Patient Comprehension of Breast Pathology Report Terminology: The Need for Patient-Centered Resources

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Background

- The 21st Century Cures Act now requires healthcare institutions to immediately release all medical records to patients
- Studies in other fields have determined patient understanding of medical jargon is poor
- Patient comprehension of breast pathology terms has not been well studied

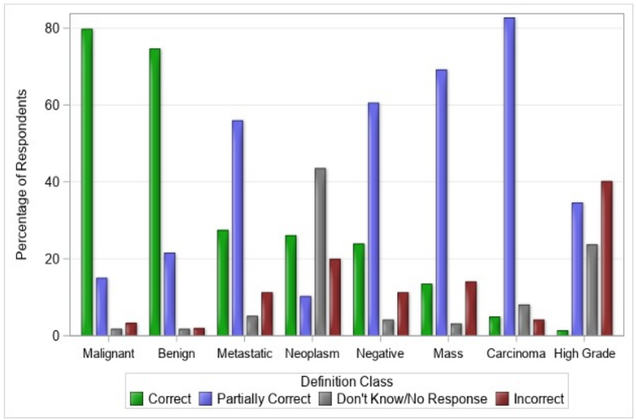
Objective

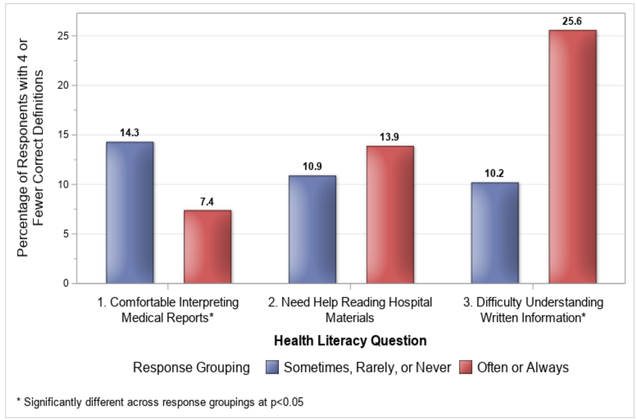
Evaluate patient comprehension of terminology common to breast biopsy pathology reports

Methods

- Survey administered at 4 distinct screening mammography sites:
  1. Define and interpret 8 medical terms
  2. 3 health literacy screening questions
  3. Patient demographics
- Patient responses independently scored by 2 reviewers using pre-determined rubric of definitions

Results





* Significantly different across response groupings at p<0.05

Patients need resources when reviewing their medical records

- 527 patients completed the survey.
- Most correctly defined: 'Malignant' (80%) and 'Benign' (73%)
- Least correctly defined: 'High Grade' (1%)
- ≤ 4 correct terms associated with:
  - Feeling uncomfortable interpreting medical reports
  - Often/always have difficulty understanding written information.
  - Black/African American race
  - Education level
- *No* difference if working in healthcare or a prior history of cancer treatment

Adjusted odds ratios (AOR) for having 4 or fewer correct definitions of medical jargon terms

Independent variable	Adjusted odds ratio	95% CI for AOR		P value
		Lower	Upper	
Race/ethnicity				
White; Hispanic/Latino	1.00 (ref); 3.75	1.42	9.90	.008
Black/African American	4.81	3.35	6.90	<.001
Other	1.61	0.51	5.13	.416
English is primary language				
Yes; No	1.00 (ref); 1.32	0.50	3.49	.574
Education level				
Graduate or professional degree; high school diploma/equivalent or less	1.00 (ref); 7.31	3.28	16.32	<.001
Some college/trade or vocational/associate's degree	5.28	2.35	11.88	<.001
Bachelor's degree	2.86	1.19	6.86	.019
Age: 1-year increase	0.98	0.94	1.02	.253
Health-related occupation				
Yes; No	1.00 (ref); 2.45	0.85	7.10	.098
Current cancer treatment or surveillance				
Yes; No	1.00 (ref); 1.13	0.60	2.12	.709

Robust, treatment center-clustered standard errors used in confidence interval estimation.

Conclusions

- Terminology common to breast biopsy pathology reports is largely misunderstood
- Lower scores correlated with reporting difficulty understanding written information and feeling uncomfortable interpreting medical reports
- Race/ethnicity & education level correlate most with odds of scoring poorly
- Assumptions about patient understanding based on the patients past medical history and/or prior exposure to healthcare could be displaced

Implications

- Patients need resources while independently reviewing their medical records.
- Future work must focus on designing educational tools to improve the patient experience

Disclosures

No disclosures or conflicts of interest