FCCC CCSG Supplement: Population Health Assessment
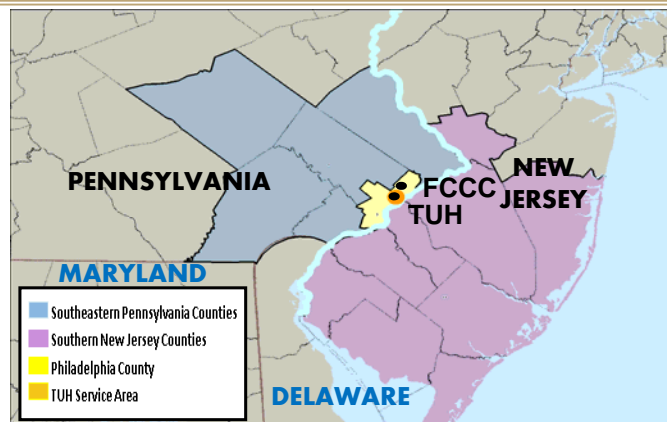
Nestor Esnaola, MD, MPH, MBA
Susan Fisher, MS, PhD

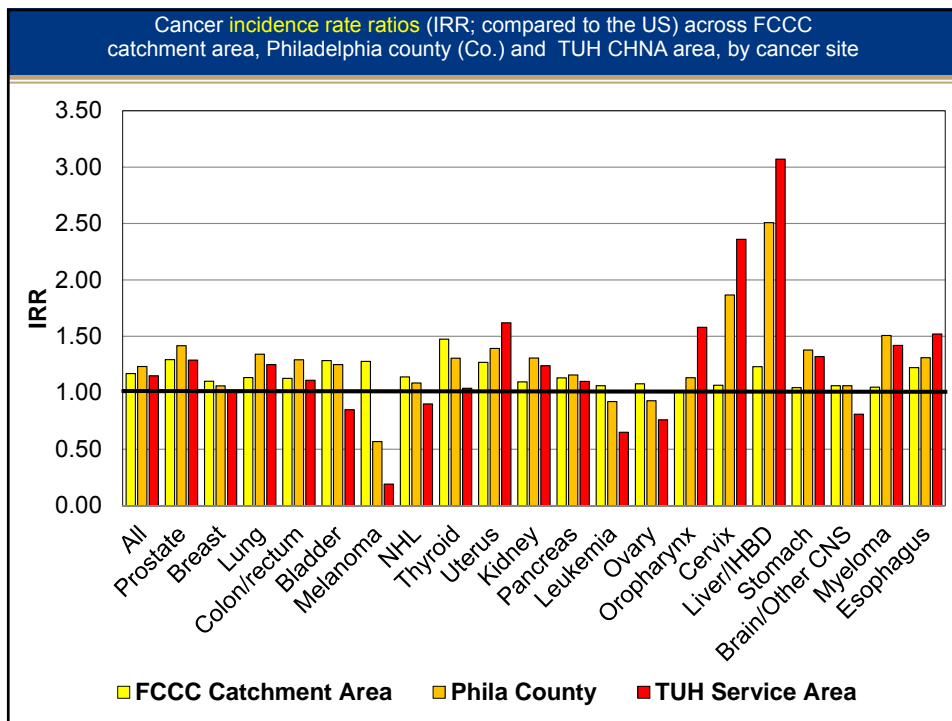**December 14, 2016**

FOX CHASE CANCER CENTER
TEMPLE HEALTH

FCCC Catchment Area Sociodemographics

	U.S.	FCCC Catchment Area	TUH Primary Service Area
Population	312,855,438	7,208,325	470,294
Non-White	25.9%	28.8%	74.9%
Hispanic or Latino	17.3%	9.5%	26.5%
Living in Poverty	14.1%	11.7%	35.7%

Source: U.S. Census, American Community Survey, 2008-2012

Cancer incidence rate ratios (IRR; compared to the US) across FCCC catchment area, Philadelphia county (Co.) and TUH CHNA area, by cancer site

Population Health Assessment: Background

- Capitalizing on existing population health assessment efforts/infrastructure, we propose a local data collection project that will allow for

  - improved characterization of our catchment area

  - new insights into underserved/understudied populations

  - development of a novel, multilevel data resource relevant to national/state/local cancer surveillance efforts

Population Health Assessment: Background

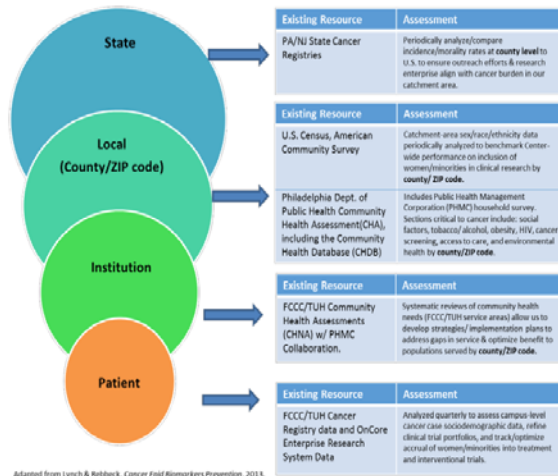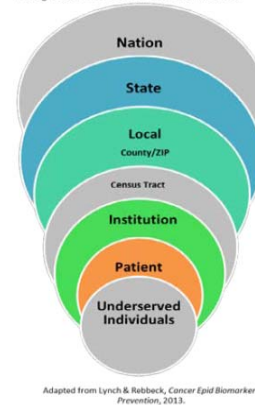Figure 3. Existing Population Health Assessment Efforts

Figure 4. Value added (in gray) includes data collection on individuals from understudied/underserved areas and the creation of an integrated multilevel data resource.

