

# Getting to Goals: Understanding the Nature and Achievement of Health-Related Goals in Coaching

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## Background

To combat the prevalence of lifestyle-driven chronic conditions, health coaching has become a key intervention in the past decade. Current literature suggests health coaching is an effective strategy for promoting health behavior change and improving health status.<sup>1,2</sup> Emerging best practices demonstrate the importance of an ongoing relationship with a coach, including work that is fully or partially patient-centered, incorporating self-discovery and active learning processes versus passive receipt of advice, encouraging accountability for behaviors, and focusing on patient-determined goals.<sup>3</sup>

## Objectives

To examine variations in gender, age and area of focus regarding goal-setting and goal achievement in coaching, and to explore potential goal-intention clusters within each coaching area of focus.

## Methods

### Study Design:

- This was a retrospective analysis of 22,903 employees enrolled in an employer-sponsored coaching program between 2012-2015.
- Initial outcome-focused goals set by coaching participants were examined.

### Data Source:

- This study utilized Humana's health coaching transactional databases, which included information regarding demographics of participants and the types of goals identified.
- Free-text fields within the health coaching database provided more detailed information on each individual participant's stated goal intention.

### Inclusion and Exclusion Criteria:

- All participants 18 years of age and older, with and without other insurance and/or wellness products were included.
- Participants needed to have set one or more outcome-focused (non-planning) goals to be included in the analysis.

### Outcomes:

- Outcomes of interest were descriptive in nature, such as participant demographics, types of goals set and goal completion rates.
- Additional information of interest included the specific intentions of participants within each of the broader goal categories (e.g., back care, nutrition, stress, weight management, etc.).
- Goal intention was derived from text responses for people coached in 5 areas (weight, nutrition, fitness, tobacco, stress).

### Statistical Analyses:

- Descriptive statistics were generated and significance tests were conducted to test gender and age differences on goal type and completion rates. Differences between groups were based on estimated coefficients and odds ratios derived from logistic regression models of goal choice or completion.
- Initial goal-intention clusters were generated algorithmically after removing stop-words, repeated/sparse terms, and normalizing punctuation, and then refined manually.

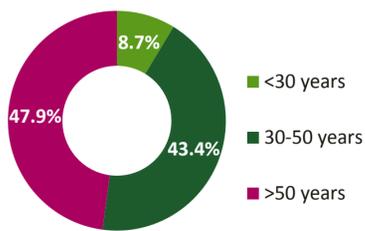
## Results

The majority of participants in the coaching program were women.



- 71.3% female
- 24.9% male
- 3.8% unknown

Participants in coaching were primarily over the age of 30.



**Table 1. Variations in Goal Type by Gender**

Women were more likely to set lifestyle-related goals, while men were more likely to set condition-related goals.

Goal Focus	Gender		Odds Ratio M v. F
	Women (n=16162)	Men (n=5645)	
Managing Weight	61%	52%	0.70***
Healthy Eating	14%	14%	0.96
Getting Fit	21%	20%	0.94
Managing Stress	9%	7%	0.80***
Quitting Tobacco	8%	11%	1.48***
Managing Blood Pressure	2%	4%	1.92***
Managing Cholesterol	2%	4%	1.51***
Managing Diabetes	4%	6%	1.52***
Back Care	1%	2%	1.71***

\*\*\*p<0.001

**Table 2. Variations in Goal Type by Age**

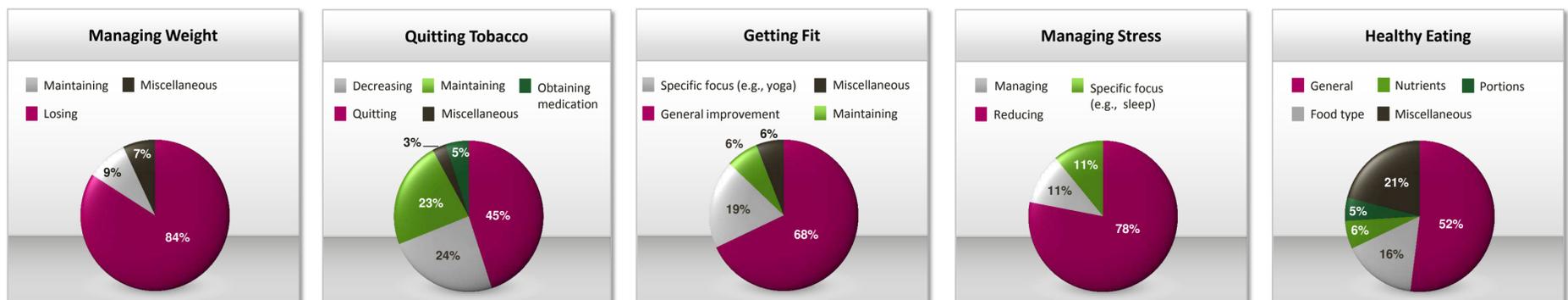
The types of goals set by participants varied considerably by age. Participants 30-50 years were more likely to set tobacco and fitness goals; participants over 50 were more likely to set goals focused on back care, nutrition, and stress.

