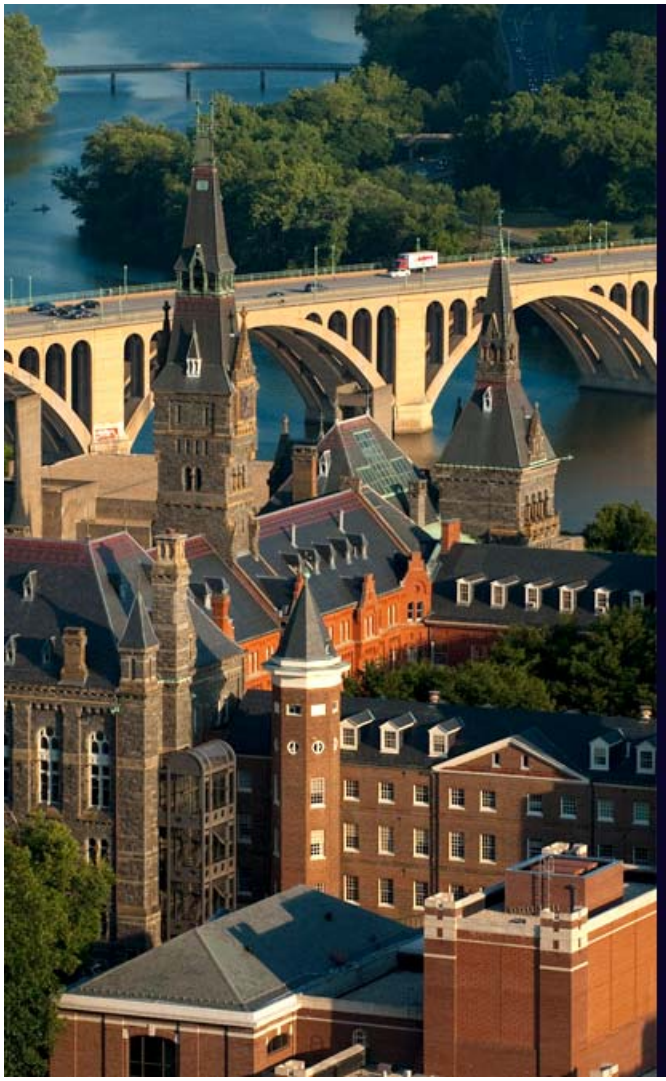

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COMPREHENSIVE CANCER CENTER

Alternative Models of Clinical Service Delivery: Impact on Disparities in BRCA Testing

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NCI CCC
A Comprehensive Cancer Center Designated by the National Cancer Institute

Hereditary Breast-Ovarian Cancer: Alternative Models of Genomic Service Delivery

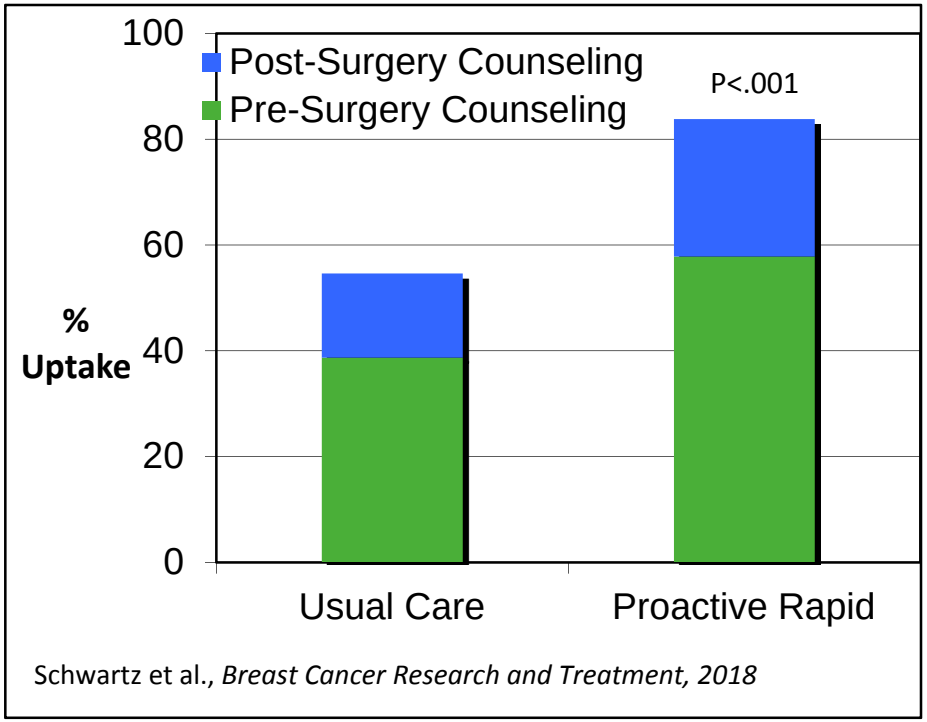
- Shortage of providers
- Uneven geographic distribution of providers
  - Urban
  - Academic medical centers
- Access to services
- Sub-optimal referral
- Changing landscape of genomic testing
  - Expanded indications in breast cancer
  - Ovarian cancer patients
  - Metastatic prostate cancer
- Increasing recognition that one size does not fit all

