

**THE MATERNAL AND CHILD BEHAVIORAL HEALTH PILOT:  
AN ANALYSIS USING THE KING COUNTY BOARD OF HEALTH'S  
HEALTH CARE REFORM PRINCIPLES**

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## Summary

The Maternal and Child Behavioral Health Pilot (the “Pilot”) is a four-year program that identifies and treats depression in low income pregnant women, mothers, and their young children. Its design and implementation incorporates many of the health reform principles adopted by the King County Board of Health in September 2008. Because of how it is structured, the Pilot is rapidly developing an impressive track record of identifying and improving the health of thousands of King County residents.

Depression among pregnant women and mothers exists across income groups and is of serious concern because it harms both the women who suffer from the condition and their children.

Depression in pregnant women and mothers is linked to:

- Low birth-weight, prematurity, and obstetric complications;
- Failure to – adopt SIDS safety practices, regularly use car seats, or obtain infant preventive health services; and
- Higher rates of attention deficit disorder, separation anxiety, poor academic performance, and insecure attachment in children.

The Pilot focuses its efforts on low-income women and children because they are more likely than economically secure individuals to suffer from depression and are less likely to obtain treatment. By ensuring that these women and their children have access to affordable, high-quality, patient-centered care that is engaging, safe, and culturally appropriate, the Pilot uses resources in a way that is very cost and health effective. The program guidelines incorporate many of the King County Board of Health’s principles and demonstrate that their use increases the likelihood of improved health outcomes in an effective, equitable, and efficient manner.

## Introduction

In August 2007, King County adopted the Public Health Operational Master Plan (PHOMP) which directed the Seattle-King County Health Department (the “Department”) to, among other things, advocate for health care financing reform as part of an effort to increase the number of healthy years lived by King County residents.

Following passage of the PHOMP, the King County Board of Health (BOH) passed Resolution 08-10 in September 2008. The Resolution delineated six principles (the “Principles”), each one defined in detail, and which address the health issues of access, quality, affordability, community participation, health promotion and prevention, and health equity. They provide that:

Principle #1: All people have access to affordable, comprehensive health care services on an equitable basis. All individuals are able to access the right care in the right place at the right time.

Principle #2: All health care is clinically appropriate and provided in a timely, safe, and patient-centered manner.

Principle #3: Health services financing is designed and allocated so as to provide permanent, stable, and sufficient funding for high-quality, universal health care.

Principle #4: Health services delivery systems are responsive to the needs of the community they serve. Community members collaborate with health care systems to ensure the delivery of appropriate high quality health care services.

Principle #5: The best investments are those that prevent disease and promote good health in the most cost-effective manner.

Principle #6: Health services delivery and financing systems employ strategies, policies, and interventions aimed at achieving health equity.

The Principles illustrate how a health plan should be designed so that it promotes the health and

The Board and the Seattle-King County Public Health Department believed that the Principles, if used as the cornerstone of a health plan, would promote the well-being of King County residents.

The Board subsequently passed Resolution 09-04 which adopts a King County health reform plan. The plan provides for a number of activities including a Principle-based analysis of a King County health program to determine how the use of the principles impacts program services and health outcomes. This paper provides that analysis based upon a review of the Maternal and Child Behavioral Health Pilot project (the “Pilot”). An overview of the Pilot is provided below.

## **Pilot Description**

The Maternal and Child Behavioral Health Pilot (the “Pilot”) is a four-year program that identifies and treats depression in low income pregnant women, mothers and their children.

### **Background**

Approximately 13 percent of women suffer from depression during pregnancy.<sup>1</sup> Approximately one-half of all mothers of young children may also suffer from depression.<sup>2</sup> The condition affects women of all races and economic backgrounds, but it disproportionately impacts low-income families because they also cope with poverty, substance abuse, violence and low or no community support.

Depression is a problem for these women and their children. It impedes a woman’s ability to function well and ensure that she is taking steps to be as healthy as possible during pregnancy, and it impedes her ability after childbirth to provide essential care for her infant and other children.

