

BACKGROUND

- Socio-demographics are commonly used to measure health care disparities, improve quality of care, and evaluate population-specific clinical outcomes.
- There is conflicting literature on the accuracy of data capture on demographic variables.

PURPOSE

- To critically assess the consistency or inconsistency of medical staff entry versus patient reported ethnicity, race, gender, preferred spoken language, and preferred written language within the electronic medical record.

METHODS

- Study Design**
 - Multi-center, prospective, cross-sectional study
 - Demographic data collected through questionnaire
- Inclusion Criteria**
 - Children 0-18 years of who present to the pediatric ED for acute care.
- Primary Outcomes**
 - Agreement between self-reported and medical record documentation by hospital personnel on race.
- Secondary Outcome**
 - Agreement between self-reported and medical record documentation by hospital personnel on ethnicity, written language, spoken language, and gender.

		Krippendorff's Alpha	95% CI			Krippendorff's Alpha	95% CI
Ethnicity	Self-report	0.81	0.72 – 0.88	Ethnicity	PIF	0.83	0.75 – 0.90
	EMR				EMR		
Race	Self-report	0.49	0.39 – 0.59	Race	PIF	0.09	-0.02 – 0.18
	EMR				EMR		
Gender	Self-report	0.92	0.86 – 0.97	Gender	PIF	0.97	0.93 – 1.00
	EMR				EMR		
Preferred Spoken Language	Self-report	0.64	0.51 – 0.76	Preferred Spoken Language	PIF	0.89	0.82 – 0.96
	EMR				EMR		
Preferred Written Language	Self-report	0.61	0.46 – 0.74	Preferred Written Language	PIF	0.91	0.85 – 0.97
	EMR				EMR		

Factor	Comparison	Main Hospital	WL Community	WC Community
		N = 70 (34.8%) α_K (95% CI)	N = 62 (30.8) α_K (95% CI)	N = 69 (34.3%) α_K (95% CI)
Ethnicity	Self-report	0.83 (0.70 – 0.95)	0.72 (0.57 – 0.88)	0.92 (0.81 – 1.00)
	EMR			
Race	Self-report	0.46 (0.27 – 0.65)	0.46 (0.23 – 0.66)	0.49 (0.30 – 0.65)
	EMR			
Gender	Self-report	0.89 (0.77 – 0.97)	0.90 (0.77 – 1.00)	0.97 (0.88 – 1.00)
	EMR			
Spoken Language	Self-report	0.60 (0.39 – 0.82)	0.76 (0.52 – 0.95)	0.51 (0.27 – 0.76)
	EMR			
Written Language	Self-report	0.49 (0.26 – 0.70)	0.74 (0.53 – 0.95)	0.61 (0.32 – 0.85)
	EMR			

RESULTS

- There was high agreement for all three types of data collection when documenting ethnicity ($\alpha > 0.80$) and gender ($\alpha > 0.90$).
- Race was not concordant and had the lowest Krippendorff's alpha ranging from 0.04 to 0.49.
- Results for reporting preferred written and spoken language were varied with alphas ranging from 0.61 to 0.91.

CONCLUSION

- Ethnicity and gender are reliably documented between self-report and EHR.
- Preference in written and spoken language had mixed results.
- Race had the highest discordance for documentation across all three types of emergency departments
- Careful consideration should be given when reporting data using HER.
 - Measure health care disparities
 - Improve quality of care
 - Evaluate population-specific clinical outcomes

REFERENCES

