Oregon Cancer Genomics Surveillance Program

Oregon Public Health Genetics Program:
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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

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

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

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

Surveys of health care providers: ~4500 1st care and cancer specialty providers

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

Medicaid database: ~157,000 enrolled adults

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

Interviews of 3rd party payers: top 10 insurers cover 1.7 million lives
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.