PROBLEM STATEMENT: Research shows that prenatal and early childhood wellness (physical, behavioral, social, emotional, and cognitive) can positively impact life-long health and learning. A key barrier to wellness in Central Oregon is inadequate coordination between primary care, public health and other prevention services.

GOAL: Improve prenatal and early childhood (EC) wellness through a MCH Care Coordination system that empowers low-income families and optimizes their use of primary care along with: oral health, behavioral health, prevention, family support, early learning services and other CCO initiatives.

INITIATIVES: 1) Expansion of RN care coordination work with high utilizers and physician directed/at risk patients to ensure successful outcomes, and 2) Expansion of high risk perinatal home visiting.

ACCOUNTABLE COORDINATOR: Central Oregon Health Board

PARTICIPATING PARTNERS: Central Oregon Pediatric Associates (COPA), East Cascades Women’s Group (ECWG), Advantage Dental, Pacific Source, St. Charles Health System, Mosaic Medical, La Pine Community Health Center, Central Oregon Early Childhood Councils and partners

WHAT: Develop a regional MCH care coordination system incorporating:

1) Expansion of Mosaic’s RN Care Coordinator/community health worker model for high utilizers into COPA and ECWG. 2) Enhancement of WIC and Oregon Mother’s Care programs to provide “one-stop” care coordination and support services for low-income pregnant women and their children aged 0-5. 3) Extension of care coordination into the home by expanding nurse home visiting programs (i.e., Cacoon, Maternity Case Management and Nurse Family Partnership programs).

To assure system continuity, connection with prevention services, and experienced home visitors, RN care coordinators and community health workers will be hired by public health agencies.

- Deschutes County: Hire 2 RNs and 2 community health workers. RN 1 will support ECWG and provide Maternity Case Management home visiting. She will also give oversight to a new community health worker at ECWG. RN 2 will support COPA and provide Cacoon home visiting services for special-needs children along with oversight for a new community health worker in that practice. Community health workers will be bilingual/bicultural and certified in WIC and Oregon Mother’s Care.

- Jefferson and Crook Counties: Hire .5 RN FTE each to provide similar care coordination and home visiting services with primary care practices in their counties.

RN care coordinators: promote integration of oral health, behavioral health, prevention, family support, early learning services and other CCO initiatives in the practices. Help develop the “one-stop” support service clinics in WIC during year two. Provide consultation/oversight for WIC certifiers in their expanded role.

WIC certifiers: work in enhanced role to include assessment, screening and referral to required services as well as family education and advocacy. Five (5) additional certifiers will be hired for these clinics which can be expanded to include oral and behavioral health services, parenting education classes and support groups etc.

Nurse Family Partnership (NFP): Deschutes County will expand the evidenced-based home visiting program, NFP, by hiring 1 additional bilingual/bicultural RN to help serve the tri-county’s Hispanic CCO members and provide back-up for the other NFP nurses. (Currently, NFP is only able to serve 50% of eligible referrals.)

WHEN:

- Jan-Mar 2013—Deschutes Co. will hire/train: 2 RN Care Coordinators and 1 NFP nurse and Jefferson and Crook Co will each hire/train a .5 RN Care Coordinator

- July-Sept 2013—Deschutes Co. will hire/train 2 bilingual/bi-cultural community health workers to support COPA and ECWG

- Jan-Mar 2014—Deschutes Co. will hire/train 3 WIC certifiers for one-stop clinics and Jefferson and Crook Counties will each hire/train 1 WIC certifier each

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1WIC has a strong evidence base and already serves the target population of low-income pregnant women and children aged 0-5. Further, WIC food vouchers attract and retain clients in the system.
**Based on program outcomes/resources, services will later be expanded to other practices in the region.**

