**Assessment of Need**:

## Cancer Health Disparities in WV

West Virginia, the only state whose borders are entirely contained within the geographic region of Appalachia, has a population of 1.8 million and the 3rd highest cancer mortality rate in the nation (196.6 deaths per 100,000 versus U.S. national average of 171.8 for the rate period 2005-2010).1 Many WV counties have cancer mortality rates above the national average. Incidence rates for lung, gynecological (cervix and ovary) and hematological (leukemia & lymphoma) malignancies among many others exceed the national average; there are 16 counties in the state where mortality for breast cancer exceeds the national average.1  Major risk factors include tobacco consumption (2nd highest rate in the nation) and obesity (3rd highest rate)2; an aging population (2nd highest percentage ((16.8%)) of population who are 65 years and over only exceeded by Florida)3, significant environmental/heavy metals exposures attributable to our coal mining-driven state economy; and WV ranks highest among US states for incidence of HPV related cancer. 4-5 Forty-three of WV’s 55 counties are wholly or partially designated as Medically Underserved Areas by the Health Resource and Services Administration.6 WV had the second lowest median household income in 2008-2011($40,400)3 and 9th highest percentage of residents living in poverty (18.1% 2 year average for 2010-2011).3  Further compounding the cancer burden are low screening rates (under- and uninsured); low literacy coupled with ineffective or inefficient communication (resulting in reduced access to screening and care); and geographic challenges as the 2nd most rural state, in getting to and from place of residence to comparatively few and more distant points of healthcare delivery via non-interstate transportation. These data imply that many WV communities have limited access to cancer prevention and early diagnostic/therapeutic intervention, including access to and enrollment in cancer clinical trials.

**Metastatic Breast Cancer**

In the United States approximately 6-10% of new breast cancer cases are Stage IV7 and 20-30% of allbreast cancer cases will become metastatic.8 In WV, 28.6% of all breast cancer diagnoses are made when there is already regional and distant metastases. This percentage increases to more than 35% for women under the age of 50 as identified in Table 1.9 In 2013, approximately 5% of new breast cancer cases referred to the Mary Babb Randolph Cancer Center were Stage IV.10 As evidenced in the disparities section of this application many of our residents live in geographically isolated areas and receive care outside the major University system. This grant aims to increase access to our Weekly Breast Cancer Conference for community providers and thus improve patient outcomes.

Table 1.



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