CHAMPIONING AND UNIFIED VISION

In 1993, the associate hospital director responsible for women's and children's services and

newly appointed chair of obstetrics and gynecology convened a full-day meeting to discuss their shared vision for building a comprehensive women's health program that addressed all issues in women's health, going far beyond reproductive healthcare into social, environmental, and family issues, mental health, life span, research, and wellness issues. Their partnership was strong, and their united front as champions for women's health was effective. The response from other department chairs, faculty members, clinicians, researchers, and administrators throughout the system was remarkable. The first annual women's health planning retreat convened with over 100 participants representing over 30 departments and clinical programs, committed to a shared vision for improving women's healthcare at Michigan and ultimately improving women's lives in our community and beyond: The Women's Health Program.

In the months that followed, the group analyzed the strengths, weaknesses, opportunities, and threats (SWOT) to the success of a comprehensive women's health program, anchored by an obstetrics and gynecology department in a large, academic medical center. The mission and vision were defined and approved by consensus. Although edited slightly through the years, the message has remained unchanged: The mission of the University of Michigan Women's Health Program is to encourage the highest quality healthcare experience to women through coordinated service, collaborative research, extensive education, and community outreach. The key elements of the program's vision are to define and respond to the needs of our patients, provide comprehensive services, respect diversity, encourage multidisciplinary collaboration, foster research on women's health, expand educational efforts, and increase community involvement through volunteerism.

With the mission and vision articulated and with market data, SWOT analyses, and a community needs assessment in hand, a series of focus groups was held with community women for the purpose of validating the general focus that emerged from the first retreat. The focus groups communicated widespread interest in having a coordinated program, gaining access to more information about common conditions, faster and more convenient access to care providers for answering quick questions without having to make an appointment, and assistance with navigating

the healthcare system overall (figuring out which doctors to see for specific issues). In short, they communicated the need for a Women's Health Resource Center (WHRC), open to the general public and ready to assist with any and all women's health concerns. The Women's Health Program responded initially by dedicating a small room and single telephone line staffed by a registered nurse in the obstetrics and gynecology clinic to operate as a temporary WHRC while work could begin on assignment and development of dedicated space for a library and various information resources. The project quickly transitioned to a plan for complex, matrixed program, with the enlarged and enhanced WHRC serving as the coordination center for the 30+ participating departments and clinical services that comprised the Women's Health Program.

At the third annual Women's Health Program Retreat in 1995, administrators, clinicians, and faculty from the participating services ratified a set of service standards that all Women's Health Program participants would adopt. The standards outlined targets for wait times, open appointments, and referral services and provided guidelines and templates for patient education materials and coordinated clinical information services, cross-scheduling of appointments, and patient communications. Compliance with the standards was tested quarterly through a blind shopper evaluation: a WHRC volunteer phoned each area's call center, posed as a patient seeking an appointment, and asked a scripted set of questions. The results of each call were made available to the Women's Health Program steering committee, which consisted of representatives from all program participants. The services and departments that became part of the Women's Health Program wheel (Fig. 2) accepted and complied with the standards for participation. They found this program very helpful and believed that it directly enhanced the level of service provided by their call centers.

The retreat participants also agreed to begin work on the creation of a gender-specific patient satisfaction tool and in 1996 invited an expert to turn their goals into an actual product. Carol S. Weisman, Ph.D., who had recently begun her appointment in the University of Michigan School of Public Health, joined the Women's Health Program leadership team as evaluation director. Together with a committee including clinicians, faculty, community women, and administrators, a