Barriers to Genetic Counseling and Testing

- General Barriers – barriers that are broadly relevant to all populations, but may differentially impact underserved/minority populations:
  - Awareness/knowledge
  - Sub-optimal referral
  - Access to services/practical barriers
  - Socioeconomic barriers
  - Attitudes
  - Mismatch with content/process of traditional genetic counseling delivery
- Population-Specific Barriers – barriers that may be specific to a particular population:
  - Language
  - Cultural
  - Implicit bias

Proactive-Rapid Genetic Counseling in Newly Diagnosed Breast Cancer Patients

- RCT: proactive-rapid counseling vs. usual care
- Barriers targeted: awareness, referral, access, practical
- Sample
  - N = 330 newly diagnosed breast cancer patients
  - Aged 50 and younger
  - 30% racial/ethnic minority



Schwartz et al., *Breast Cancer Research and Treatment, 2018*

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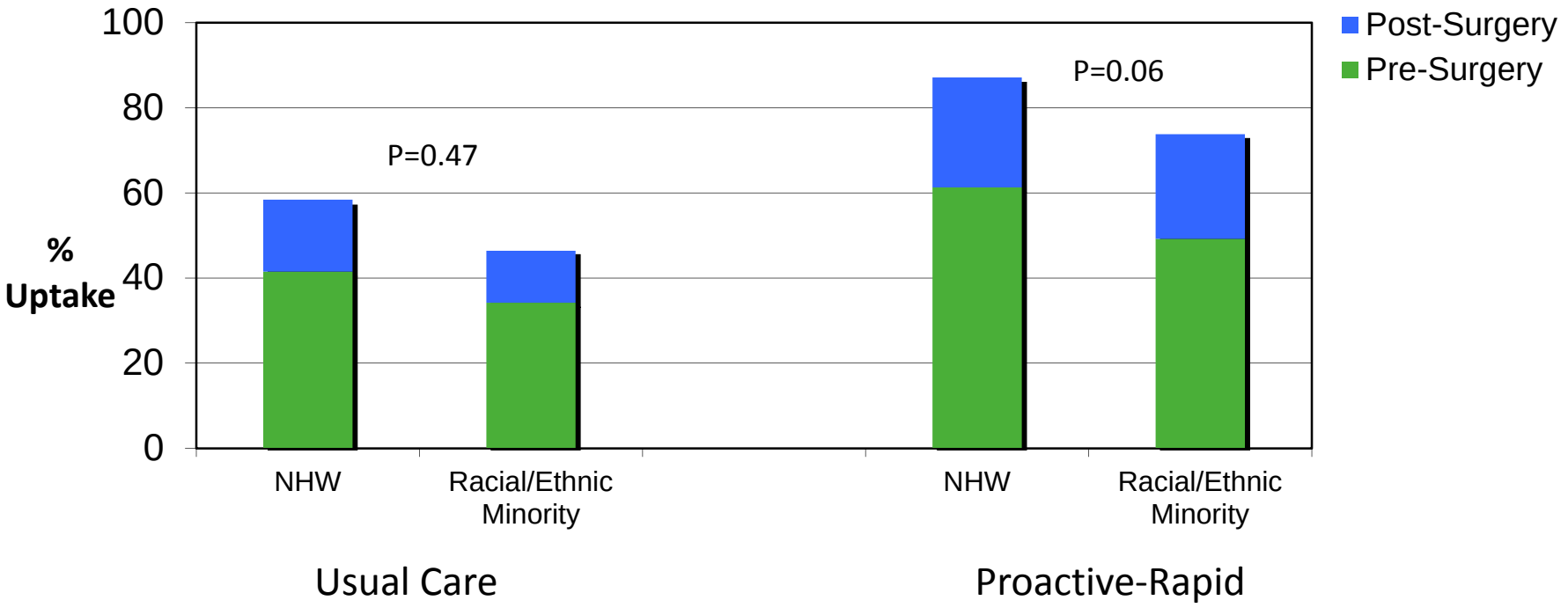
Genetic Counseling Participation



