

# Is there a relationship between self-reported healthy days and comorbidity medication adherence among oncology patients?

Abstract Number: 189

## Background

Previous studies established the link between comorbidities and Health Related Quality of Life (HRQoL) for cancer patients.<sup>1,2</sup> Adherence to comorbid medications has been found to be predictive of HRQoL in other disease states, but this has not been established for patients with cancer.<sup>3,4</sup> This study sought to investigate the association between healthy days (HDs), a measure of HRQoL, and comorbidity medication adherence (CMA) for cancer patients.

## Methods

### Data Source

A survey was mailed to 5,098 patients with metastatic breast, lung or colorectal cancer who received treatment in 2014 and had at least one comorbid condition. Survey responses were merged with Humana claims data for analysis.

### Measures

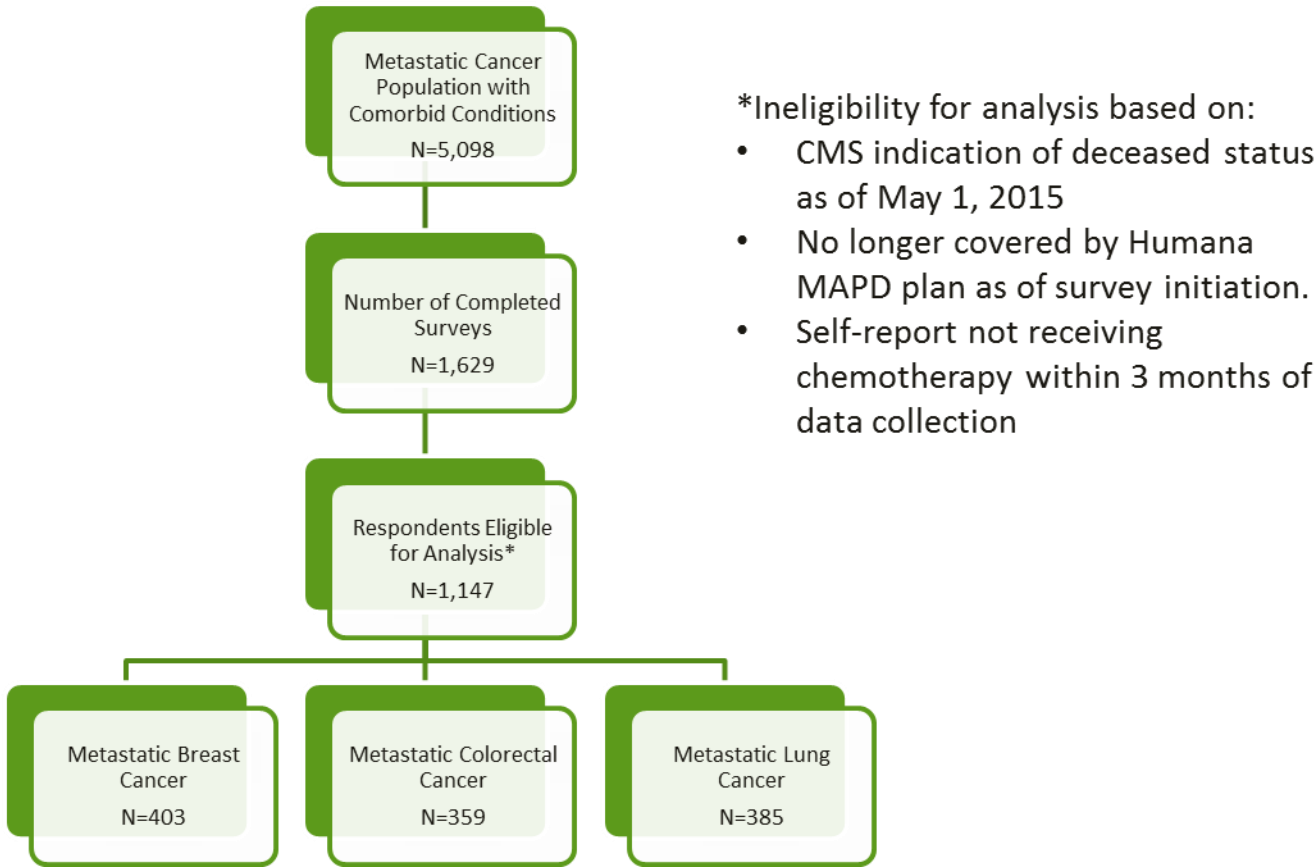
The Center for Disease Control and Prevention’s Healthy Days Measure was used to identify self-reported overall, physical and mental unhealthy days in the past 30 days and the number of days that poor physical or mental health limited usual activities.<sup>5</sup> The Morisky Medication Adherence<sup>6</sup> 8-point scale was used to differentiate high CMA (>6) and low CMA (<6) .