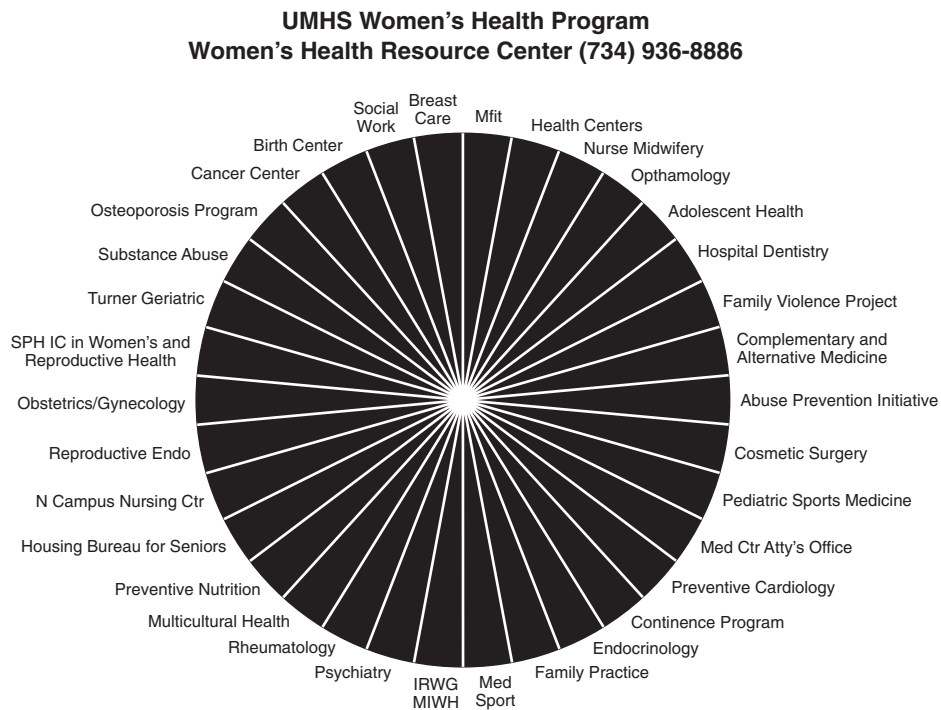


FIG. 2. The wheel of programs and departments participating in the Women's Health Program (2006).

gender-specific patient satisfaction tool was created, tested, and implemented in the 30+ services of the Women's Health Program. The tool was made available to the National Centers of Excellence 2 years later and has been revised, tested, and widely implemented by the member centers of that network nationwide.⁶

DEMONSTRATED VALUE

The Women's Health Program's most visible contribution to UMHHC patients and the general community is the WHRC. In February 1995, the WHRC opened in a dedicated, 480-square foot space in the hospital, adjacent to the obstetrics and gynecology clinic, with a library, print and video materials, general information on community resources and referrals, and Internet access (both guided and open). Staffed by a registered nurse, a part-time clerical assistant, and a work-study student, the center served 6000 women by phone or in-person in its first year. The client base consisted of patients, health system employees, and general community members seeking information on availability and selection of care providers, treatment options for specific diseases

or conditions, or general resources on pregnancy, birthing, and infant care. A major service of the WHRC in the beginning and to this day is the provision of basic assistance with navigation of our complex medical environment. WHRC staff members assist clients by identifying the general clinical area that responds to their identified needs and coordinating multiple appointments per visit when necessary. In the first year, approximately 30% of client contacts resulted in appointment referrals to UMHHC clinical services. The referral rate remains significant 10 years later, averaging 15% of those clients who speak directly with a staff member. This downstream financial benefit has proven powerful in gaining continuous hospital support. Although tailored to women, the WHRC serves a small number of men through direct calls and a significant number of men and children through the women who call on their behalf. In response to this unmet need, the WHRC now markets itself as a center dedicated to serving the clinical and informational needs of women and their families.

Today, the WHRC is housed in the same location but was expanded to 1100 square feet in 2002. It is now staffed by a full-time nonclinician coordinator, a part-time clerical assistant, 2 student

interns, and over 25 volunteers many of them undergraduate students who work 3 hours per week on average. Because of their demonstrated value to clinical programs, they are supported by hospital funds although the UMHHC as part of the University of Michigan Health System (UMHS). With the widespread availability of the Internet and digital media, the modes of communication with clients and the methods of service have changed. In FY2005, the Women's Health Program website generated over 100,000 hits, yet the walk-in activity at the WHRC remained strong at about 4300 annual visits. Phone or email requests for specific information totaled about 2100 additional contacts. Whereas early requests for information focused on treatment modalities and reproductive health issues, today's requests are more diverse, ranging from genetic testing information to clinical trials for experimental drugs and information on cutting-edge technologies for both treatment and prevention of diseases and chronic conditions.

The WHRC remains the communication hub of the Women's Health Program. It is the centerpiece and command center of the Michigan model. Through its varied offerings, both onsite and offsite educational and community programming, it serves community members and clinicians. Clinicians throughout the UMHS refer patients to the WHRC who are seeking patient education materials, information on treatment options, alternatives, and clinical research trials, as well as referrals to support groups and community agencies.

