

### February 5, 2019

### **Health Share of Oregon Comments on Section 9 of HB 2257**

Members of the House Committee on Health Care:

Health Share of Oregon is writing in support of Project Nurture—a Center of Excellence model integrating maternity care and addiction treatment for pregnant women with substance use disorders. Section 9 of HB 2257 proposes to spread the model to additional Oregon communities.

Health Share of Oregon is the state's largest coordinated care organization (CCO), serving approximately 315,000 Oregon Health Plan members living in Clackamas, Multnomah, and Washington counties. Since 2014, Health Share led the effort to stand up, fund and support Project Nurture. Currently, Health Share supports three Project Nurture sites in the metro area—one based at CODA with OHSU Family Medicine providing maternity and pediatric care; another is based at Legacy Midwifery on the Emanuel campus with Lifeworks Northwest providing addiction treatment services; and a third is based at Providence Family Medicine Clinic in Milwaukie where Providence clinicians provide both maternity and substance use treatment.

At Health Share, we know that early life health and behavioral health are interconnected; when we build resilience and address trauma early in life, we help prevent substance use among adults. In turn, when we support recovery, we help create thriving families who provide healthy beginnings for children. Nowhere is that more evident than with Project Nurture.

Between 2015 and 2017, Project Nurture showed the following improvements in health and care for the women it served:

- More prenatal care: 12 percent of participants with substance use disorders, and 10 percent of participants with opioid use disorder went to 7 prenatal appointments or more (compared to 8.5 percent and 4.6 percent of non-participants respectively)
- Access to Medication Assisted Treatment: 76 percent of participants with an opioid use disorder received MAT (compared to 50 percent of non-participants), proving positive outcomes for mother and baby
- **Fewer pre-term births and C-sections:** 4 percent of participants experienced a pre-term birth, and 28 percent experienced a C-section (compared to 11% and 37% of non-participants respectively)
- Whole families: 93 percent of women kept custody of their baby after graduating the program

We are confident that the virtues of Project Nurture will be a benefit to all Oregonians and support Section 9 of HB 2257, proposing a statewide pilot project modeled after the program.

Respectfully submitted by:

Maggie Bennington-Davis, MD
Interim Chief Executive Officer and Chief Medical Officer

Watch videos, and learn more at <a href="HealthShareOregon.org/projectnurture">HealthShareOregon.org/projectnurture</a>.

For more information, please contact Ashlen Strong, Director, Public Policy & Communications: ashlen@healthshareoregon.org, 703-350-5611.

# Project Nurture



A new model of care that integrates maternity care and substance use treatment

# Initiative background, overview & goals

Project Nurture is a new model of care that integrates maternity care and substance use treatment. Key components include:

- Team-based approach to care
- Maternity care, Level 1 substance use treatment, case management and peer support
- Weekly group visits
- Emphasis on peer support throughout for both recovery and parenting
- Planned, coordinated approach to the inpatient maternity stay
- Coordinated referrals to higher levels of treatment as needed
- Medication Assisted Treatment (MAT) for women with opioid use disorder
- Transparent relationship with DHS child welfare with a goal of safe and healthy parenting for women who want to parent
- Extended postpartum support lasting a full year after the infants birth
- Development of standardized screening protocols to more accurately identify pregnant women with substance use disorders

# **Key partners**

- CODA
- Legacy
- LifeWorks NW
- OHSU
- Providence





### What's been done so far

Since 2014 Project Nurture has cared for more than 300 women. An extensive evaluation revealed the following key findings:

Compared to pregnant women with SUD who were not exposed to Project Nurture, pregnant women with SUD who were exposed to Project Nurture had:

- 1. 170% reduced odds of preterm birth
- 2. C-section rate of 28% compared to 36.5%
- 3. Infants that had 50% reduced odds of needing higher level care (anything other than routine newborn care)
- 4. Significantly higher rates of engagement with MAT for women with opioid use disorder (76% vs. 51%)
- 5. High rates of child custody by program exit at 1 year (93% of women in Project Nurture are parenting their infants)

# Lessons learned, barriers & challenges

Women living with substance use disorders who become pregnant are a unique population in the health care system. While they resemble other populations in terms of need for physical and mental health services, as well as substance use treatment and care coordination, they differ in that they often avoid treatment due to shame, judgement and fear of DHS involvement. Given the poor overall health of these women, lack of prenatal care and substance use, births are often complicated and premature, furthering the enormous health and societal costs for these pregnancies.

