

SECRETARY'S ADVISORY COMMITTEE ON GENETICS, HEALTH AND SOCIETY

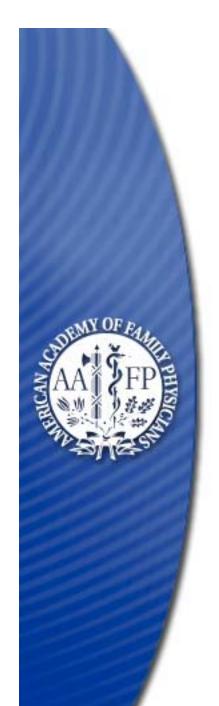
Norman B. Kahn, Jr., MD November 20, 2007 Washington, DC





 "Virtually all diseases (except maybe trauma) have a genetic component."

Francis Collins, MD, PhD



Genetics in Primary Care (GPC): A Faculty Development Initiative

Contract funded 1998-2003 by:

HRSA

Maternal and Child Health Bureau

Bureau of Health Professions

NIH

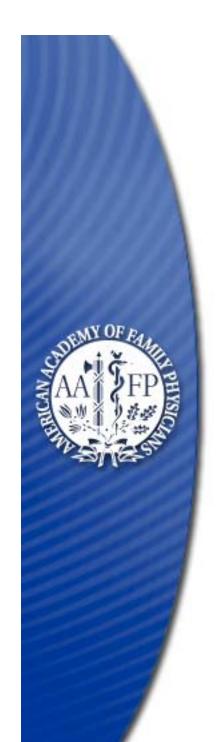
National Human Genome Research Initiative

AHRQ



Goal of the GPC

To enhance the ability of faculty to incorporate the clinical application of genetic information into undergraduate and graduate primary care medical education



"Primary Care Through a Genetics Lens"

- Expansion of differential diagnosis to include genetic conditions
- Appropriate use of family history to identify genetic conditions
- Importance of nondirective counseling
- Recognition of ethical, legal, and social issues raised by genetic diagnosis



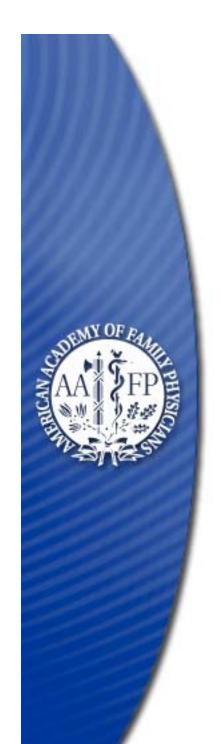
"Genetics Through a Primary Care Lens"

- Evaluate utility of genetic information in terms of health outcomes
- Respect for patient preference
- Protect patients from media hype
- Use the potential of longitudinal care



GPC Faculty Teams

- Baylor College of Medicine (Houston, Texas)
- Boston University School of Medicine/Boston Medical Center (Boston, Massachusetts)
- Cedars-Sinai Medical Center (Los Angeles, California)
- Cook County Hospital/Rush Medical College (Chicago, Illinois)



- East Carolina University, Brody School of Medicine (Greenville, North Carolina)
- Lancaster General Hospital Family Medicine Residency Program (Lancaster, Pennsylvania)
- Mayo Clinic (team leader from Scottsdale, Arizona; other members from Jacksonville, Florida, and Rochester, Minnesota)
- Medical College of Wisconsin (Milwaukee, Wisconsin)



- New York Medical College (Valhalla, New York)
 - Palmetto Health Alliance/University of South Carolina School of Medicine (Columbia, South Carolina)
- State University of New York School of Medicine at Buffalo (Buffalo, New York)
- University of California School of Medicine, Los Angeles (Los Angeles, California)



- University of Cincinnati College of Medicine (Cincinnati, Ohio)
- University of Florida College of Medicine (Gainesville, Florida)
- University of Maryland School of Medicine (Baltimore, Maryland)
- University of Oklahoma Health Sciences Center, Tulsa (Tulsa, Oklahoma)
- University of Utah Health Sciences Center/Primary Children's Medical Center (Salt Lake City, Utah)



- University of Vermont College of Medicine (Burlington, Vermont)
- University of Washington Family Medicine Residency Network (Seattle, Washington)
- Vanderbilt University Medical Center and Maharry Medical College (Nashville, Tennessee)



GPC Curriculum

Seven topics commonly recognized in primary care as having a genetic component:

- Breast cancer
- Cardiovascular disease
- Colorectal cancer
- Congenital hearing loss
- Dementia
- Developmental delay
- Hemochromatosis



Complimentary Tools and Resources Identified for Development

- "Genetics 101" curriculum for primary care physicians
- Aids to family history-taking in primary care
- "Red flags" to alert primary care MDs to potential genetic basis of disease
- Evidence-based medicine tools for interpreting genetics tests
- Cultural competency relevant to applying genetics advances in primary care