The best way to reduce the negative impact of depression is through early diagnosis and treatment of the condition. However, primary care physicians who see pregnant women and mothers and their young children often do not have the information and tools to test for or treat depression. Parents are at a similar disadvantage. They generally do not recognize the early stages of poor social and emotional development in their children that results from repeated exposure to a depressed care taker (this is particularly true in low-income families).

In order to address this problem, the 2007 Washington State legislature passed legislation that supported a four-year program to facilitate the early identification, intervention, and

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<sup>1</sup> Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes. Evidence Report / Technical Assessment No. 119. AHRQ: US DHHS. [www.ahrq.gov/downloads/pub/evidence/pdf/peridepr/peridep.pdf](http://www.ahrq.gov/downloads/pub/evidence/pdf/peridepr/peridep.pdf)

<sup>2</sup> Wassel, R. “Maternal Depression: A Review of the Literature.” Prepared for Health Start Bureau, US Depart. Of Health and Human Services (Washington DC: US DHHS 2000.).

prevention of childhood depression. This goal necessarily required the treatment of pregnant women and mothers. The Pilot operates in eight King County safety-net clinics, and began operating in 2009.

The legislation required that Pilot services be:

- Provided on an equitable basis (not distributed by ability to pay)
- Of high quality and culturally appropriate (provide translation services)
- Family oriented (the entire family was to be engaged in the treatment of children)
- Developmentally appropriate, evidence-based, and flexible (to best meet the needs of the women and children served).

With this mandate, the initial goal of the Pilot was to determine how best to design a program that would effectively identify and treat mental health problems in low-income women and children. The Pilot included a range of approaches, but each one had the following goals:

- Improve mental health outcomes in low-income children through increased access for their mothers to depression screening and treatment.
- Improve mental health treatment through the implementation of standardized treatment protocols in primary care.
- Improve primary care providers' ability to reduce the risk of mental health problems, and to treat conditions when they arose in both mother and child.

## **The Pilot in Operation**

### *Testing*

Education about depression and depression screening was provided to all pregnant women and mothers during their regular clinic appointments. A number of screening tests were used in each clinic incorporating different languages and cultural practices appropriate for the patient population. The tests were used with pregnant patients during their prenatal visits. Some clinics tested mothers during their children's visits to the clinic for an acute illness or well child care.

As of June 2009, 2,823 low-income pregnant women and mothers from diverse backgrounds were screened for depression and mood disorders. The screenings showed that most of them had symptoms of major depression, and needed treatment that would include psychotherapy and/or antidepressants.

For children, clinic staff used developmental “red flags.” These “red flags” were considered to be particularly important when the child’s mother had tested positive for depression. Through this process, 1,731 children 0-12 years have been identified as at risk of behavioral and/or developmental issues.

### *Treatment*

As a result of the extensive testing, by June, 2009, 285 individuals – 99 children and 186 pregnant women and mothers – were receiving mental health treatment.

Among the women, 85% of them received a comprehensive mental health clinical assessment from social workers or psychologists on the primary care team. Three-quarters of them received numerous follow-up activities by phone, clinic visit, or in support groups within four weeks of their enrollment. Clinics have started peer support groups for depressed pregnant and parenting women. In addition to individual therapy and medication, support groups are effective because they serve to decrease social isolation, increase personal awareness, and promote emotional growth among the participating women.

**Pilot Analysis based upon  
the Board's Principles**

**Principle #1:** *All people have access to affordable, comprehensive health care services on an equitable basis. All individuals are able to access the right care in the right place at the right time.*

**Universal.** Access to health care cannot be limited or denied based upon ability to pay, pre-existing conditions, gender, age, race, ethnicity, sexual orientation, immigration status, neighborhood, availability of transportation or other factors.

- **Meets** this requirement

The Pilot serves all low-income pregnant women and mothers who use the eight King County safety-net clinics. It does not distinguish or allocate care based upon any other factor. The program is no cost to participants. To the extent to which care is limited, it a consequence of limited program funding, not program design.

**Affordable.** The costs of care are based upon the individual's ability to pay.

- **Meets** this requirement

The Pilot operates at safety-net clinics where many low-income individuals receive their care. The clinic provides care to all those who seek it without regard to income, free of charge.

