Michigan Department of Community Health
MDCH
Jennifer M. Granholm, Governor
Janet Olszewski, Director

Promoting Cancer Genomics Best Practices through Surveillance, Education, and Policy Change in the State of Michigan (2008-2011)

Jenna McLosky, MS, CGC, Debra Duquette, MS, CGC and Janice Bach, MS, CGC

SUMMARY

The Michigan Department of Community Health (MDCH) in collaboration with the Centers for Disease Control and Prevention (CDC) has created a multi-faceted, comprehensive cancer genomics program to promote appropriate translation of cancer genetic tests and gene profiling tests into clinical and public health practice.

GOALS

The desired impact of this genomics translation program is an increase in the appropriate use of cancer genetic tests for at-risk persons leading to a reduction of early (under age 50) cancer deaths in Michigan residents.

- Develop and implement a model for cancer genetic **surveillance** and the use of genetic and gene profiling tests for:

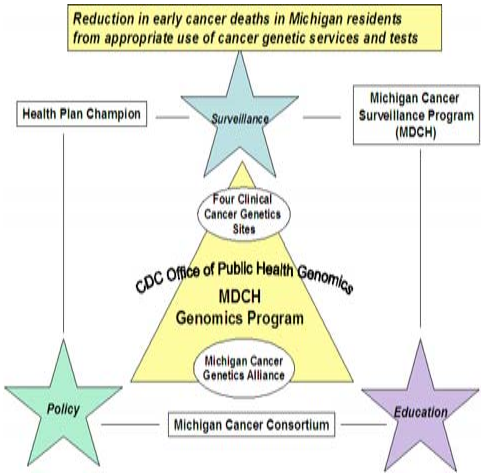
• BRCA1	• MSH6
• BRCA2	• MLH1
• MSI	• OncotypeDX
• IHC	• *MammaPrint*
• MSH2	• HI Ratio

- Identify model **provider education** programs to increase use of appropriate screening, counseling and evidence-based genetic tests.

- Identify a model **health insurance policy** for BRCA1 & 2 cancer genetic testing.

METHODS

The target population for this translation program is Michigan residents with or at increased risk for specific cancers, providers, health systems, and health insurance plans.



To achieve program goals, our core project team (director, coordinator, educator, & epidemiologist) partners with:

- **Michigan Cancer Surveillance Program (MCSP) and Vital Records staff**
- **Michigan Cancer Consortium & MDCH Cancer Prevention and Control Section**
- **Four Cancer Genetics Clinical Facilities**
- **A Health Plan Champion**

Project evaluation is based on methods recommended by the Guide to Community Preventive Services, and is designed to demonstrate an increase from baseline measures. During the first year, we initiated activities related to surveillance, education and policy. Where relevant, activities were submitted to the MDCH IRB and determined to be exempt from review (public health surveillance).

Surveillance

- ✓ Began to examine existing MCSP data for statewide incidence rates, trends, and mortality related to possible inherited breast/ovarian and Lynch syndrome cancers
- ✓ Began MCSP hospital chart reviews to collect data on use of genetic counseling and testing, in order to describe provider practices
- ✓ Formed a network of clinical cancer genetics sites to share data on BRCA1/2 counseling and testing
- ✓ Created questions on Lynch syndrome for the 2010 Michigan Behavioral Risk Factor Survey

Education

- ✓ Created portable risk assessment/referral guide
- ✓ Updated website of Michigan cancer genetic providers
- ✓ Disseminated EGAPP guidelines on Lynch syndrome and breast cancer gene expression profiling tests
- ✓ Provided resources and technical assistance to providers

Policy

- ✓ Reviewed Michigan health plan policies to determine number consistent with U.S. Preventive Services Task Force (USPSTF) guidelines for BRCA1/2
- ✓ Began tracking use of BRCA1/2 counseling and tests (through cancer genetics clinics) for members with and without policies consistent with USPSTF

EXPECTED OUTCOMES

By October 2011, we anticipate the following outcomes:

- ➢Increased understanding of incidence rates, trends and mortality related to possible inherited breast/ovarian, colorectal, and other Lynch syndrome cancers
- ➢A description of provider practices regarding family history assessment, genetic counseling and genetic testing for BRCA1 & 2 and Lynch syndrome cancers
- ➢Increased understanding of barriers and facilitators to cancer patient knowledge, attitudes and use of family history, genetic counseling and testing
- ➢A system for tracking the numbers and demographics of patients who receive genetic counseling and testing for BRCA1 & 2 and Lynch syndrome
- ➢Increased provider awareness of validity, utility, harms and benefits of Lynch syndrome genetic testing and gene expression profiling for breast cancer recurrence and treatment
- ➢Increased use of USPSTF guidelines for BRCA1/2 counseling and testing
- ➢Increased communication between health plans and cancer genetics experts
- ➢An increased number of health plans consistent with USPSTF BRCA1/2 guidelines

CONCLUSION

We hope this cancer genomics best practices project will provide methods and models that serve as a foundation for other states and federal agencies working to translate evidence-based guidelines into health practice. In addition, the data we collect will help to provide baseline measures for two recently proposed Healthy People 2020 objectives that align with our program goals:

- ⇨ Increase the proportion of persons with newly diagnosed colorectal cancer (CRC) who receive genetic testing to identify Lynch syndrome (or familiar CRC syndromes)
- ⇨ Increase the proportion of women with a family history of breast and/or ovarian cancer who received genetic counseling.

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