GPC Curriculum

http://genes-r-us.uthscsa.edu/resources/genetics/pdfs/gpc-completedoc.pdf

September 2001 revision can be accessed electronically at:

http://www.mchlibrary.into/mchbfindreports/docs/fr240980020.pdf



ANNUAL CLINICAL FOCUS 2005 GENOMICS



ACF 2005 GENOMICS SUPPORTERS

Maternal and Child Health Bureau, HRSA

National Human GENOME Research Institute

National Coalition for Health Professional Education in Genetics

American Cancer Society

National Heart, Lung and Blood Institute



2005 ACF GENOMICS SUPPORTERS

National Institute of Child Heath and Human Development

The Susan B. Komen Breast Cancer Foundation

Roche

GlaxoSmithKline

Genentech



ACF 2005 GENOMICS COOPERATING PARTNERS

American Academy of Nurse Practitioners

American Academy of Pediatrics

American Academy of Physician Assistants

American College of Medical Genetics

American College of Physicians



ACF 2005 GENOMICS COOPERATING PARTNERS

American College of Physicians
American Heart Association
American Society of Human
Genetics

Centers for Disease Control and Prevention

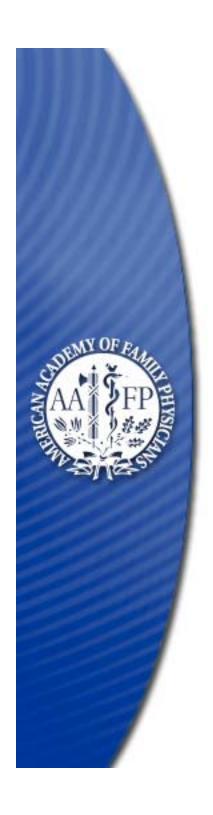
March of Dimes

National Society of Genetic Counselors, Inc.

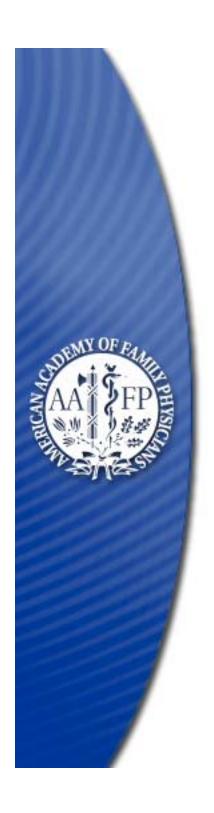


ACF 2005 GENOMICS TOPICS

Family History **Breast Cancer** Alzheimer's Disease Colorectal Cancer Bi-Polar Disorder Newborn Screening Hemochromatosis **Autism**







ACF 2005 GENOMICS USAGE DATA

Web Visits

2005 - Present

| Family History | 4,314 |
|-------------------|--------|
| Breast Cancer | 3,514 |
| Alzheimer's Dis. | 3,975 |
| Colorectal Cancer | 3,576 |
| Bi-Polar Disorder | 6,307 |
| Newborn Screening | 2,640 |
| Hemochromatosis | |
| Autism | 3,426 |
| | 1,924 |
| TOTAL VISITS | 29,676 |

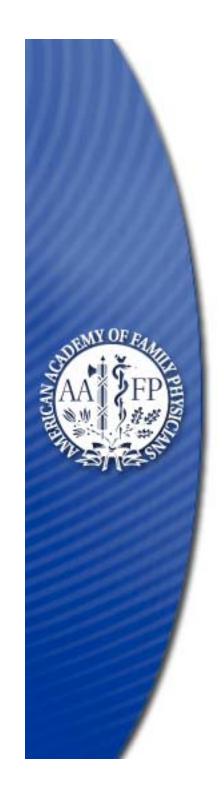


American Academy of Family Physicians

"Recommended Curriculum Guidelines for Family Medicine Residents – Medical Genetics" AAFP Reprint No. 258



to "see primary care through a genetic lens"



to incorporate family history as a standard of practice in each patient's health record



to be sensitive to the ethical, legal, and social issues in helping patients and families approach genetic testing



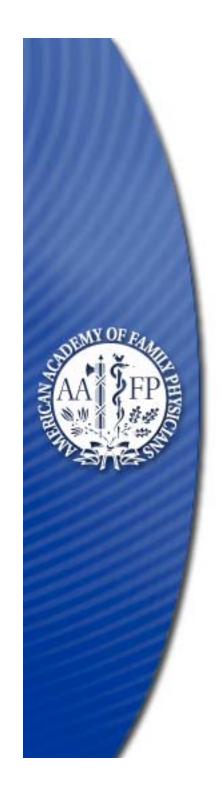
to know the evidence-based implications for genetic testing



to be comfortable in interpreting and following-up on genetic tests with patients and families



to be comfortable managing chronic genetic-based illness, using multi-disciplinary teams and community resources



genetic decision support integrated into electronic health records