# **Next steps**

Health Share has financially supported the Project Nurture model since its inception. In coordination with plan partners, we are now looking to build a sustainable funding model for the program's future.

We are also looking to further Integrate SUD treatment with physical health services—crucial to improving access and engagement, especially for this complex population. Investments in effective models like Project Nurture produce many positive ripple effects for families and health systems.

Costs for this model include peer support staff (Certified Peer Recovery Mentors and Doulas), case management, coordination of care, complex care management by clinicians and program administration. However, potential cost savings from improving immediate health outcomes are about \$1,600 per participant and up to \$2,200 for women with opioid use disorders. In addition, the lifetime savings from averting preterm birth and foster care placement are substantial and far-reaching.

# **Project sites**

**CODA/OHSU** Based at CODA, with OHSU Family Medicine providing maternity and pediatric care. Deliveries at OHSU. MAT with methadone on-site.

**Legacy/Lifeworks** Based at Legacy Midwifery clinic on the Emanuel campus, with Lifeworks providing addiction treatment. Deliveries occur at Legacy Emanuel.

**Providence Milwaukie** Based at Providence Family Medicine clinic in Milwaukie. Providence behavioral health staff provide substance use treatment and mental health support. MAT with buprenorphine on-site. Deliveries occur at Providence Portland.



# Project Nurture Evaluation Findings

Kristen Lacijan-Drew, MS, MPH August 9<sup>th</sup>, 2018



PROJECT NURTURE EVALUATION

I honestly love Project Nurture. I feel like it saved my life. I just feel like I belong there.

-Project Nurture participant





# **Project Nurture Evaluation: Data Sources**



# **CLAIMS DATA**

Used provider and facility codes to construct two groups:

- 1) Likely PN participants (n=114)
- 2) Likely NOT PN participants (n=507)



# **PROGRAM DATA**

Excel and paper based data tracking system for PN participants (n=238). This de-identified data was used to create a picture of PN encounters and parenting outcomes.



# **SURVEYS**

43 surveys were received from PN participants. Data was summarized but not statistically analyzed.



# **INTERVIEWS**

18 interviews with PN staff and stakeholders; 17 interviews with PN participants. Themes are included in the final report.



# Why Project Nurture?

Maternal and infant birth outcomes are significantly worse among women with SUD.

Maternal outcomes	SUD N=1,401	No SUD N=20,438	AOR	p-value
Prenatal care (7 or more visits)*	10.6%	14.7%	0.6	< 0.0001
Preterm birth*	9.9%	5.8%	1.6	<0.0001
C-Section*	34.5%	26.2%	1.4	<0.0001
Placental abruption*	4.8%	2.6%	1.7	0.0003
Hemorrhage	9.8%	9.3%	1.0	0.8455
Hypertension*	20.4%	16.5%	1.2	0.0066

No SUD SUD exposure exposure Infant outcomes N = 954N=17,013 **AOR** p-value Premature\* 10.9% 1.9 < 0.0001 5.9% Extremely premature 0.2% 2.2 0.1372 0.5% Low birth weight\* 3.4% < 0.0001 6.8% 2.1 Extremely low birth weight 0.4% 0.3% 1.4 0.5369 Small for gestational age\* 8.5% 4.1% 2.2 < 0.0001 Neonatal abstinence syndrome 23.2% Intrauterine growth restriction\* 1.6% 0.4% 3.8 0.0001 Respiratory distress syndrome\* 9.5% < 0.0001 14.2% 1.6

AOR=adjusted odds ratio, adjusted for birth hospital. p<0.05 considered statistically significant.