**Equitable.** Services are conveniently located and equitably distributed; facilities have adequate resources to provide preventive, diagnostic and treatment services.

- **Meets** this requirement

The Pilot is designed to help all pregnant women and mothers who are already patients at one of eight safety-net clinics. As such, the Pilot services are conveniently located because they are integrated into the health care system that the target population already uses. The Pilot has provided primary care providers with diagnostic, preventive, and treatment training and infrastructure to provide services to those who need it.

**Comprehensive.** A uniform set of services is guaranteed and equally available to all people on the basis of clinical need and must include, among other things, medical, preventive care, mental health, substance abuse, dental, vision, reproductive health, and end of life care.

- **Meets** this requirement

In terms of the diagnosis and treatment of depression, Pilot services are fairly comprehensive. They include individual therapy, medication, and group therapy. Although greater resources could improve or expand treatment options, those provided are equally available to the target population on the basis of need and through screening provide preventive care, diagnosis, and treatment as appropriate.

**Principle #2:** *All health care is clinically appropriate and provided in a timely, safe, and patient-centered manner.*

**Clinically appropriate.** Quality health services meet the most current scientific and clinical standards (best practices).

- **Meets** this requirement

Through the Pilot, clinic staff members are trained to lead peer support groups for depressed pregnant women and mothers using evidence-based and research-based practices.

**Patient-Centered.** Benefits design and financial incentives are linked to clinically appropriate care and improvement of patient health outcomes.

- **Not applicable**

**Patient-Centered.** Patients have access to a health care “home” which provides primary care and coordinates specialized health care services.

- **Meets** this requirement

The Pilot is specifically designed to be integrated into existing primary care services. Consequently, primary care providers follow up with patients who are in the program. In addition, they oversee treatment provided by social workers and psychiatrists, and the care provided in supervised group sessions.

**Patient-Centered.** Health practitioners and patients have access to up-to-date, evidence-based information to make decisions about health care treatments and options without undue third party interference.

- **Meets** this requirement

The Pilot is funded through public levies and so the program is not subject to treatment limitations based upon insurance companies and or government restrictions. The limitation of the program to the eight clinics is a consequence of funding limitations. The Pilot is specifically designed to engage patients in care using evidence-based treatment protocols.

**Principle #3:** *Health services financing is designed and allocated so as to provide permanent, stable, and sufficient funding for high-quality, universal health care.*

**Cost-effective health delivery systems.** Practitioners and health care systems incorporate efficient health care delivery practices to increase value and reduce waste (e.g., electronic health records, care coordination, etc.).

- **Meets** this requirement

The Pilot incorporates care coordination within the primary care context.

**Efficiency.** Administrative systems, including payment mechanisms, are non-duplicative and easy to use.

- **Not applicable.**

Patients in the Pilot do not pay for services directly.

**Efficiency.** Financial incentives are designed to produce an efficient care delivery system with rational cost controls.

- **Not applicable.**

**Risk sharing.** Health services financing is designed so that, in an insurance system, risks are shared as broadly as possible across populations.

- **Not applicable.**

**Principle #4:** *Health services delivery systems are responsive to the needs of the community they serve. Community members collaborate with health care systems to ensure the delivery of appropriate high quality health care services.*

**Collaboration.** Community members, including patients, participate in the development of health services design, delivery and evaluation.

- **Partially** meets this requirement.

Patients receive culturally appropriate care and interpretive services as necessary. They are engaged in their treatment, however, there is no provision in the Pilot for patients to assist in the design, delivery, or evaluation of their care. Patients do, however, inform providers as to whether or not the services they receive alleviate their depressive symptoms. In that sense, they are involved in the evaluation of services.

**Collaboration.** The health care system is integrated with community services that promote health, including services that assist people with special needs.

- **Partially** meets this requirement

The Pilot is integrated with primary care services. These services are provided in community clinics and, in that sense, are integrated into the communities they serve. The Pilot is not integrated into other community services such as shelters, food banks, or schools.

