



## King County

Community Services Division

Department of  
Community and Human Services

401 5th Avenue, Suite 510

Seattle, WA 98104

206.263.9062 FAX: 206.296.0156

TTY RELAY: 711

### IMPLEMENTATION PLAN

#### 2012 – 2017 Veterans and Human Services Levy

#### Activity 4.2 Maternal Depression Reduction

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##### 1. Goal

Increase self-sufficiency of veterans and vulnerable populations.

##### 2. Strategy

The Veterans and Human Services Levy Service Improvement Plan (SIP) set a goal of strengthening families at risk. This strategy recognizes the value of upstream investments in prevention and early intervention, the keys to reducing the future risk of involvement in public crisis and dependency systems.

Research indicates that the development of the brain is most intense from birth through age three, and it is in these earliest years that the foundations of lifelong health and behavior are built into our biology.<sup>1</sup> Supporting parents and caregivers in their role as a child's first teacher is key to ensuring bonding and attachment. High quality, proven programs focused in the prenatal and early childhood period buffer against the stresses of the early years and establish a foundation that helps children succeed in school, graduate from high school, and move into career paths that build a sustainable future.

##### 3. Activity 4.2 : Maternal Depression Reduction

Severe maternal depression occurs most frequently in low-income mothers and is a serious deterrent to the development of healthy maternal-child attachments and early child development. Activity 4.2 works to improve the mental health of low-income mothers by providing mental health screening and treatment to address maternal depression integrated into primary care settings.

##### 4. Service Needs, Populations to be Served, and Promotion of Equity and Social Justice

###### a) Service Needs

Depression symptoms and other mood disorders are common in pregnant women and women with young infants and children.

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<sup>1</sup> *The Foundations of Lifelong Health Are Built in Early Childhood*, [National Scientific Council on the Developing Child](#) and the [National Forum on Early Childhood Policy and Programs](#).

- Estimates of the overall prevalence of depression among mothers of young children range from 12-50%.<sup>2</sup>
- The prevalence of major depression is the same for postpartum women as for many other women with children. Nearly as many mothers of children who are 2.5 to 3 years of age reported depressive symptoms as those reporting depressive symptoms when their children were two to four months old.<sup>3</sup>
- Depression, anxiety and other mood disorders are most persistent in situations where women face financial difficulties, are experiencing high family conflict including domestic violence, have poor physical health, and live in circumstances in which they have little family and social support.<sup>4</sup>
- In recent studies, depression was most frequently reported by mothers who are less than 20 years of age, low-income, nonwhite, Hispanic, not living with the child's biological father, and had less than a high school education.<sup>5</sup>

Pregnant women and mothers suffering from depression want the best for their children but anxiety, sadness, fatigue, and poor concentration affect their ability to care for themselves, their parenting ability and their relationships with family members. Research has shown that untreated maternal depression has many adverse impacts on children and on parenting behaviors:<sup>6</sup>

- Untreated prenatal depression is linked to poor birth outcomes, including low birth-weight, prematurity and obstetric complications.<sup>7</sup>
- Mothers suffering from depression are less likely to engage in safety practices like safe sleep for prevention of SIDS or use of car seats, and they are less likely to obtain routine preventive health care for their children.<sup>8</sup>
- Children of depressed mothers have higher rates of depression, attention deficit disorder, separation anxiety, poor academic performance, and insecure attachment.<sup>9</sup>
- Effects of maternal depression persist as children reach school age. For school-age children and adolescents, maternal depression is associated with low self-esteem and problems in school; they are at higher risk of developing mental disorders themselves.<sup>10</sup>

Appropriate and timely treatment for maternal depression improves functioning not only for mothers but for children as well. Children whose mothers are successfully treated for depression show progressive and marked improvement in their own behaviors even a

<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.).

<sup>3</sup> Jellinek M; Patel, BP, Froehle, MC, Eds. "Bright Futures in Practice: Mental Health." Vol. 1, Practice Guide. Arlington, VA: National Center for Education in Maternal and Child Health, 2002.

<sup>4</sup> Wassel (2000)

<sup>5</sup> McLearn, K et al. "The Timing of Maternal Depression Symptoms and Mothers' Parenting Practices with Young Children: Implications for Pediatric Practice." *Pediatrics* 2006; e174-e182. Available at [www.pediatrics.org/cgi/doi/10:1542/peds.2005-1551](http://www.pediatrics.org/cgi/doi/10:1542/peds.2005-1551).

