

# Evaluating Trends in Prenatal Genetics: Washington State, 1997-2002

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## Objectives:

- To determine the current trends in the utilization of prenatal genetic services (PGS) in Washington State.
- To identify further research areas and issues pertaining to the statewide use of PGS.
- To promote discussion regarding the social, ethical, and policy implications of prenatal genetics.

Figure 1: Number of Prenatal Genetics Patients by Primary Indication for Referral, 1997-2002.

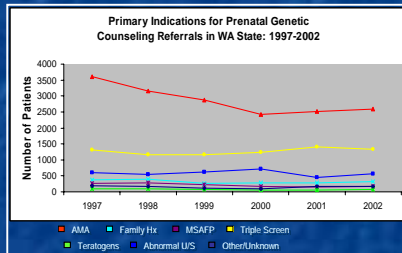
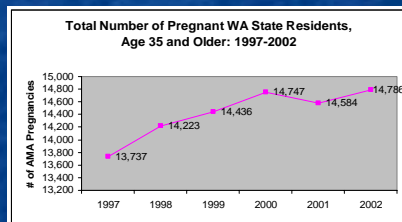
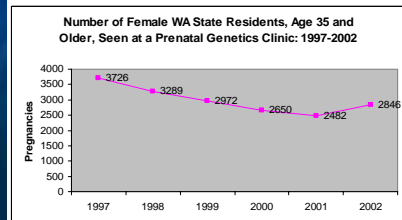


Figure 2: Number of Pregnancies in Women 35+ years old, 1997-2002 (top) and Number of Patients referred for AMA, 1997-2002 (bottom).



Source: WA State DOH Vital Statistics



Source: WA State DOH MDS

## Background:

- RCW 70.54.220: "All persons licensed or certified by the state of Washington to provide prenatal care or to practice medicine shall provide information regarding the use and availability of prenatal tests to all pregnant women in their care..."<sup>1</sup>
- The number of patients referred to UWMC's clinic fluctuated in a U-shaped pattern during the last six years.<sup>2</sup> To explore this observation, we were interested in looking at the prenatal genetics referrals trends at all state-funded clinics. There are currently nine regional genetics clinics (RGCs) in Washington State.<sup>1</sup>
- Knowledge of the patterns in referral rates at these clinics will help to evaluate the utilization of PGS statewide and assess state policies surrounding the discipline.

## Results:

- The number of women being referred to genetic clinics for advanced maternal age (AMA, defined as age 35+ at time of delivery) decreased 28% between 1997 and 2002 while the number of patients seen for other indications remained fairly constant (Figure 1).
- The number of advanced maternal age pregnancies increased 7.6% during this time period (Figure 2, top) while there was a 23.6% decrease overall in the number of patients seen at prenatal genetics clinics who were age 35 or older (Figure 2, bottom).
- Figure 3 shows prenatal genetics visits as a proportion of pregnancies, by county of residence for 1997 (top) and 2002 (bottom). In 1997, 5.7% of pregnant women across the state received PGS. This average dropped to 4.8% in 2002. Decreases were noted regardless of proximity to an RGC.

## Discussion and Future Directions:

Possible reasons for observed decline and potential questions for future research projects:

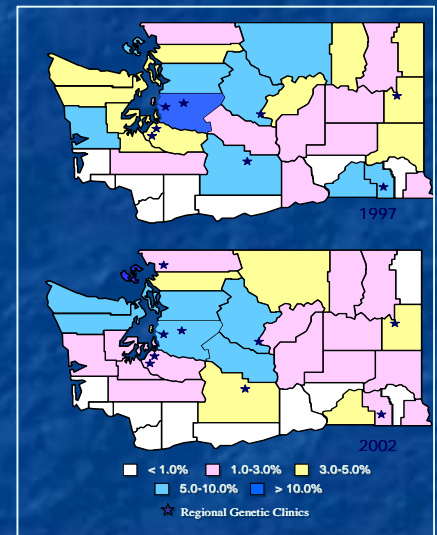
<b>DATA VALIDITY</b>	<ul style="list-style-type: none"> <li>- Are there variations in the reporting practices across clinics?</li> <li>- Are there physicians who provide genetic services and are not affiliated with the RGCs utilization not included in MDS?</li> </ul>
<b>TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>- Do negative screening results, performed in a physician's office, reduce anxiety and alter behavior concerning diagnostic testing?</li> </ul>
<b>BARRIERS TO SERVICES</b>	<ul style="list-style-type: none"> <li>- Do previously defined barriers to genetic services still pose a problem? These barriers include: lack of referral, lack of public awareness, language, culture, and transportation limitations.<sup>3</sup></li> </ul>
<b>CHANGING SOCIAL NORMS</b>	<ul style="list-style-type: none"> <li>- What are the public's perception of prenatal genetic services and how have they been affected by the media, public policy, and changing perceptions of disability and disease?</li> </ul>

## Data Sources:

**Minimum Data Set (MDS).** An aggregated data set compiled by the DOH from utilization and referral information provided by each of the RGCs. Reported annually. Received 1997 to 2002 data from Genetic Services division (Debra Lochner Doyle, MS, CGC, Director).

**Vital Statistics Data on Pregnancy.** Statewide aggregated data containing total number of pregnancies (live births, induced abortions, and fetal deaths), by county of residence and maternal age. Public data accessed from DOH website.

Figure 3: Prenatal Genetics Visits as a Proportion of Pregnancies, by County of Residence for 1997 and 2002.



## References:

- 1 Washington State Department of Health website: <http://www.doh.wa.gov>
- 2 Stefanie Uhrich, MS, CGC, Manager of UWMC Prenatal Genetics and Fetal Therapy Program. Personal discussions.
- 3 Vinaya Murthy. 1999. Why Aren't Women Utilizing Prenatal Genetic Services in Washington State? What Genetic Counselors Think. MS PowerPoint presentation provided by Stefanie Uhrich.