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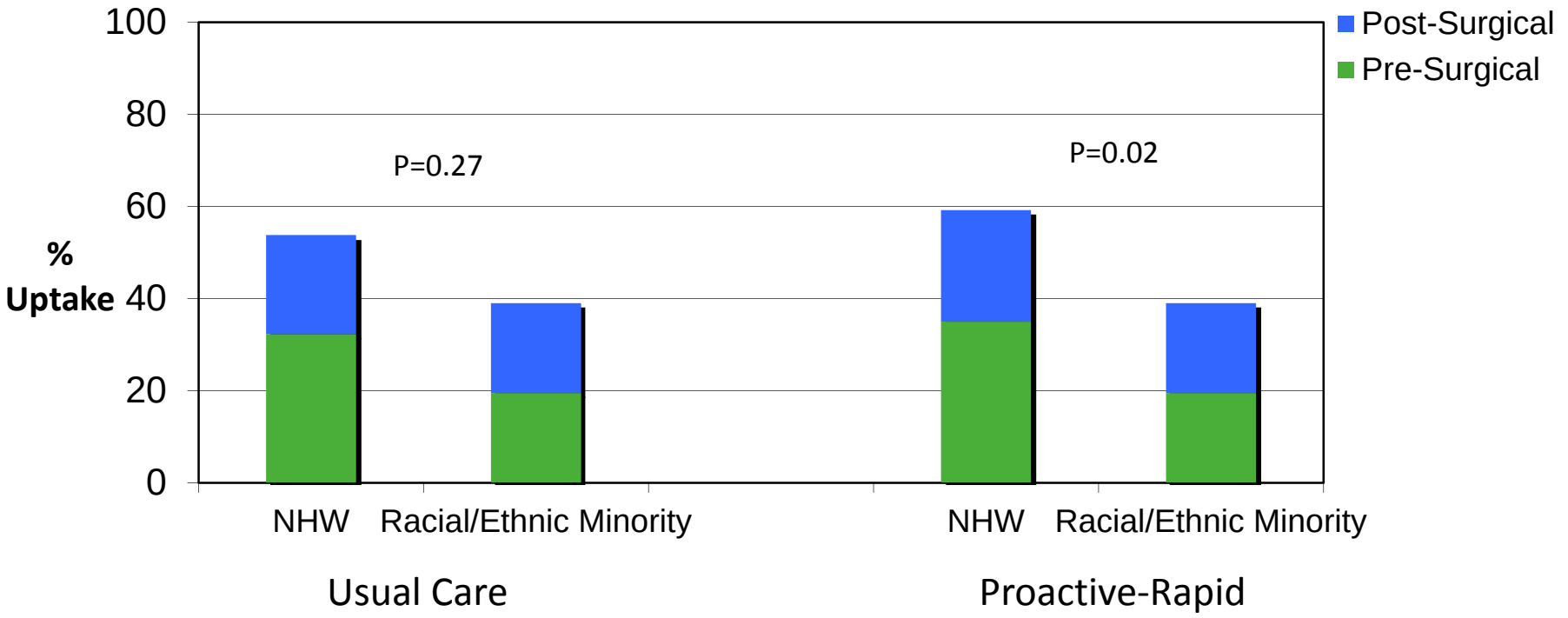
Genetic Testing Participation