Adapted from Lynch & Rebbeck, *Cancer Epid Biomarkers Prevention*, 2013.

Population Health Assessment: Study Population

- Individually survey $\geq$ 1000 persons residing in our catchment area

  - $\geq$ 50% of the individuals surveyed will reside in the TUH Primary Service Area

  - $\geq$ 50% of the individuals surveyed *across the catchment area* will satisfy at least one of the following criteria of being historically underserved

    - 1) Live in medically underserved areas (Health Resources and Services Administration)

    - 2) Have low literacy

    - 3) Have low income ($\leq$ $11,670 for single individual or $23,850 for family of 4

    - 4) Be uninsured/subsidized health insurance coverage

Population Health Assessment: Recruitment Plan

- 1) We will identify/recruit subjects who reside in the TUH Primary Service Area by expanding Temple Health Block-by-Block's (THB3) already-planned, third wave of data collection
  - Re-contacting families already participating in THB3
- 2) We will identify/recruit (historically underserved and "non-underserved") subjects *across the entire catchment area (both within and outside the TUH Primary Service Area)*
  - Via future community outreach/cancer screening efforts scheduled/conducted by FCCC's Office of Community Outreach (OCO)
  - Through the OCO's and the Health Communication and Community Engagement (HCCE) Facility's community partners
  - Re-contacting individuals who previously participated in research studies conducted by the HCCE Facility

Temple Health: Block-by-Block Project Goals

…establish a multigenerational urban neighborhood health partnership to enrich minority research participation, optimize the institutional research portfolio, and contribute to the health improvement of our community.

- Provide a sustainable cohort of community participants engaged in individual and community health improvement across the life cycle through research;
- Provide investigators access to descriptive health data from urban populations for research purposes;
- Enhance participation of minorities in clinical research through improved education, access, and empowerment;
- Provide a venue for a community voice in new research initiatives.

Temple Health: Block-by-Block Recruitment Goals

- 1,000 subjects per year
- Ages ≥ 18 years (children to be included in Year 3)
- Multiple individuals within each household
- Maintain retention >80%
- Minimum goal of 5,000 subjects accrued and retained

Temple Health: Block-by-Block Methods

- Collect descriptive, longitudinal data every 6 months related to:
  - Demographic and social characteristics
  - Anthropometric & biologic parameters
  - Health behaviors
  - Health outcomes
- Specific data "themes" for each bi-annual assessment
- Integration of data collection/interventions for independent research studies

Specific Benchmarks of Success

- Increased minority recruitment into TUHS clinical trials
- Increased clinical investigations which focus on community health priorities
- Increased representation of minorities in national, therapeutic studies
- Improved health indicators (very long term ☺) among North Philadelphia residents:
    - ⬇ obesity and improved nutrition
    - ⬇ tobacco use
    - ⬆ health screening
    - earlier disease diagnosis

Population Health Assessment: Recruitment Plan

- 1) We will identify/recruit subjects who reside in the TUH Primary Service Area by expanding Temple Health Block-by-Block's (THB3) already-planned, third wave of data collection
    - Re-contacting families already participating in THB3
- 2) We will identify/recruit (historically underserved and "non-underserved") subjects *across the entire catchment area (both within and outside the TUH Primary Service Area)*
    - Via future community outreach/cancer screening efforts scheduled/conducted by FCCC's Office of Community Outreach (OCO)
    - Through the OCO's and the Health Communication and Community Engagement (HCCE) Facility's community partners
    - Re-contacting individuals who previously participated in research studies conducted by the HCCE Facility

Population Health Assessment: Key Constructs

Table 1. Data and key constructs for proposed data collection project.

Data/Key Construct	Instrument
Sociodemographics (e.g., age, gender, marital status, race, ethnicity, preferred language, education, income, urban/rural status, insurance status, etc)	U.S. Census [1]*, HINTS [2]*, NHIS CCS [3]*, BRFSS [4]*
Reactions to race	BRFSS [4]*
Social context (e.g., work, finances, etc)	BRFSS [4]*
Social networks	HINTS [2]*
Chronic health conditions/ functional status	BRFSS [4]*, HINTS [2]*
Health care access	HINTS [2]*, BRFSS [4]*
Health status/HRQOL	BRFSS [4]*, SF-12 [5]
Cancer perceptions/knowledge	HINTS [2]*
Cancer communication	HINTS [2]*
Cancer-related risk behaviors	HINTS [2]*, NHIS CCS [3]*, BRFSS [4]*
Cancer risk attitudes	HINTS [2]*
Cancer screening	HINTS [2]*, NHIS CCS [3]*, BRFSS [4]*
Family history/genetic testing	HINTS [2]*, NHIS CCS [3]*, BRFSS [4]*, 13-item Attitudes Toward Genetic Research and Testing [6]
Knowledge/attitudes regarding medical research/clinical trials	HINTS [2]*, 17-item Likelihood of Participation Scale [7]
Knowledge/attitudes regarding biobanking research	BANKS [8]*

*, denotes selected items; HINTS, Health Information National Trends Survey; NHIS CCS, National Health Interview Survey Cancer Control Supplement; BRFSS, Behavioral Risk Factor Surveillance System; SF-12, 12-Item Short Form Health Survey; BANKS, Biobanking Attitudes and Knowledge Survey.

FCCC CCSG Supplement: Population Health Assessment

Nestor Esnaola, MD, MPH, MBA
Susan Fisher, MS, PhD

December 14, 2016

FOX CHASE
CANCER CENTER
TEMPLE HEALTH