Agreement between Self-Report and Medical Charts for PSA Testing and Prostate Biopsy Frequency

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INTRODUCTION

- Active surveillance (AS) is the preferred initial option for patients with low-risk prostate cancer (LRPC)
- Surgery or radiation provides no survival benefits for low-risk prostate cancer while leading to side effects like impotence and incontinence
- Studies suggest a significant number of patients on AS do not follow AS practice guidelines on frequency of testing
- The accuracy of self-reported PSA testing frequency and prostate biopsy frequency is not known
- We want to assess the accuracy of self-reported frequency of PSA testing and prostate biopsy frequency by comparing the patient's self-report data with medical record data

METHODS

- Population-based survey study of patients from Metro Detroit area and Georgia
- White and Black patients (n=332) with newly diagnosed LRPC on AS identified through cancer registries (SEER)
- Patients surveyed at baseline (<4 months after diagnosis) and at two years post diagnosis

RESULTS

- Of the 332 medical records reviewed, 249 of these men completed the two-year follow up surveys
- Average age was 63.3 years (SD=6.7, range 47-76)
- For PSA testing frequency, approximately half of self-reports (52%) matched the values from the medical charts and 36% differed by 6 months.
- For prostate biopsy frequency, 36% of all self-reports matched the values from the medical charts and 26% differed by 6 months

RESULTS

Table 1. Sample demographic characteristics by location (N=249)

Variable	Georgia (N=96) (38.6%)	Detroit (N=153) (61.4%)	P-value
Age			0.131
≤64	49 (51.0%)	93 (60.8%)	
65+ years	47(49.0%)	60 (39.2%)	
Race			0.952
Caucasian	87 (90.6%)	139 (90.8%)	
Black	9 (9.4%)	14 (9.2%)	
Marital Status			0.312
Married	14 (14.6%)	30 (19.6%)	
Not Married	82 (85.4%)	123 (80.4%)	
Education			0.521
High School or less	9 (9.5%)	11(7.2%)	
Some College	86(90.5%)	142(92.8%)	
Employment			0.779
Not working	40 (41.7%)	61(39.9%)	
Working	56 (58.3%)	92(60.1%)	
Income			0.085
<70K	27(29.0%)	58(40.0%)	
≥70K	66(71.0%)	87(60.0%)	

Table 2. Agreement for PSA Testing Frequency between Self-Report and Medical Record

Sample	Weighted Kappa	95% CI
Total Sample (N=249)	0.262***	0.11 to 0.42
Georgia (N=96)	0.236**	0.05 to 0.43
Detroit (N=153)	0.228**	0.10 to 0.36

** p ≤ 0.01, *** p ≤ 0.001

RESULTS

Table 3. Agreement for Prostate Biopsy Frequency between Self-Report and Medical Records

Sample	Weighted Kappa	95% CI
Total Sample (N=245)	0.278***	0.15 to 0.42
Georgia (N=93)	0.105	-0.07 to 0.28
Detroit (N=152)	0.382***	0.23 to 0.53

*** p ≤ 0.001

CONCLUSIONS

- The results showed that the level of agreement between self-report and medical records was only fair for both frequencies of PSA testing and prostate biopsy
- Use patients' self-reported data as a means of assessing AS adherence cautiously
- It is important that clinicians are aware of the limitations of using self-reported frequency of testing for AS adherence
- Ways to improve the accuracy of self-reported data are important to ensure AS patients are doing so safely
- One way to improve patients' recall is to improve physician-patient communication to help patients better understand the importance of the tests and procedures of AS for better quality of care
- Another way is to make better use of patient tracking tools, such as a cell phone application, that would allow patients to more accurately track what tests and procedures have been done and what tests are needed in the future