The Women's Health Program also provides value to the overall UMHS by fostering collaboration across departments and disciplines for the purpose of improving both the quality of care and the care experience for our patients. The Abuse Prevention Initiative (API), a clinical initiative of the Women's Health Program provides ongoing professional education and competency assessment related to personal violence issues to the nursing staff and physician faculty, as well as medical and nursing students, house officers, and other clinicians. The API distributes information in each restroom within the UMHS (public, private, men's, and women's restrooms, including those located in the 30 offsite health centers). Most importantly, the API promotes screening of 100% of inpatient adults admitted to the University of Michigan Hospitals, provides 24-hour backup to clinicians assisting patients who have

been victims of family or personal violence, and provides assistance with referrals to community shelters and safe houses.

In addition to clinical programs like the API, the Women's Health Program publishes a quarterly consumer newsletter that highlights a different multidisciplinary clinical initiative each issue (available at www.med.umich.edu/whp/whrc/newsletter.htm). The newsletter generates community interest in UMHHC's clinical programs, brings cutting-edge research findings to community members in language that they can understand and with information that they can use, and generates referrals to each department or service it features. It provides market differentiation for clinical services by highlighting consideration of gender in each service and identifies providers who have a clinical or research interest in women's health and gender-based medicine.

The Michigan model is built on widespread participation. Just as it did in the mid-1990s, the Women's Health Program Annual Retreat continues to bring together faculty members from the 30+ participating departments and services to discuss the direction of the program and provide updates on women-specific initiative or services, as well as gender-based research within each department or service. Participation in the Women's Health Program includes an ongoing relationship with the WHRC. Departments and services share and update patient/consumer information in the library, send patients to the WHRC for more detailed patient education resources, or participate in and cosponsor educational programs. Participating faculty members also have access to the Women's Health Registry,⁷ a unique database that links women interested in volunteering for research with investigators. It stores detailed health profiles in a searchable database and facilitates all initial communication between prospective subjects and research projects.

The Michigan Women's Health Program has contributed to, and benefited from, a concurrent medical school effort to increase the number of faculty women, especially in leadership positions. In late 1994, as the Women's Health Program was beginning, medical school leaders renewed their commitment to the recruitment, promotion, and advancement of women faculty. Since that time, the number of women in senior faculty ranks has increased from 60 to 169, a growth of 182%. The corresponding growth for men was 26%. Similarly, the number of tenured

women more than doubled, from 51 to 106. This 108% increase compares with a growth of 9% for tenured men. During this time period, there was a net addition to the tenured ranks of 39 men and 55 women. Among all faculty, there was a net addition of 645 faculty members—372 (58%) were women.

In the department of obstetrics and gynecology, where the Women's Health Program is centered, women faculty fared similarly well. In 1999, a woman clinician earned tenure, the first in the department's 150+ year history. Since 1993, the number of women in senior faculty ranks increased from 1 to 9 (800%) while the total number of faculty women grew from 7 to 31 (343%). Corresponding rates of growth for faculty men were from 11 to 14 (27%) and from 17 to 25 (47%). The Women's Health Program proved to be an effective recruiting tool for obstetrics/gynecology and other participating departments, as potential faculty learned about the numerous initiatives within the larger program. Similarly, the growing number of faculty women, especially at the senior ranks, strengthened the Women's Health Program.^{8,9}

The success of the Women's Health Program's model for clinical collaboration has influenced other multidisciplinary initiatives at the University of Michigan. It has become the major clinical interdisciplinary women's health link at the university, as the Michigan Initiative for Women's Health is the major interdisciplinary research link (Fig. 1). Both the University of Michigan Depression Center (championed by the chair of psychiatry) and the University of Michigan Cardiovascular Center (championed by the chair of internal medicine and the chiefs of cardiology and vascular surgery) studied the Women's Health Program collaborative model when building the foundations for their new comprehensive, interdisciplinary programs. Both adopted the steering committee, retreat model, the service standard approaches, and the WHRC service design. Both programs are active participants in the Women's Health Registry advisory committee and research communities.

Members of the Women's Health Program have been involved in curricular changes across campus. The recent medical school curriculum revision included substantial increases in women's health subjects (from dissection of previously discarded breasts in anatomy to lectures on breastfeeding and enhanced sessions on re-

productive health and primary women's health-care issues).