**Collaboration.** Health information is widely and effectively disseminated (e.g., community newspapers, schools, libraries, on-line, etc.).

- **Partially** meets this requirement

Information about the Pilot is provided to patients once they seek services at one of the eight safety-net clinics. There is no indication that information regarding depression and treatment options is publicized in the broader community, outside of the clinic setting.

**Accountability.** Financing systems, practitioners, health systems, and public agencies operate transparently.

- **Not applicable.**

**Accountability.** The health care system collects and publicly reports performance data on access to and quality of care at both the system and provider level.

- **Meets** this requirement

The Pilot administrators have provided detailed information to the Seattle-King County Public Health Department, the Washington State legislature, and the Governor about the types of individuals served, the number of patients, the nature of the diagnosis process, treatments provided, and current health outcomes.

**Principle #5:** *The best investments are those that prevent disease and promote good health in the most cost-effective manner.*

**Health promotion.** Local public health and health care services support one another and are part of state, regional and national strategies to increase healthy years lived.

- **Meets** this requirement

The Pilot is a local public health program that is integrated into the primary care system. It identifies and treats disease that impacts the health and well-being of pregnant women, mothers, and their young children. The public health aspect of the Pilot is directly linked to health care services. At this stage, the Pilot is regional in scope, but as its effectiveness becomes better documented, it will hopefully continue to expand.

**Health promotion.** Health care providers incorporate health promotion strategies in their individual practices.

- **Meets** this requirement

The incorporation of health promotion strategies (particularly in the area of depression) in primary care is a key element of the Pilot.

**Health promotion.** The health care system encourages and provides incentives to patients to actively participate in promoting and maintaining their own health.

- **Meets** this requirement.

By assisting patients to seek treatment, and by providing treatment directly, the Pilot encourages depressed women to actively participate in promoting and maintaining their mental health. By doing so, research shows that they then take better care of themselves and their children.

**Disease prevention.** Evidence-based, preventive services, including screenings and immunizations, are available to all individuals.

- **Meets** this requirement

**Principle #6:** *Health services delivery and financing systems employ strategies, policies, and interventions aimed at achieving health equity.*

**Achieving health equity.** Health care services are sensitive and responsive to patient needs and cultural norms.

- **Meets** this requirement

The Pilot is specifically designed to be culturally appropriate, and be responsive to patient needs and cultural norms.

**Achieving health equity.** Health care systems collaborate with local public health, education, social services, and other community-based programs to support state, regional and national strategies to increase healthy years lived and achieve health equity.

- **Meets** this requirement

The Pilot is a community-based program that specifically links the public health needs of reducing depression and improving the health of low-income pregnant women, mothers, and their children, with medical services in the settings where these populations receive regular care.

**Achieving health equity.** Public health system collects and reports data on the health status of the population, with a specific focus on health equity.

- **Meets** this requirement

The Pilot is specifically designed to improve health equity and, in particular, equitably provide access to care by allocating treatment solely on the basis of need.

## **Conclusion**

The Board of Health principles set clear guidelines for the design of an effective, efficient, and equitable health system. The Pilot is an example of a health program that achieves its goals in part by incorporating these principles. The Pilot demonstrates that their use is possible, and that, by doing so, the program is more effective than it would be otherwise.

Some recommendations: The Pilot might be modified and prove to be even more effective if it incorporated community input into the design of its diagnosis and treatment protocols. As the Pilot continues in operation, information regarding depression, its symptoms and its impacts could be distributed outside of the clinic setting (e.g., pamphlets in community centers, local grocery stores, food banks, shelters, schools). This type of more broad-based communication could provide women who do not use the clinics important health information.

The above recommendations are just that and do not detract from the fact that the Pilot is a very well-designed program that seeks to take a public health concern (greater behavioral health problems in young children), determine one significant source (the health of their mothers) and effectively work within existing community structures to address the problem and improve health outcomes.

The Pilot has only been underway for a brief period of time, but early results are promising. It is program to champion because it strives to meet the main goals of the principles: healthier individuals and healthier communities over the long term.