Effects of Mode and Order of Administration on Generic HRQOL Scores?

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Health Measurement in Patients Tracking Clinical Outcomes Study

- Self-administration (mail) of HRQOL measures at baseline, 1 month, 3 months, and 6 months post-baseline.
 – SF-36v2[™], QWB, EQ-5D, HUI
- Telephone interview at 6 months postbaseline
- Participants randomized to order of mail/phone administration at 6 months

Analysis

- Differences in days between survey dates
 - ✤ -133 to 54 days (mail phone)
 - ✤ 57% were within 3 weeks
- 318 patients at 6 months:
 - 92 heart failure
 - 226 cataract surgery
- Random intercept model (PROC Mixed), controlling for gender, age, race, education, and site (UCSD, UCLA, Wisconsin by heart failure and cataract).

Means by Mode and Order

	Mail after phone	Mail before phone	Phone before mail	Phone after mail
MCS	51 ^c	53 ^{b,c}	53 ^b	56 ^a
PCS	39 ^c	41 ^{b,c}	41 ^{a,b}	43 ^a
6-D	69 ^c	71 ^{b,c}	73 ^{a,b}	76 ^a
QWB	58 ^{a,b}	61 ^a	57 ^b	60 ^{a,b}
EQ-VAS	69 ^c	74 ^b	72 ^b	76 ^a
EQ-5D	77 ^c	80 ^{b,c}	81 ^b	85 ^a
HUI-2	78 ^b	82 ^{a,b}	79 ^b	85 ^a
HUI-3	67 ^c	73 ^b	71 ^b	82 ^a

Project 1

Later order of administration in telephone interview is significantly related to:

- More positive HRQOL reports for EQ-5D (VA and U.S. preference score) and SF-36 (6D, PCS, MCS)

- More negative for QWB-SA

Max. Differences by HRQOL Measure

	Difference	SD	
MCS	5	10	
PCS	4	12	
6-D	7	14	
QWB	2	14	
EQ-Vas	7	19	
EQ-5D	8	17	
HUI-2	8	18	
HUI-3	15	25	

Test-Retest Reliability Estimates

HRQOL Measure	Intraclass Correlation			
MCS	0.63			
PCS	0.82			
6-D	0.74			
QWB	0.60			
EQ-VAS	0.79			
EQ-5D	0.72			
HUI-2	0.60			
HUI-3	0.68			

Correlations among HRQOL Measures

	MC	PC	6D	QW	VA	5D	H2	H3
MC	67	13	44	33	37	37	35	44
PC	30	84	70	49	70	65	57	57
6D	57	67	77	55	66	67	59	63
QW	38	58	61	61	52	55	47	53
VA	44	64	61	47	80	57	55	56
5D	47	58	64	51	60	74	64	65
H2	48	55	63	46	58	68	62	60
H3	46	61	62	47	59	68	67	70
Mail	on	top	pho	ne	on	left	N =	250

Results

- The most positive generic HRQOL scores tend to be obtained when the measures are administered by phone after a mail administration whereas the least positive scores occur by mail after a phone administration.
- Effect sizes range from small to moderate

Conclusions

- No doubt that these are differences that are beyond minimally important
- Caution is needed when comparing HRQOL estimates if mode or order of administration varies