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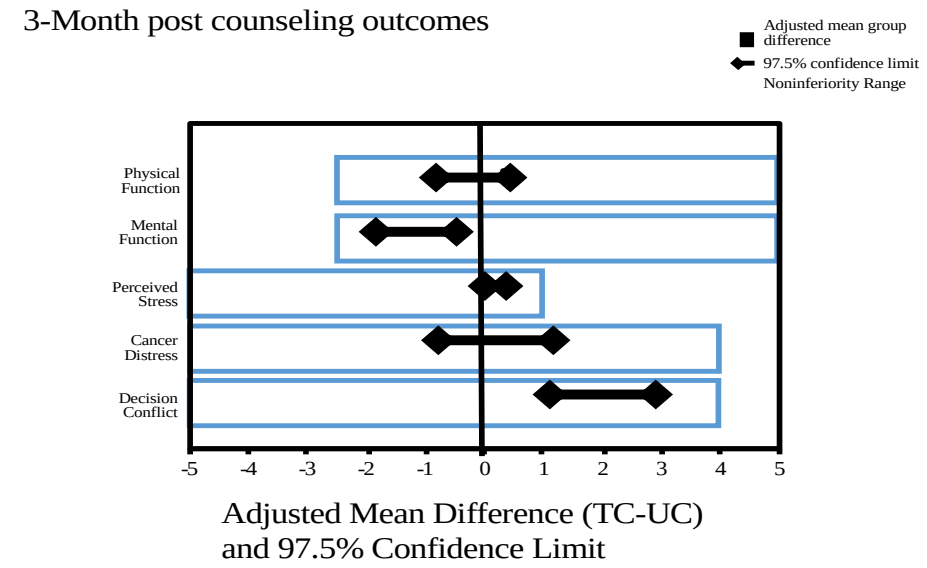
Telephone vs. Standard Delivery