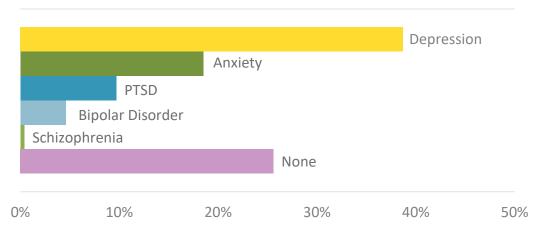
<sup>\*</sup>Statistically significant difference.

# **Project Nurture Participants**

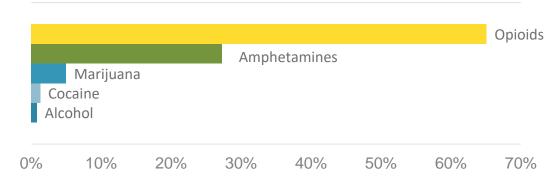
 74% of participants had an active mental health diagnosis. Depression and anxiety were the most common diagnoses.

 Opioids were the most common primary substance (65%), followed by amphetamines (27%).

# **Primary Mental Health Diagnosis**



# **Primary Substance Used**





# **Project Nurture Participants**

# **CHILDHOOD TRAUMA SURVEY**

- 43 PN participants responded to a survey in the fall of 2017.
- Respondents reported a high prevalence of childhood adversity.
- Note: The small sample size and the convenience sampling strategy limits the generalizability of the results.

Childhood Experience	% of PN survey respondents
Household member with SUD	79%
Ever drop out of school	77%
Parents separated/divorced	67%
Witness violence between parents/caregivers	63%
Verbal abuse	58%
Household member depressed/mentally ill	54%
Physical abuse	51%
Sexual abuse	47%
Household member in jail/prison	35%
Ever in foster care	35%



# **Project Nurture Participants**

# **ADULT TRAUMA SURVEY**

- 43 PN participants responded to a survey in the fall of 2017.
- Respondents reported a high prevalence of adulthood trauma and adversity.
- Note: The small sample size and the convenience sampling strategy limits the generalizability of the results.

Adulthood Experience	% of PN survey respondents
Verbal abuse by a partner	81%
Ever been hit by a partner/loved one	77%
Ever been arrested	72%
Ever been in jail	63%
Ever hit partner or loved one	58%
Had to go without stable housing in the last 12 months	40%
Had to go without food in the last 12 months	40%
Ever had child go in foster care	37%



# Project Nurture Visit Snapshot: Per Person Per Month

(Using Program data contact logs, n=138)

- 1.5 Case Management visits
- 1.2 Group visits
- 1.1 Prenatal/Postpartum visits
- 0.7 Substance Use Treatment visits
- 0.3 Peer Recovery Mentor/Doula visit offsite
- 0.2 Peer Recovery Mentor/Doula visit in clinic
- 0.8 Phone/Text hours (not in person)

Total average monthly contacts = 5.0 in person contacts +.8 hours phone/text



# **CLINICAL OUTCOMES**

"Where we were not that long ago was where people would just avoid the care [...] until they showed up in labor, in emergency with no prenatal care or very little prenatal care."

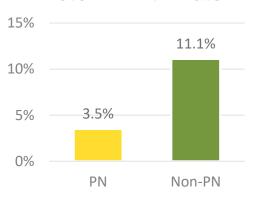
Project Nurturestaff



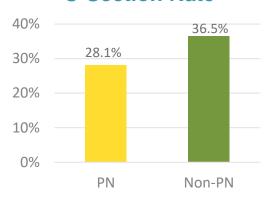
# **Project Nurture Clinical Outcomes**

Comparing the "PN-exposed" group to the "non-PN-exposed" group using claims data

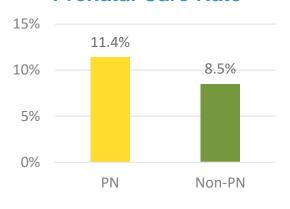
# **Preterm Birth Rate**







# **Prenatal Care Rate**



70% reduction in the odds of preterm birth.

