



# Oregon Cancer Genomics Surveillance Program

Oregon Public Health Genetics Program:  
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10/29/2009

# Topics

- Grant objectives
- Data sources
- Progress
- Challenges
- Conclusions





# Translation Program: Grant Objectives

- Evaluate how familial risk of colorectal, breast & ovarian cancer influences Oregon healthcare practice & Oregonians' behavior
- Evaluate Oregonians' awareness, knowledge, & use of BRCA 1 & 2 testing
- Evaluate Oregon healthcare providers' knowledge, attitudes, & use of genetic tests for colorectal, breast, & ovarian cancer
- Evaluate disparities in Oregonians' access to genetic testing & genetic counseling for colorectal, breast, & ovarian cancer



# Seven Cancer Genetic Tests

- Population screening
  - Fecal DNA (CRC)
  - Multigene panels, e.g., OncoVue (BC)
- Testing populations at high risk
  - Mismatch repair gene mutation for HNPCC (CRC)
  - BRCA 1&2 (BOC)
- Treatment/management
  - BOC
    - BRCA 1&2
    - CYP2D6
    - Gene expression profiling (e.g., Oncotype DX)
  - CRC
    - MMR gene mutation
    - UGT1A1



# Test Recommendations

- United States Preventative Services Task Force (USPSTF)
  - Fecal DNA (CRC)
  - BRCA 1&2
- EGAPP
  - UGT1A1
  - MMR
  - Gene expression profiling (e.g., Oncotype DX)
- Under review
  - CPD2D6
  - BC screening panel

# Key Questions & Data Sources

Genetic services clinical data: 7 clinics seeing ~1300 adult patients in 2 years

**How many Oregonians should be getting cancer genetic counseling and testing?**  
**How many Oregonians are getting appropriate cancer genetic counseling and testing?**

Medicaid database: ~157,000 enrolled adults

Interviews of 3<sup>rd</sup> party payers: top 10 insurers cover 1.7 million lives

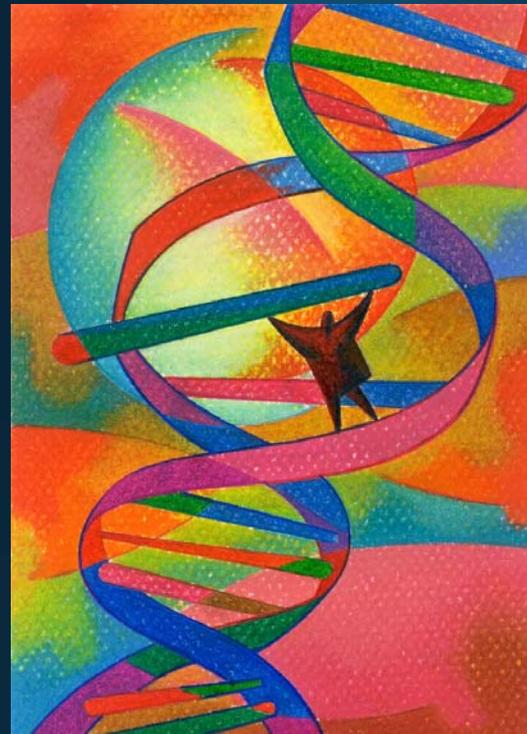
Surveys of health care providers: ~4500 1<sup>o</sup> care and cancer specialty providers

Cancer Registry Data: ~85,000 relevant cancers in 2.9 million adults in 10 years

Behavioral Risk Factor Surveillance Survey (random telephone survey): 2000 people representing 2.9 million adults

# Assessing Disparities

- Insured & uninsured
- Types of insured: Medicaid, HMO, other
- Safety net clinics
- Rural & urban





# Successes

- BRFSS
  - 2008 preliminary data analysis on CRC (see OGP poster):
  - 2009 BOC questions in the field
  - 2010 CRC questions drafted & submitted
- Oregon Cancer Registry (OSCaR) – preliminary 1996-2007 data
- Genetic Services Providers – data from 4 of 7 clinics, although data are incomplete
- Surveys of HCPs – contractor chosen, help from FQHC medical directors
- Outside evaluation contract in place



# Challenges

- We are conducting a complex surveillance program on tests with variably-proven validity & utility.
- Although partners are supportive & see the value of our program, providing data to us is not their highest priority.
- We need to survey ~4500 physicians (or several representative samples) on complex topics.
- We need genetic testing data that cannot be obtained with the CPT codes for genetic testing .
- The prevalence of genetic mutations which predispose our population to cancer is unknown (# of Oregonians in denominator).



# Important Outcomes for Broader Use

- Our surveillance program will further the field of translational genomics because:
  - our results may approximate the situation in other states; and
  - Using data from our surveillance program, our proposed HCP education program can be a model for other programs.



## Conclusions

- At 11 months into the grant, we are satisfied with our progress.
- We are constrained by the time availability of our partners.
- Anecdotal conversations suggest that primary care providers do not have time to adequately conduct cancer genetic risk assessment & therefore other assessment mechanisms or approaches to primary care assessment may be necessary.
- Our surveillance program is on track to contribute to GAPPNet's genomics mission.