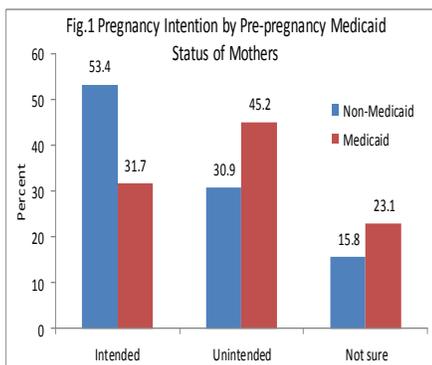


Assessment of Preconception Wellness among Mothers with Medicaid

The overall health of mothers before pregnancy is of utmost importance in impacting the outcome of the pregnancy and the well-being of the infant^{1,2}. The United States is the only developed country where maternal mortality is on the rise despite advances in perinatal care. To change this trajectory, preconception health status must improve.

Preconception wellness is often related to the social, structural, environmental, and behavioral health of mothers before pregnancy. The National Preconception Health and Healthcare Initiative has proposed a set of measures to track the quality of preconception wellness (PCW)². These measures address the domains that affect preconception wellness such as clinical factors, social determinants of health, mental health and access to care.

In Oklahoma, few attempts have been made to monitor and assess the



quality of preconception wellness. To address this, the PCW measures proposed by the national initiative were adopted to benchmark baseline preconception wellness. Specifically, this report provides a baseline for seven of the nine PCW measures

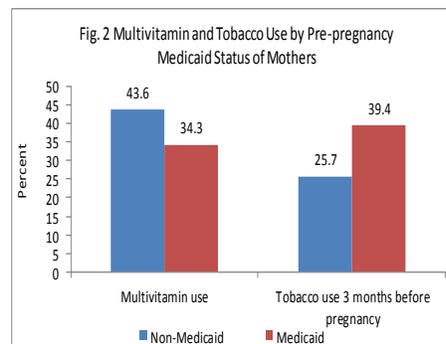
among mothers enrolled in Medicaid. In this report, Medicaid coverage reflects self-reported coverage prior to pregnancy unless otherwise stated. Pregnancy Risk Assessment Monitoring System (PRAMS) 2012 - 2014 data were analyzed in which nearly twenty-one percent of mothers reported having Medicaid prior to pregnancy.

Pregnancy Intention (PCW1)

Unintended pregnancies have significant negative effects on the health and well-being of the mother and child. Less than one-third of mothers with Medicaid had an intended pregnancy compared to over half of all mothers without Medicaid (Fig.1).

Multivitamin Use (PCW3)

Folic acid intake before and during a pregnancy can prevent certain birth defects in babies. Mothers with Medicaid took a multivitamin daily or on



some days at a significantly lower rate than non-Medicaid mothers (34% vs. 44%, $p < 0.05$) (Fig.2).

Tobacco use (PCW4)

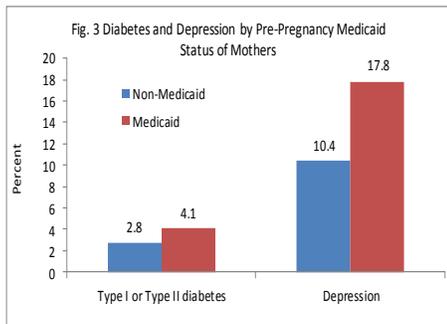
Oklahoma has one of the highest rates of tobacco use among pregnant women. More mothers with Medicaid smoked cigarettes three months prior to pregnancy than non-Medicaid mothers (39% vs. 26%, $p < 0.05$) (Fig.2).