<sup>6</sup> *ibid.*

<sup>7</sup> Wassel (2000)

<sup>8</sup> McLearn (2006)

<sup>9</sup> Knitzer, J et al. "Reducing Maternal Depression and Its Impact on Young Children: Toward a Responsive Early Childhood Policy Framework." Project Thrive, Issue Brief No. 2, Jan 2008, National Center for Children in Poverty.

<sup>10</sup> Center for Disabilities and Development, "Fact Sheet on Maternal Depression," *EPSDT Care for Kids Newsletter* Spring 2000

year after their moms discontinue treatment.<sup>11</sup> These studies underscore the importance of screening for maternal depression and intervening not only during the prenatal period but also during a woman's early years in the parenting role.

The first Levy Strategic Improvement Plan (SIP) recognized that a significant challenge for King County is the lack of access to behavioral health services, especially for individuals who are not eligible in the public mental health system. Washington state's Medicaid plan covers medical care for three months and family planning for twelve months following delivery, but mental health evaluation and intervention are rarely available to pregnant women and new mothers covered by Medicaid. Under the current state formula for funding Regional Support Network (RSN) services, RSN-supported community mental health agencies offer very limited access to outpatient mental health services for those who do not qualify for the Medicaid mental health benefit. Mothers who do not have very severe mental illness will not qualify.

To prevent negative consequences of depression for mothers and their children, screening and treatment for maternal depression must continue well beyond the immediate postpartum period. Consequently, primary care and maternity support programs which already serve a significant number of at-risk, low-income mothers need additional resources to adequately meet the mental health needs of this population.

b) Populations to be Served

Activity 4.2 targets King County low income pregnant and parenting women. Prevention and early intervention for this population helps lay the foundation for a successful future for mother and children and prevents involvement in crisis systems.

In 2010, a total of 9,270 low-income Medicaid-covered women gave birth in King County, representing almost 39 percent of all King County births.<sup>12</sup> Around 30 percent of this group did not graduate from high school; only 46 percent were married; 21 percent were undocumented. Ninety percent of Medicaid-covered women giving birth received maternity support services (MSS) at some point in their pregnancy, making the MSS site an ideal locale for screening and intervention for this population. Racial /ethnic distribution of the target population is described in the following table:

<b>Race / Ethnicity of King County Births Covered by Medicaid, 2010</b>				
White	31.0%		Asian	11.6%
Hispanic	28.6%		Hawaiian/PI	3.1%
African American	15.5%		Multiracial	4.8%
Native American	1.4%		Unknown	4.0%

Source: First Steps Database, Washington State DSHS Research and Data Analysis Unit

c) Promotion of Equity and Social Justice

Activity 4.2 promotes equity by impacting two key determinants of equity:

<sup>11</sup> Wickramaratne P et al. Children of depressed mothers 1 year after remission of maternal depression: findings from the STAR\*D-Child study. *Am J Psychiatry*. 2011 Jun;168(6):593-602

<sup>12</sup> *First Steps Database*, Washington State DSHS Research and Data Analysis Unit

- Early childhood development. This activity provides evidence-based support for nurturing early relationships and optimal early childhood development;
- Health and human services. This activity provides integrated mental health services that are high quality, free, and culturally appropriate.

Activity 4.2 seeks to improve the mental health status and functioning of low income pregnant and parenting mothers. Maternal depression impacts all races and classes but disproportionately impacts low-income women, women of color, and women of limited English proficiency who are vulnerable to the additional psychosocial stressors of poverty, lack of social supports, substance abuse, violence and stress. This activity seeks to provide screening and treatment to those groups adversely impacted by maternal depression to help break the cycle of poverty.

Black, including African American and East African, and Hispanic women are disproportionately represented among low-income King County mothers:

- Hispanic women comprised 14 percent of King County women who gave birth in 2010, but represented 28.6 percent of women whose births were covered by Medicaid.
- African American women comprised 7.5 percent of King County women who gave birth in 2010, but represented 15.5 percent of women whose births were covered by Medicaid. (No breakout is available for East African-born mothers as compared to African American mothers.)

Births to undocumented women comprised 21 percent of all Medicaid-covered births in 2010. Of this population, an overwhelming majority (83%) was Hispanic women, and around 8 percent were women from countries of Asia.