### Statistical Analysis

P-values are from chi-square and t-tests at alpha = 0.05.

### Response rate

The survey response rate was 32% (N=1,629). After exclusions, the final sample size was 1,147.



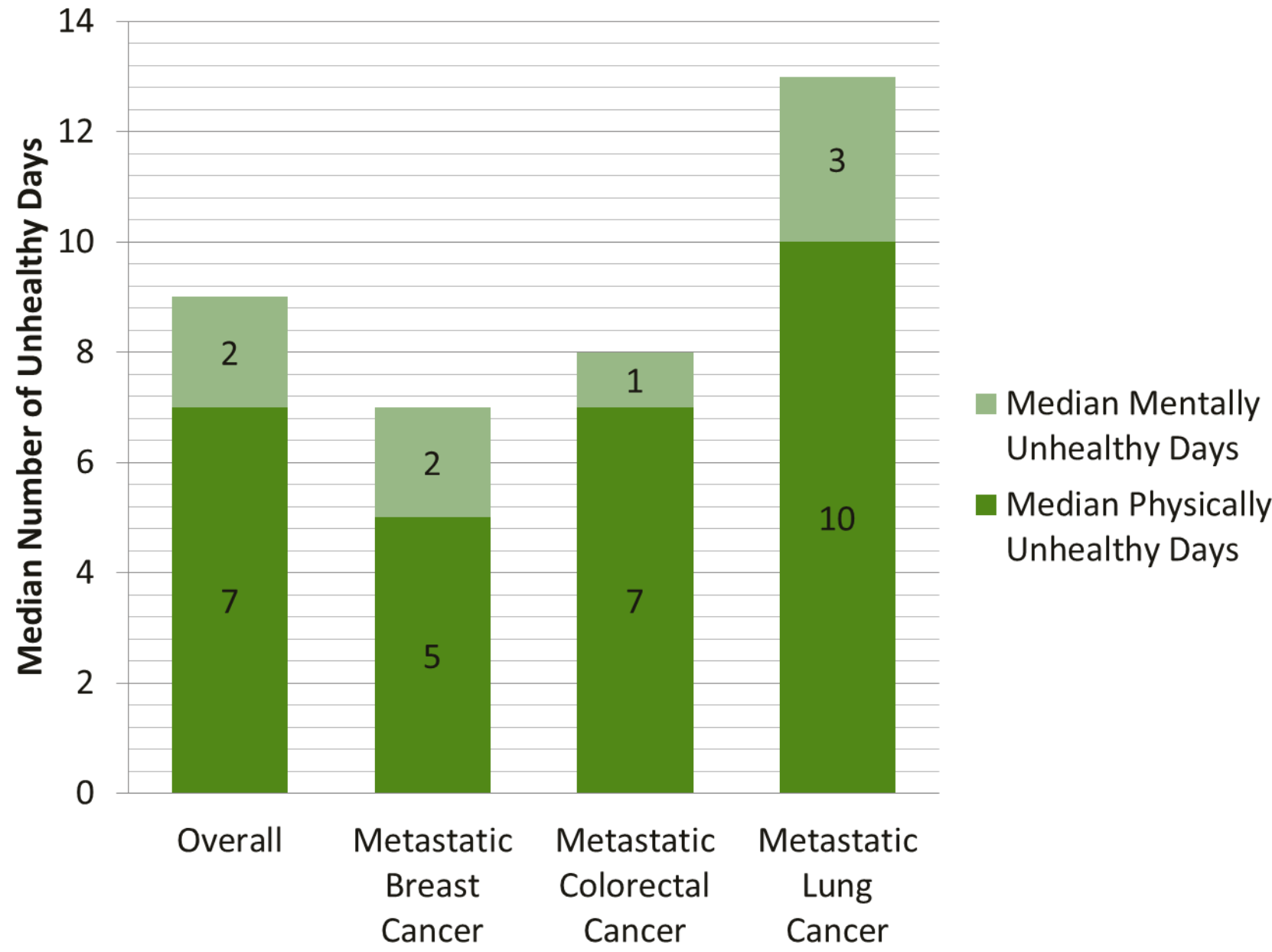
## Results

Table 1. Demographics of Survey Respondents by Frequent and Infrequent Unhealthy Days

	Overall	Infrequent Unhealthy Days (<14)	Frequent Unhealthy Days (>=14)	P-value
Age, years				
Mean (± SD)	69.7+/- 8.5	69.7+/-8.40	69.5+/-8.68	0.7409
Gender, female				
N (%)	727 (66.2%)	408(68.8%)	319(63.2%)	0.0492
Deyo-Charlson Comorbidity Index				
Mean (± SD)	7.6 (3.3)	7.6 (3.12)	7.6 (3.4)	0.9805
Median (Q1-Q3)	8 (8 – 9)	8 (8 – 9)	8 (8 – 9)	0.9662
Plan Type, N (%)				
Medicare (vs. commercial)	981 (89.3%)	521(87.9%)	460(91.1%)	0.0838
Dual Eligible	110 (11.3%)	57(11%)	53(11.6%)	0.7630
Low – income subsidy	168 (17.2%)	86(16.5%)	82(17.9%)	0.5721

SD – Standard deviation  
Q1 - Quartile 1 - 25th percentile; Q3 - Quartile 3 - 75th percentile

Figure 1. Median Total, Physical and Mentally Unhealthy Days Overall and by Cancer Type



Adrianne Casebeer<sup>1</sup>, Dana Drzayich Jankus<sup>1</sup>, Sari Hopson<sup>1</sup>, Raya Khoury<sup>2</sup>, Aparna Parikh<sup>2</sup>, Alisha Stein<sup>2</sup>, Todd Michael<sup>2</sup>, Stephen Stemkowski<sup>1</sup> and Mikele Bunce<sup>2</sup>