OKLAHOMA FACTS

- Nearly 32% of Medicaid mothers had an intended pregnancy compared to 53% of non-Medicaid mothers.
- Medicaid mothers had a much lower rate of multivitamin use prior to pregnancy.
- Three months prior to pregnancy, over 39% of Medicaid mothers smoked compared to 26% among non-Medicaid mothers.
- More mothers on Medicaid were overweight or obese compared to non-Medicaid mothers.
- Nearly 18% of Medicaid mothers reported being diagnosed with depression compared to 10% of non-Medicaid mothers.
- Type I or II diabetes was diagnosed in 4.1% of Medicaid mothers compared to 2.8% among non-Medicaid mothers.
- Only 63.3% of Medicaid mothers accessed prenatal care in the first trimester compared to 77.7% among non-Medicaid mothers

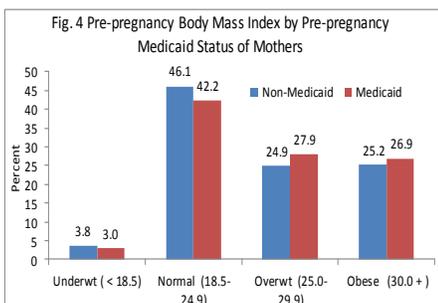
Depression (PCW5)

Depression affects a mother's ability to engage in safe and healthy parenting practices. A significantly higher percent of mothers with Medicaid reported being diagnosed with depression prior to pregnancy compared to non-Medicaid mothers (17.8% vs. 10.4%, $p < 0.05$) (Fig. 3).



Type I or Type II Diabetes (PCW8)

Mothers on Medicaid also had a higher rate of Type I or Type II diabetes compared to non-Medicaid mothers prior to pregnancy (4.1% vs. 2.8%) (Fig.3).

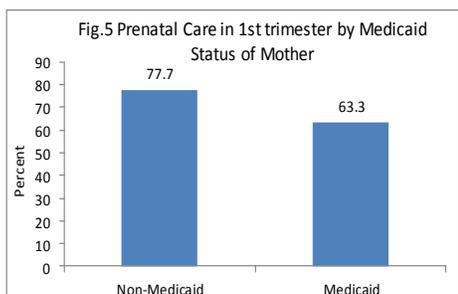


Body Mass Index (BMI) (PCW6)

Mothers on Medicaid had a slightly higher percent of overweight and obese BMI than non-Medicaid mothers (Fig.4).

Prenatal Care in First Trimester (PCW2)

Prenatal care is an important part of a healthy pregnancy. Over 63% of all



mothers with Medicaid during pregnancy accessed prenatal care (PNC) in their first trimester compared to 78% among non-Medicaid mothers ($p < 0.05$) (Fig.5).

Due to an increase in chronic health conditions and an increase in tobacco and alcohol use, women are entering pregnancy in poorer health. Continuous health insurance coverage provides access to preventive health services and facilitates better pregnancy planning. Further analysis is needed to understand why low-income women with health insurance prior to pregnancy, particularly those with chronic conditions, do not access available services.

Given that half of pregnancies remain unintended, each provider visit with women of child bearing age should be viewed as an opportunity to discuss preconception health issues. Multiple resources are available for screening and counseling women to improve their overall health. One of the first questions to ask should be "Do you desire pregnancy in the next year?". If the answer is yes, targeted preconception health information should be provided to attain optimal pre-pregnancy health. If the answer is no, interventions should be provided to prevent pregnancy and attain optimal health in the event of an unintended pregnancy.

These indicators could be used to track improvements in preconception wellness among Oklahoma women.

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"I took my vitamins. Never smoked or drank, even before pregnancy. I listened to my doctor, I was told to take iron supplements and I did. Listen to your doctor".

- PRAMS mom

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PRAMS is a population-based surveillance system about maternal behaviors and experiences before, during, and after pregnancy. Approximately 250 mothers are selected to participate in Oklahoma each month. Mothers are sent as many as three mail questionnaires seeking their participation with follow-up phone interviews for non-respondents. Information included in the birth registry is used to develop analysis weights that adjust for probability of selection and non-response. Prevalence rates were calculated and statistical significance was assessed using the Cochran-Mantel-Haenszel Chi-Square (χ^2) Test. PRAMS had 5,596 respondents for 2012-2014 for a response rate of 63.6%.

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