To enhance positive impacts of this activity, community health center agencies providing services are held financially accountable for patient outcomes. Public Health – Seattle & King County uses a pay for performance contracting approach and provides extensive technical assistance and training to participating providers to ensure that services are provided with fidelity to evidence-based practices. A recent analysis of program data demonstrated that pay-for performance yields more timely follow-up care and a significant reduction in the time to depression improvement.<sup>13</sup> Activity funds are also used to support psychiatrist FTE to provide consultation to primary care physicians to ensure appropriate medication management for breastfeeding and pregnant women. PHSKC also requires that agencies hire only licensed mental health providers for this activity. (WAC 246-809, 246-810, 246-924, 246-840)

A possible negative impact of screening and treating depression is breach of confidentiality and stigmatization. To prevent adverse impacts, PHSKC contracts with Federally Qualified Health Centers who are bound by federal HIPAA law to maintain the integrity of protected health information. Providing depression treatment in primary care also greatly reduces stigma, as a patients' reasons for going to a primary care clinic are not immediately obvious to family or community members, as they would be at a mental health clinic.

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<sup>13</sup> Unutzer et al 2011. Quality Improvement with Pay-for Performance Incentives in Integrated Behavioral Health Care. American Journal of Public Health June 2012, Vol 102, No. 6

## 5. Activity Description

Activity 4.2 provides screening for and treatment of maternal depression at community health centers and public health centers where low-income mothers are participating in prenatal care, Maternity Support Services (MSS), well child care, and the Women Infants and Children (WIC) program. Activity 4.2 objectives are:

- Implement universal, standardized screening for depression that is coordinated across maternity support programs and primary care, aimed at pregnant women and mothers of young children.
- Increase access to mental health treatment for culturally diverse, low-income mothers.
- Improve mental health status and functioning of at-risk mothers and their children using the evidence-based collaborative care model.
- Improve primary care clinic capacity to reduce risk, address early symptoms of maternal depression and other mood disorders, and treat mental health issues for both mothers and children.

Resulting from a Request for Proposal process, Activity 4.2 services are provided via subcontract with Public Health - Seattle & King County by thirteen clinic sites spread throughout King County managed by 6 agencies: Country Doctor Community Health Centers, HealthPoint, International Community Health Services, Public Health – Seattle & King County, Neighborcare Health, and Sea Mar Community Health Centers.

Clinics offer education about depression to their pregnant and parenting clients, as many women are not adequately prepared for this potential risk, do not recognize symptoms and do not know where help might be available. Education and health promotion strategies are incorporated into maternity support programs and anticipatory guidance is provided in prenatal and postpartum care.

Clinics then screen all MSS, WIC, and OB patients for depression and anxiety, as well as screening mothers of young children at well child visits. Mental health providers have received extensive training in motivational interviewing to enable them to effectively engage mothers who screen positive into treatment. Clinics then use the collaborative stepped care model to deliver services in the primary care clinic to treat depression and other common mental health disorders. The primary care team uses a coordinated set of guidelines and evidence-based treatment protocols that are designed to improve common mental health disorders. In addition, a consulting psychiatrist is available to consult with primary care staff.

Collaborative stepped care is coupled with a robust, web-based care management tool called the Mental Health Integrated Tracking System (MHITS). Similar to a chronic disease registry, MHITS tracks functional and symptomatic improvement, provides access to a variety of standardized assessment measures, supports systematic caseload management, and provides rich outcome data to drive quality improvement efforts.

Patients with severe or complex mental health needs are referred to licensed mental health community centers for more intensive services, and patients in need of treatment for chemical dependency are referred for treatment while receiving ongoing support in their

primary care home. MHITS is then used to coordinate care between primary care and mental health providers. Improved communications ensure better clinical outcomes and conserve program resources.

The essential elements of the collaborative care model are described below:

- a. Staff collaboration on mental health treatment in the primary care setting occurs in two main ways: (1) the patient's primary care physician works with the mental health provider to develop and implement a mental health treatment plan; (2) the mental health provider and primary care providers consult with a designated psychiatrist to help change treatment plans if patients do not improve.
- b. Mental health providers communicate regularly with primary care providers and consulting psychiatrists to ensure that they are coordinating the client's mental health treatment; mental health providers facilitate care, provide brief therapeutic interventions, refer clients to appropriate resources, and monitor symptoms for treatment response.
- c. A designated psychiatrist consults systematically with the mental health provider and primary care physician on the care of patients who do not respond to treatments as expected. The psychiatrist may suggest referrals to community mental health and chemical dependency treatment agencies for complex patients who need more intensive service and who are eligible to receive more intensive services through these agencies.
- d. Mental health provider measure symptoms at the start of a patient's treatment and regularly thereafter using brief, structured screening and clinical rating scales that are appropriate for the specific disorders that are being treated. If patients are not improving, they change the course of treatment or add additional services in consultation with the primary care provider and/or consulting psychiatrist.