Significantly reduced rates of C-section.

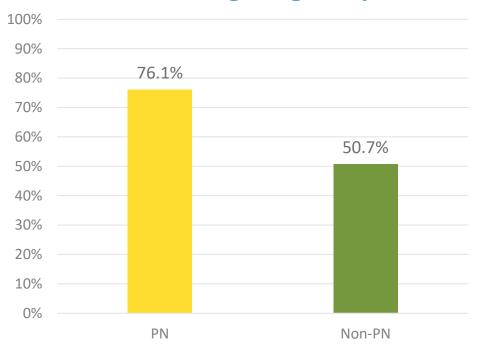
Significantly increased rates of 7+ prenatal care visits.



## **Project Nurture Clinical Outcomes**

# Significantly higher rates of MAT during pregnancy (among women with OUD).

# **MAT during Pregnancy**



Comparing the subset of women with OUD in the "PN-exposed" group to the "non-PN-exposed" group using claims data.



# **Project Nurture Clinical Outcomes**

Comparing the "PN-exposed" group to the "non-PN-exposed" group using claims data

# Infants born to women in the Project Nurture group were half as likely to need additional care after birth.

- This difference was also significant in the OUD subgroup, where 44% of infants in the Project Nurture group needed additional care, compared to 58% of infants in the non-Project Nurture group.
- Among the infants who did need additional care, differences in care intensity between the two groups were unclear.





# Project Nurture Projected Cost Savings: ALL Project Nurture Participants

\$103,710

# PRETERM DELIVERIES

7.6 preterm births prevented for every 100 births.

\$13,646 saved per preterm birth prevented.

\$24,360

# **C-SECTIONS**

8.4 C-sections prevented for every 100 births

\$2,900 saved per C-section prevented.

\$6,269

# **HIGH NEEDS CARE**

0.9 cases of high needs care prevented for every 100 births.

\$16,200 saved per high needs care averted (removed duplication for pre-term deliveries)

Total saved= \$161,339 per 100 births \$1613 per participant



# Project Nurture Projected Cost Savings: Project Nurture Participants with OUD

\$89,819

# **PRETERM DELIVERIES**

7.3 preterm births prevented for every 100 births.

\$13,646 saved per preterm birth prevented.

\$32,770

# **C-SECTIONS**

11.3 C-sections prevented for every 100 births

\$2,900 saved per C-section prevented.

\$96,827

# **HIGH NEEDS CARE**

13.9 cases of high needs care prevented for every 100 births.

\$16,200 saved per high needs care averted (removed duplication for pre-term deliveries)

Total saved= \$219,416 per 100 births \$2194 per participant



### PROJECT NURTURE PARENTING OUTCOMES

"I am stable today. And, because of that and Project Nurture, I have my home, I have an amazing support here and outside. I have amazing clean time that I'm super proud of. I have amazing recovery I'm super proud of. I have both my children. I'm happy, so happy. I have food, a vehicle. So, I'm happy."

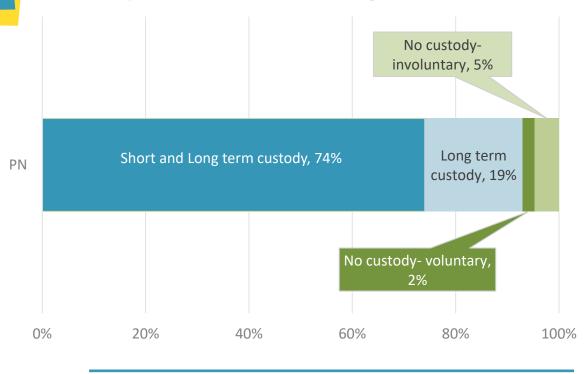
-Project Nurture participant



**Project Nurture Parenting Outcomes** 

# 93% of PN participants have long-term custody of their infant at program exit.

# **Project Nurture Parenting Outcomes**



Using program data at time of program exit (n=127)