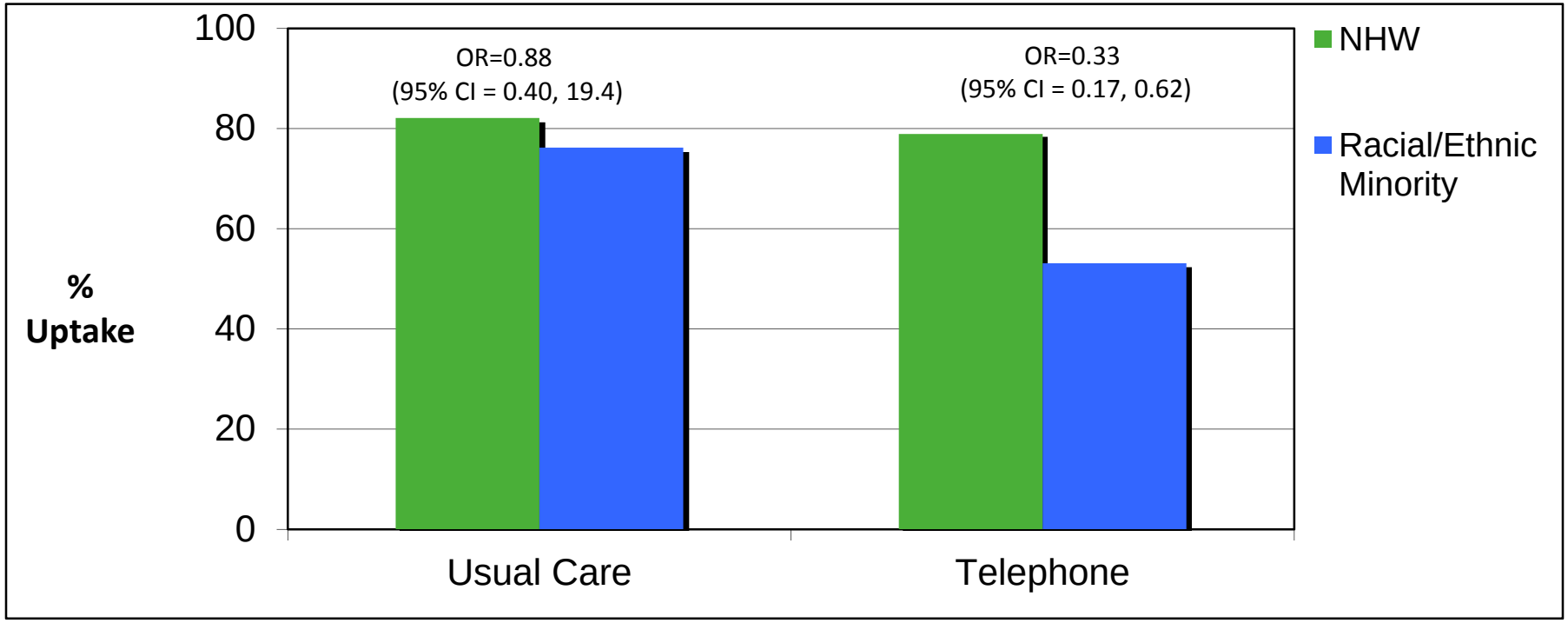
- Non-Inferiority Trial: telephone vs. standard delivery
- Barriers targeted: access, practical
- Sample
  - N = 669 high-risk women
  - Self- or physician-referred
  - Four sites: Georgetown; Dana Farber; Mt. Sinai; Univ of VT
  - 14% racial/ethnic minority



Note: Scores were adjusted for baseline score on the outcome measure and genetic test result

Schwartz et al., *JCO*, 2014;
Interrante et al., *JNCI: Cancer Spectrum*, 2017

Uptake of Genetic Testing Full Sample



Butrick et al., *Genetics in Medicine*, 2015

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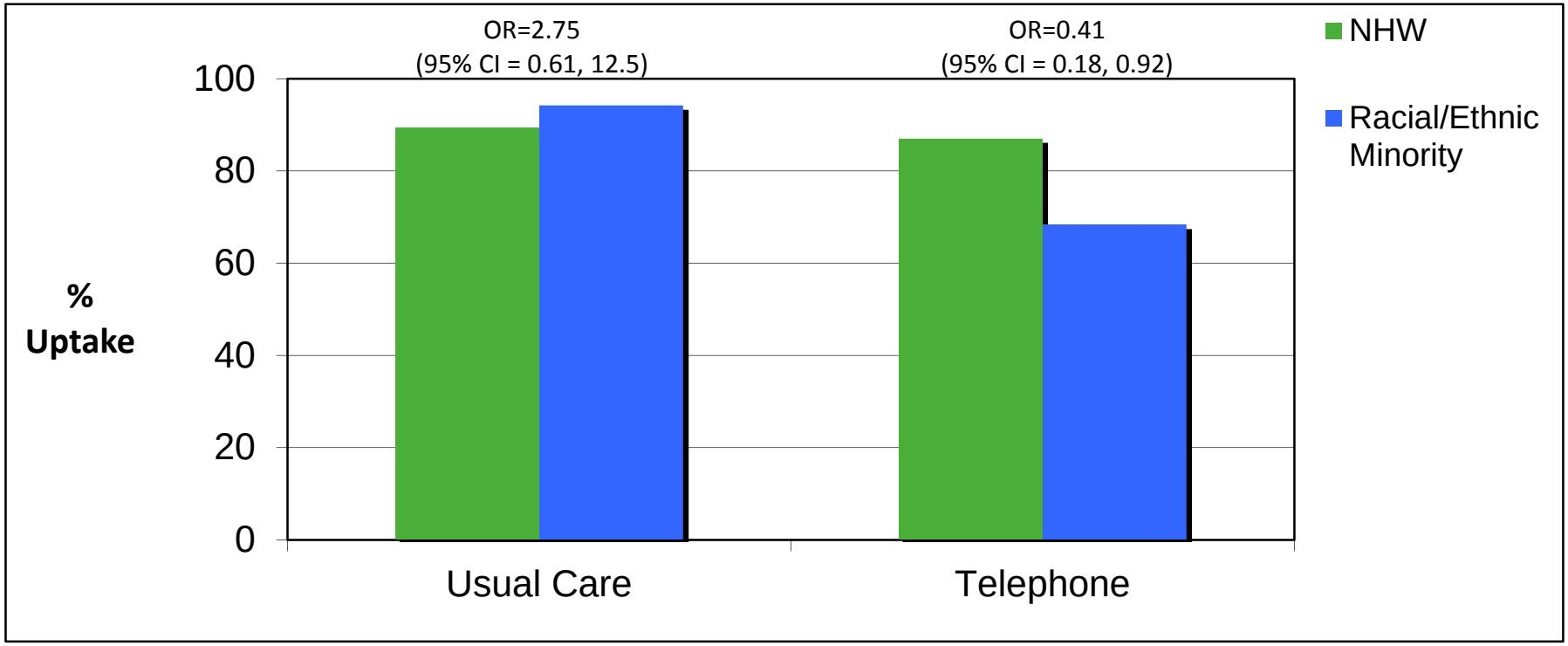
Genetic Testing Among Those Who Completed Genetic Counseling