Clinics also offer peer support groups for depressed pregnant and parenting mothers. These groups promote interpersonal support and are an effective and efficient mechanism to help depressed mothers share their experiences, expand social support networks, and receive emotional support as well as practical advice. Peer connections reduce isolation and help at-risk women deal with the stresses of parenting.

## 6. Funds Available

The 2012 Service Improvement Plan identified the following allocations for this activity.

	2012	2013	2014	2015	2016	2017
<b>Veterans Levy</b>						
<b>Human Services Levy</b>	\$625,000	\$625,000	\$625,000	\$625,000	\$625,000	\$625,000
<b>Total</b>	\$625,000	\$625,000	\$625,000	\$625,000	\$625,000	\$625,000

A total of \$625,000 is available in 2012 to implement this activity.

## 7. Evidence-based or Promising Practices

Activity 4.2 uses the collaborative stepped care model, also known as the IMPACT Model. Collaborative stepped care has been shown to improve access, reduce overall costs, and improve mental health outcomes.<sup>14,15,16</sup> The IMPACT model is listed on the National Registry of Evidence-based Programs and Practices (NREPP) through the Substance Abuse and Mental Health Services Administration (SAMHSA). Activity 4.2 has demonstrated very impressive outcomes, including depression and/or anxiety improvement for 65% of clients in treatment; this exceeds results achieved in national clinical trials of the IMPACT model. Evaluation results from Activity 4.2 were recently published in the Journal of Family Practice.<sup>17</sup>

## 8. Service Partnerships

PHSKC partners with the University of Washington Department of Psychiatry and Behavioral Sciences for training, technical assistance, and psychiatric consultation to Activity 4.2 providers and clinics. This strategy also leverages and integrates funds from the Children’s Health Initiative (CHI), which supports a small amount of FTE in the participating clinics for child mental health treatment, as well as child psychiatry consultation from Seattle Children’s Hospital.

## 9. Performance Measures

The following performance measures were identified by the Levy’s Evaluation Team.

Objectives	Service Outputs/ Measures	Most recent performance	2012 Target(s)	Data Source
<b>Engagement/ Assessment</b>	Number of persons screened	3,219	3,000	Report Card – Services
	Number of persons screened positive for depression	1,145	1,100	Report Card – Services
<b>Treatment/ Intervention</b>	Total number of all clients receiving treatments	851	750	Report Card – Services
	Number of clients who have improved mental health status	65%	65%	Report Card - Outcomes

Participating agencies must also achieve four Quality Aims, which are key measures of program quality and fidelity proven to equate to better outcomes for the families we serve. Public Health- Seattle & King County Community and School-Based Partnerships program, which manages these funds, uses performance-based contracting to hold agencies accountable to outcomes by making 20% of contracted funds contingent on achieving the four Quality Aims (5% for each Aim). Aims data is tracked in MHITS and real time progress

<sup>14</sup> Gilbody S, Bower P, Fletcher J, et al. Collaborative Care for Depression: A Cumulative Meta-analysis and Review of Longer-term Outcomes. Arch Intern Med. 2006;166:2314-2321

<sup>15</sup> Simon G. Collaborative care for depression. BMJ. 2006;332:249-250

<sup>16</sup> Unützer J, Choi Y, Cook I, Oishi S. A web-based data management system to improve care for depression in a multi-center clinical trial. Psychiatric Services. 2002; 53:671-678.

<sup>17</sup> Huang, Hsiang. Variations in depression care and outcomes among high-risk mothers from different racial/ethnic groups. Journal of Family Practice 2011; 0:1–7

is available to agencies so that they can monitor their progress and adjust their practice accordingly. Activity 4.2 agencies have met or exceeded their Quality Aims every year of the Levy to date. In 2012, contractors are held to the following Quality Aims:

1. Maintain active caseload of 60 patients per 1.0 FTE
2. At least 50% of active caseload will be supported by at least two clinical contacts each month.
3. At least 40% of patients will achieve a 5 point or greater improvement on either the PHQ9 or the GAD7, tools for screening and monitoring depression and anxiety.
4. Providers will receive psychiatric consultation on at least 80% of clients who are not improving.