New undergraduate classes on women's reproductive health, global women's health, and a new minor in gender and health in the women's studies department have proven popular.¹⁰ A new public health course in global women's health enhances the school's interdisciplinary concentrations in women's and reproductive health and global health. The courses have been popular and maximally subscribed, and many students taking these classes have served as volunteers in the WHRC and worked on research projects of the Women's Health Program faculty across the schools and colleges. The positions are funded by the program and laboratories that train them. Many students have entered professional schools, some already reaching graduate medical education programs and junior faculty positions in women's health. The Women's Health Program recently certified its first fellow¹¹ (supported by hospital clinical funds), an internist/gastroenterologist, who completed a 1-year clinical fellowship in women's health, focusing on such interdisciplinary issues as mental health (irritable bowel syndrome, fecal incontinence-related depression) and health services research (women's perceptions about female endoscopists¹²).

THE FUTURE OF THE MICHIGAN MODEL

The Michigan model has paid significant attention to its sustainability of comprehensive women's health programming. It began with institutional leaders who championed the cause of women's health and brought attention to the need to deliver care to women in a way that took gender and gender-based issues into consideration. It continues by generating and sustaining widespread interest and commitment to a unified vision of comprehensive women's health through new community programs, services tailored to the women they serve, and careful attention to the pipeline of students, future employees, and healthcare providers who are educated at the University of Michigan and mentored and trained by the Women's Health Program. The Women's Health Program, from its conception, has worked to influence the curricula of the medical school, the school of public health, and the undergraduate campus in ways that bring wo-

men's health issues to the forefront, contribute to the presentation of gender differences in positive, relevant, and meaningful contexts, and foster interest and commitment to women and women's health as not only a viable but an attractive career choice.

With each of the major clinical areas participating in the Women's Health Program, the provision of excellence in clinical care and research in women's health is an expectation, unremarkable and institutionalized. Consideration of gender-based issues or interests is central to institutional and programmatic goals, research reviews and funding decisions, recruitment decisions, and retention efforts. The Michigan model was strengthened by its designation as a National Center of Excellence but was not dependent on it. It is sustained by the strength of the program to continue beyond the years of federal funding, salient interest, and media hype for women's health issues. UMHHC and university schools and colleges provide funding for its programs based on proven value and the human resource outcome. With institutional champions, a unified vision, continued focus on the mentoring pipeline, and the ability to continue to create value for all participants, the Michigan model for building and sustaining a comprehensive women's health program is one that warrants consideration by any institution interested in delivering the highest quality service to patients, creating a women's health culture, and enhancing education and research with the hope of ultimately improving women's lives.

REFERENCES

1. Looker P. Women's health centers: History and evolution. *Womens Health Issues* 1993;3:95.
2. Weisman CS, Curbow B, Khoury AJ. The National Survey of Women's Health Centers: Current models of women-centered care. *Womens Health Issues* 1995;5:103.
3. Milliken N, Freund K, Pregler J, et al. Academic models of clinical care for women: The National Centers of Excellence in Women's Health. *J Womens Health Gend Based Med* 2001;10:627.
4. Office of Women's Health. National Centers of Excellence in Women's Health Report Card. Washington, DC: U.S. Department of Health and Human Services, 2000.
5. Fife RS. Development of a comprehensive women's health program in an academic medical center: Experiences of the Indiana University National Center of Excellence in Women's Health. *J Women Health* 2003;12:869.
6. Anderson RT, Weisman CS, Scholle SH, Henderson JT, Oldendick R, Camacho F. Evaluation of the quality of care in the clinical care centers of the National Centers of Excellence in Womens Health. *Women Health Issues* 2002;12:309.
7. Rogers JL. Effectiveness of media strategies to increase enrollment and diversity in the Women's Health Registry. *Am J Public Health* 2002;92:613.
8. Morahan PS, Voytko ML, Abbuhl S, et al. Ensuring the success of women faculty at AMCs: Lessons learned from the National Centers of Excellence in Women's Health. *Acad Med* 2001;76:19.
9. Bickel J, Wara D, Atkinson BF, et al. Increasing women's leadership in academic medicine: Report of the AAMC Project Implementation Committee. *Acad Med* 2002;77:1043.
10. Inhorn MC. Defining women's health: A dozen messages from more than 150 ethnographies. *Med Anthropol Q* 2006;20:345.
11. Directory of residency and fellowship programs in women's health 2006: Association of Academic Women's Health Programs. *J Women Health* 2006;15:619.
12. Menees SB, Inadomi JM, Korsnes S, Elta GH. Women patients' preference for women physicians is a barrier to colon cancer screening. *Gastrointest Endosc* 2005; 62:219.

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