Butrick et al., *Genetics in Medicine*, 2015

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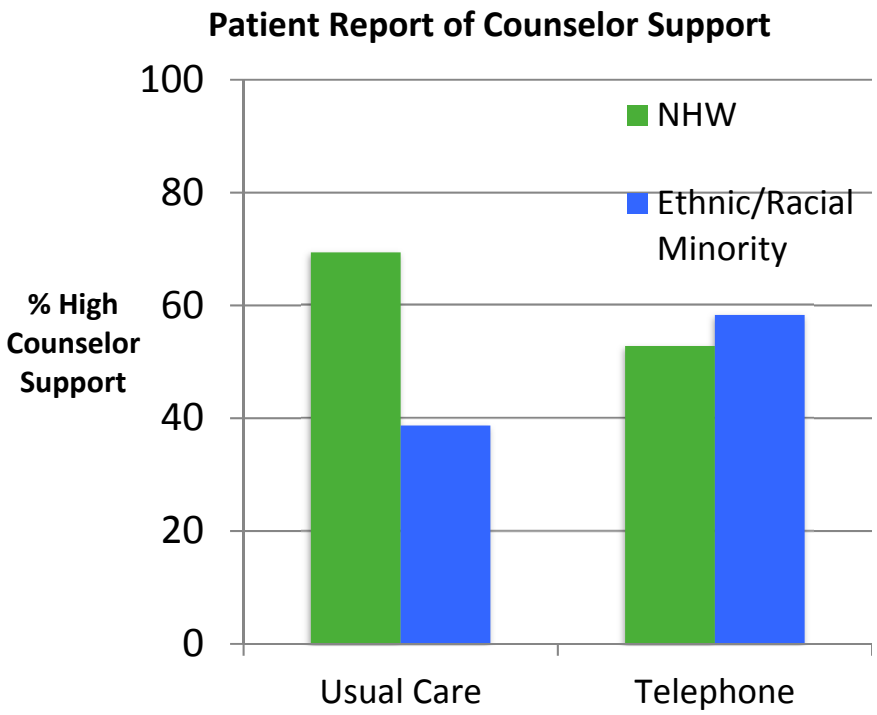
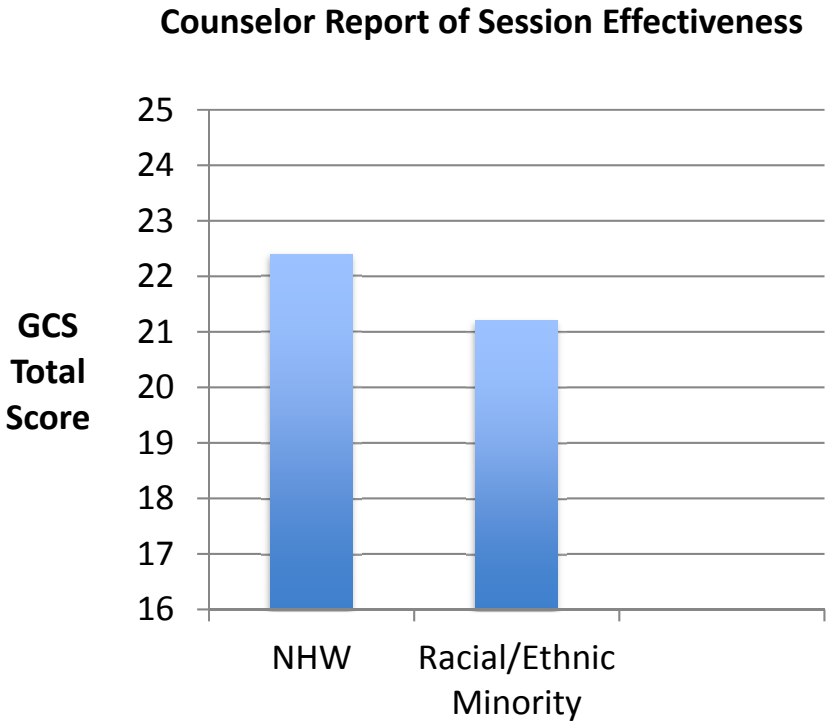
Patient and Counselor Process Measures