### METRICS:

<table>
<thead>
<tr>
<th>Metric</th>
<th>COPA Care Coordination</th>
<th>ECWG Care Coordination</th>
<th>Nurse Family Partnership</th>
<th>WIC One-Stop Support Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low birth weight (LBW) / preterm birth</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>@ 6 mos.</td>
<td>@ discharge</td>
<td>@ 6 mos.</td>
<td>@ 6 mos.</td>
</tr>
<tr>
<td>Immunization rates (mother/child)</td>
<td>(child)</td>
<td>?</td>
<td>@ 6 mos.</td>
<td>(child)</td>
</tr>
<tr>
<td>Effective contraceptive use</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Potentially avoidable ED and office visits</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Prenatal/parent tobacco use</td>
<td>(parent)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>WIC participation/early prenatal care</td>
<td>(WIC)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Prenatal/child one dental visit in last 12 mos.</td>
<td>(child)</td>
<td>(prenatal)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Eligible mothers/children on OHP</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Screening/education/referral for maternal (parent) depression/anxiety</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Screening/referral alcohol misuse</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Child ASQ developmental screening/referral</td>
<td>?</td>
<td></td>
<td></td>
<td>?</td>
</tr>
</tbody>
</table>

### CCO REQUIREMENT:
Yes, low birth-weight, tobacco use, alcohol use, dental visits, screening/referral for depression, developmental screening by 36 months, ED utilization, effective contraceptive use

### REGIONAL HEALTH IMPROVEMENT PLAN:
RHIP goals: 1) Address basic needs/living conditions, 2) Increase access to quality health care, 3) Develop/coordinate early childhood system/services, 4) Decrease child abuse/neglect, 5) Improve immunization rates, 6) Strengthen family planning services/reduce teen pregnancy, 7) Reduce alcohol/tobacco/other drug use, 8) Improve dental health of children/youth/adults, 9) Promote best practices in the community, 10) Engage consumers, 11) Improve behavioral health/primary care integration

### HEALTH DISPARITIES AND INEQUITIES:
This initiative will decrease disparities/inequities for our Hispanic population through use of bilingual/bicultural staff. It also address disparities among rural poor and those with limited transportation by serving clients in their homes, connecting services in their primary care site, and through one-stop clinics in WIC where they already participate—right care, right place, right time.

### COST VS RETURN ON INVESTMENT:
Deschutes County 3 RN and 5 Community Health Workers = $573,991
Jefferson County .5 RN and 1 Community Health Worker = $94,647 Total for Initiative = $763,285
Crook County .5 RN and 1 Community Health Worker = $94,647

**Potential Payment Sources**—Targeted Case Management, Maternity Case Management and Title V

ROI—Rand Corporation analysis found a net savings of $34,148 for every family served in Nurse Family Partnership or $5.70 return for every dollar invested. (Secondary to program outcomes including: 79% fewer preterm births, 69% reduction in tobacco use, 56% fewer child ED visits.)

For every dollar spent on a pregnant woman in WIC, up to $4.21 is saved in Medicaid for her and her infant because WIC decreases risk for preterm birth by 25% and low-birth-weight by 44%.

### EVIDENCE BASE FOR PRACTICE:
Early Childhood experiences affect health over the life course. (*Rethinking MCH: The Life Course Model as an Organizing Framework*, US Dept. of Human Services, HRSA, Maternal Child Bureau, November 2011)

Karoly, LA et.al. *Early Childhood Interventions: Proven Results, Future Promise*, RAND Corporation 2005

Kitzman, H, Olds DL et.al, *Effect of Prenatal and Infancy Home Visitation by Nurses on Pregnancy Outcomes, Childhood Injuries, and Repeated Childbearing, a Randomized Controlled Trial JAMA 1997:278 (8)*


### SYNERGY WITH OTHER INITIATIVES:
1) Expansion of Title V to Children with Special Health Care Needs, 2) Integration of behavioral health and public health, 3) Chronic disease prevention, 4) Maternity/early childhood caries management, SBHC and Living Well initiatives