1. Comprehensive Health Insights, Humana Inc., Louisville, KY, 2. Genentech Inc. South San Francisco, CA.

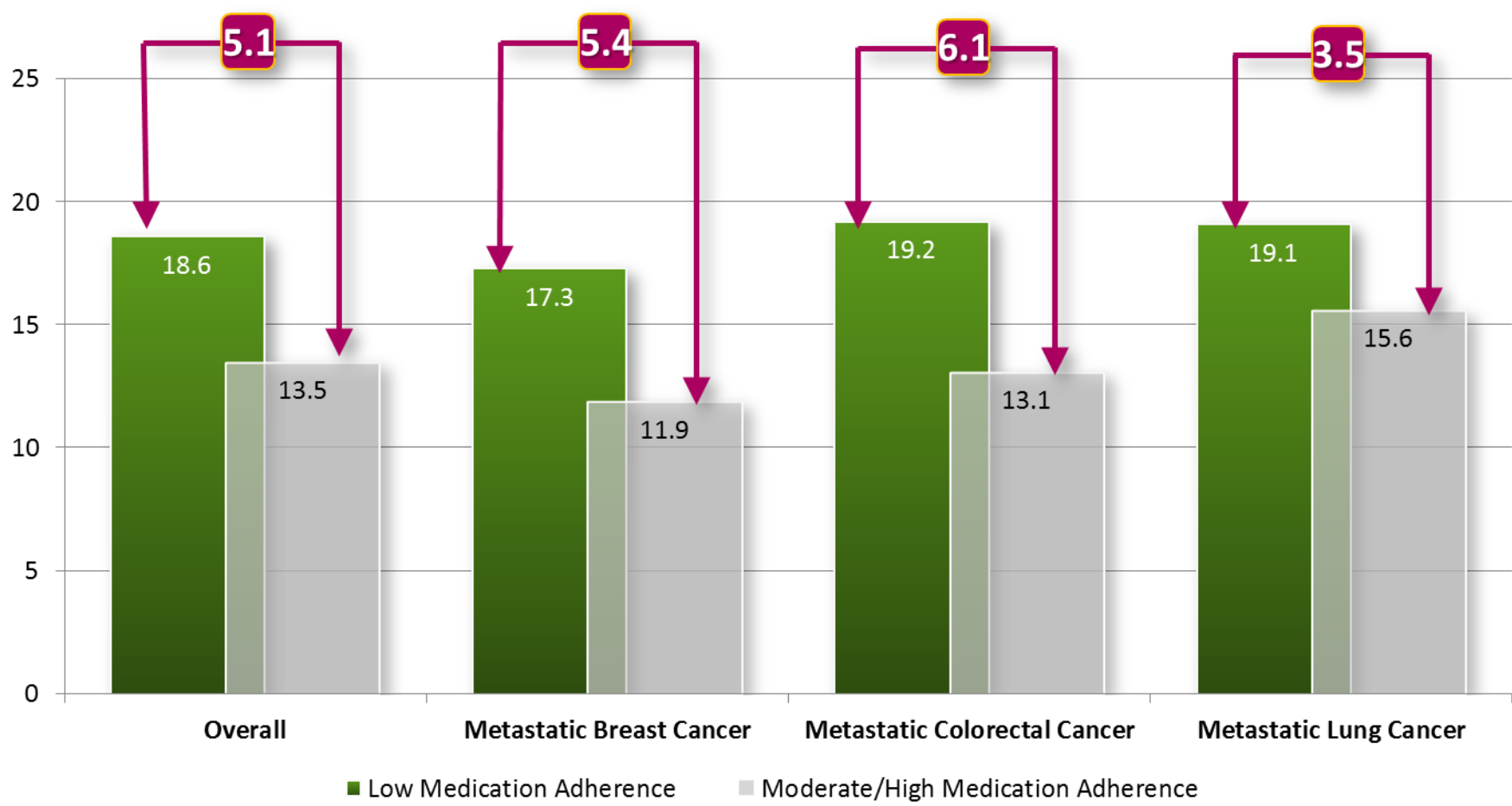
## Key findings.

- The number of overall unhealthy days was higher among patients with low CMA compared to high CMA.
- Patients with low CMA had more mentally unhealthy days than those with high CMA.
- Patients with low CMA had more physically unhealthy days than those with high CMA.
- Patients with low CMA had 3.7 more unhealthy days than those with high CMA that kept them from doing their usual activities.

Table 2. Number of Unhealthy Days by Comorbidity Medication Adherence

Unhealthy Days	Low CMA	High CMA	Mean Difference	P-value
Overall Unhealthy Days	18.5	13.5	5.0	<0.0001
Physically Unhealthy Days	12.6	10.1	2.5	0.0035
Mentally Unhealthy	10.9	6.0	4.9	<0.0001
Unhealthy days that kept patient from doing their usual activities	12.0	8.3	3.7	<0.0001

Figure 2. Number of Unhealthy Days by Comorbidity Medication Adherence, Overall and by Cancer Type



## Conclusions

- Surveyed oncology patients with high comorbidity medication adherence reported fewer unhealthy days, in particular mentally unhealthy days, in the past 30 days.
- The complex interplay between comorbidity medication adherence and Healthy Days for cancer patients warrants further investigation. These results suggest that increasing patients’ level of comorbidity medication adherence may be an avenue for improving the number of healthy days they experience.

## Limitations

- The geographic distribution of the study population is not representative of the U.S. population. Generalizing study findings to the United States population should be approached with caution.
- Due to the cross-sectionally captured survey data and lack of randomization of this study, although statistically significant associations can be established, causal relationships cannot be determined.

## References

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