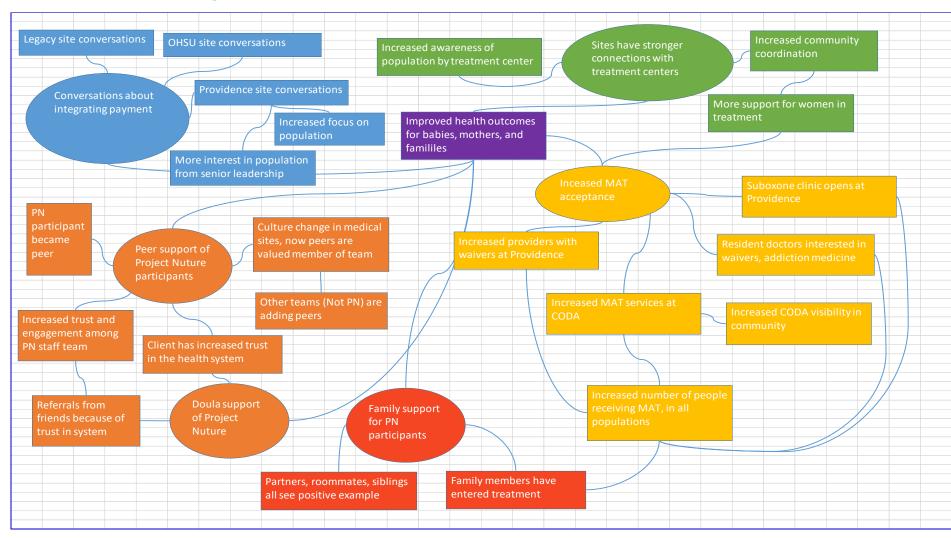
### PROJECT NURTURE RIPPLE EFFECTS

"I've decided, after this whole program, after I'm clean for two years, [PN CADC] is going to help me get into the drug counselor program, so I think that's the way that I'm going to go is to try to be a drug counselor, too, just to be able to give back everything that's been given to me."

-Project Nurture participant



# **Project Nurture Ripple Effects**





# **Project Nurture Ripple Effects**



### **EXPANSION OF MAT TO NON-PREGNANT POPULATIONS**

Providence opened a buprenorphine clinic for non-pregnant members.

Increased MAT services at CODA.

Increased MAT services within jails.

# **NICU CHANGES AT OHSU**

Infants with NAS are now cared for on the regular unit.



### **INCREASING A TRAUMA INFORMED WORKFORCE**

Labor and Delivery Trauma Informed Care workshops led to increased interest by other hospital departments.

### MORE CONNECTIONS WITH TREATMENT CENTERS

Sites report stronger connections and coordination with treatment options.

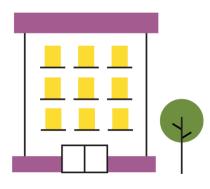
### CULTURE CHANGE IN PEER SUPPORT WORKER ACCEPTANCE

Peers have become highly valued, integrated members of the medical team.

Other teams within the sites are now adding peers as well.



# **Project Nurture Ripple Effects**



### PARTICIPANTS REFER THEIR LOVED ONES

Partners, roommates, siblings all see the positive example of the PN participant, and some have entered treatment themselves.

Friends referred by PN participants have higher levels of initial trust.

### **PARTICIPANTS SEE CAREER PATHS**

PN Participants see the peer recovery mentor as a positive example and career path, and at least one participant has become a peer recovery mentor herself.



### INCREASED TRUST IN THE HEALTH SYSTEM

As participants have positive experiences with a trauma informed workforce their trust in the health system can increase.



# Thank you



# All Together, All for You.

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