Peshkin et al., *Journal of Genetic Counseling*, 2015; Jacobs et al., *Familial Cancer*, 2016

Tentative Conclusions

- Proactive identification, referral and enrollment could increase participation
  - EMR solutions; embedded staff; navigators; genetic counseling assistants
- Despite increased rate of counseling following proactive enrollment with enhanced access, persistent differences in counseling and testing participation remain
- Telephone delivery can increase access but significant barriers remain:
  - Referral
  - Awareness
  - Attitudes?
- Content of Counseling/Mismatch
  - Cultural/linguistic tailoring
  - Streamlining

Ongoing Projects

Hurtado de Mendoza/Sheppard: Enhancing at-risk Latina Women's Use of Genetic Counseling for Hereditary Breast and Ovarian Cancer (R03)

- Community Partners: Nueva Vida and Capital Breast Care Center
- Developed a culturally-tailored narrative video designed to address the following barriers:
  - Language, cultural beliefs, lack of referral, awareness

Hurtado de Mendoza/Graves/Schwartz/Hamilton (KL2): Testing a Culturally Adapted Telephone Genetic Counseling Intervention to Enhance Genetic Risk Assessment in Underserved Latinas at Risk of Hereditary Breast and Ovarian Cancer

- Culturally and linguistically tailored
- Targeting information mismatch
- Developing streamlined and tailored visual aids for use during the session

Hurtado de Mendoza/Sheppard: Testing an Intelligent Tutoring System Intervention to Enhance Genetic Risk Assessment in Underserved Blacks and Latinas at Risk of Hereditary Breast Cancer (R21)

- Streamlined and tailored educational tool based on fuzzy-trace theory
- Pilot RCT

Ongoing Projects

Graves/Vadaparampil

- 5-year training program for 250 community health educators, navigators, promotores
- Develop cohort with "referral-level competence" to link high risk Latinas to appropriate genetic services
- 1.5 Day in-person workshop followed by 8 online education sessions

Schwartz: Facilitated Education and Testing in BRCA Positive Families (R01)

- RCT of streamlined electronic genetic counseling in families with a known BRCA mutation
- Tailoring based on race/ethnicity
- Goal: increased identification of mutations in first and second degree relatives of known mutation carriers