Table S1 Summary of backward elimination variable selection with higher chi-squared values for logistic regression model to predict presence of metastatic *vs.* non-metastatic prostate cancer at presentation

	χ^2 (d.f.)	P value
Main effects		
Age (dichotomized: >65 *vs.* ≤65 yrs)	1784.1 (1)	<0.001
Race/Ethnicity (Other/Unknown referent group)	698.7 (3)	<0.001
Insurance Status (Medicare/Other Governmental Plan referent)	2799.7 (3)	<0.001
Academic *vs.* non-Academic Medical Center	42.4 (1)	<0.001
Education: % in ZIP Code Without HS Diploma (≥29% referent)	48.2 (3)	<0.001
Median Year 2000 Income in ZIP Code (<$30,000 referent)	42.4 (3)	<0.001
Housing Type (Unknown referent)	107.2 (2)	<0.001
PSA Testing Era (2012 or before *vs.* 2013 or later)	2681.0 (1)	<0.001
Interactions		
Age × Insurance Interaction	615.4 (3)	<0.001
Age × Education Interaction	42.6 (3)	<0.001
Race/Ethnicity ×Insurance Interaction	70.6 (9)	<0.001
Race/Ethnicity × Median Year 2000 Income Interaction	55.7 (9)	<0.001
Insurance × Academic Medical Center	86.6 (3)	<0.001
Insurance × Education Interaction	34.3 (9)	<0.001
Insurance × Median Year 2000 Income Interaction	56.4 (9)	<0.001
Academic Medical Center × Education	35.2 (3)	<0.001
Academic Medical Center × Median Year 2000 Income	27.3 (3)	<0.001
Race/Ethnicity × PSA Testing Era Interaction	121.4 (4)	<0.001

Table S2 Summary of backward elimination variable selection with lower chi-squared values for logistic regression model to predict presence of metastatic *vs.* non-metastatic prostate cancer at presentation

Interactions	χ^2 (d.f.)	P value	Beta	Std. Error
Race/Ethnicity × Median Year 2000 Income Interaction	55.7 (9)	<0.001		
Hispanic and $30,000–$34,999			0.1265	0.0874
Hispanic and $35,000–$45,999			0.0807	0.0768
Hispanic and ≥$46,000			0.0936	0.0722
White and $30,000–$34,999			−0.0001	0.0774
White and $35,000–$45,999			−0.0021	0.0675
White and ≥$46,000			0.0654	0.0619
Black and $30,000–$34,999			−0.0553	0.0789
Black and $35,000–$45,999			−0.1492	0.0691
Black and ≥$46,000			−0.0736	0.0642
Insurance × Academic Medical Center	86.6 (3)	<0.001		
Academic Medical Center and Uninsured/Unknown			−0.2027	0.0299
Academic Medical Center and Private Insurance			0.0619	0.0173
Academic Medical Center and Medicaid/Medicare <65			0.0966	0.0255
Insurance × Education Interaction	34.3 (9)	<0.001		
Uninsured/Unknown and <14% Without HS Diploma			−0.0715	0.0602
Uninsured/Unknown and 14–19.9% Without HS Diploma			−0.0314	0.0570
Uninsured/Unknown and 20–28.9% Without HS Diploma			0.0346	0.0497
Private Insurance and <14% Without HS Diploma			0.0342	0.0396
Private Insurance and 14–19.9% Without HS Diploma			0.0476	0.0389
Private Insurance and 20–28.9% Without HS Diploma			−0.0429	0.0368
Medicaid/Medicare <65 and <14% Without HS Diploma			0.2072	0.0553
Medicaid/Medicare <65 and 14–19.9% Without HS Diploma			0.1228	0.0518
Medicaid/Medicare <65 and 20–28.9% Without HS Diploma			0.0638	0.0459
Insurance × Median Year 2000 Income Interaction	56.4 (9)	<0.001		
Uninsured/Unknown and $30,000–$34,999			0.1327	0.0494
Uninsured/Unknown and $35,000–$45,999			0.1402	0.0506
Uninsured/Unknown and ≥$46,000			0.0467	0.0578
Private Insurance and $30,000–$34,999			0.0548	0.0331
Private Insurance and $35,000–$45,999			0.0562	0.0329
Private Insurance and ≥$46,000			−0.0870	0.0354
Medicaid/Medicare <65 and $30,000–$34,999			0.1030	0.0411
Medicaid/Medicare <65 and $35,000–$45,999			0.1200	0.0426
Medicaid/Medicare <65 and ≥$46,000			0.0690	0.0491
Academic Medical Center × Education	35.2 (3)	<0.001		
Academic Medical Center and <14% Without HS Diploma			−0.1311	0.0299
Academic Medical Center and 14–19.9% Without HS Diploma			−0.1658	0.0283
Academic Medical Center and 20–28.9% Without HS Diploma			−0.0809	0.0256
Academic Medical Center × Median Year 2000 Income	27.3 (3)	<0.001		
Academic Medical Center and $30,000–$34,999			−0.1392	0.0282
Academic Medical Center and $35,000–$45,999			−0.1169	0.0283
Academic Medical Center and ≥$46,000			−0.1313	0.0309
Race/Ethnicity × PSA Testing Era Interaction	121.4 (4)	<0.001		
Hispanic and PSA Screening Era (2012 or before)			0.1194	0.0460
White and PSA Screening Era (2012 or before)			0.0243	0.0366
Black and PSA Screening Era (2012 or before)			0.2241	0.0393