Goal Focus	Proportions by Age			Odds Ratios		
	<30 (n=1977)	30-50 (n=9822)	>50 (n=10871)	<30 v. 30-50	<30 v. >50	30-50 v. >50
Managing Weight	51%	58%	59%	0.75***	0.73***	0.97
Healthy Eating	15%	12%	16%	1.27**	0.94	0.74***
Getting Fit	24%	22%	19%	1.09	1.35***	1.23***
Managing Stress	8%	7%	9%	1.06	0.87	0.82***
Quitting Tobacco	9%	10%	7%	0.90	1.29**	1.42***
Managing Blood Pressure	2%	2%	3%	0.73	0.61*	0.83
Managing Cholesterol	1%	3%	3%	0.52**	0.49***	0.95
Managing Diabetes	0%	1%	10%	0.31**	0.03***	0.11***
Back Care	1%	1%	2%	1.14	0.60	0.53***

\*p<0.05 \*\*p<0.01 \*\*\*p<0.001

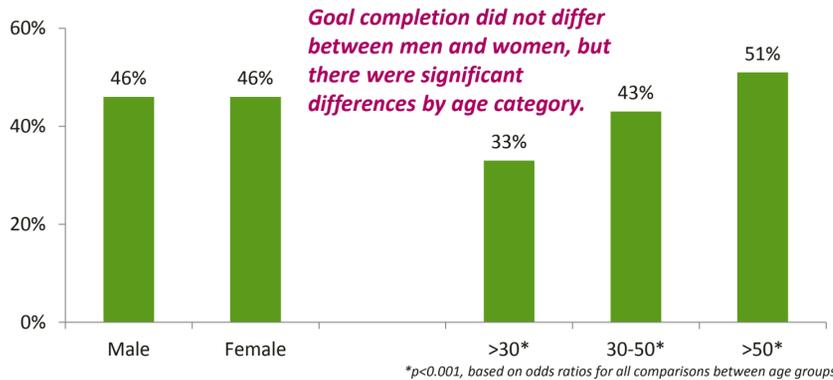
**Figure 1. Textual Analysis of Goal Intentions by Goal Type**

Clustering goal intentions revealed that participant goals can be grouped into meaningful sub-types.\*



\* Minor clusters comprising less than 5% of the data were grouped and categorized as "miscellaneous".

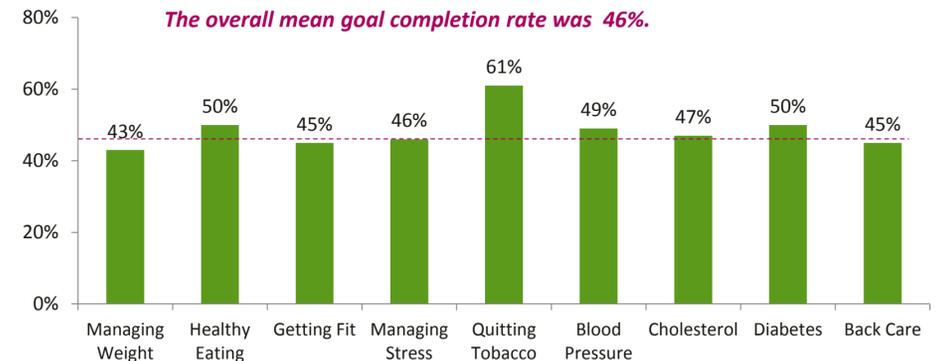
**Figure 2. Goal Completion by Age & Gender**



Goal completion did not differ between men and women, but there were significant differences by age category.

\*p<0.001, based on odds ratios for all comparisons between age groups

**Figure 3. Rates of Goal Completion by Type**



The overall mean goal completion rate was 46%.

## Conclusions

- Results suggest there are gender and age differences in goal-setting and age differences in goal achievement. Clustering revealed additional variations in the types of goals individuals set within a larger area of focus (e.g., weight, tobacco).
- Understanding these variations allows service providers to customize coaching messaging, processes and content to help optimize program enrollment, engagement and outcomes.
- Additional work is needed to understand more fully the impact of these variations on health and well-being outcomes.

## Limitations

- For text analysis, only initial outcomes-focused (non-planning) goals were examined so results may not reflect the entirety of the coaching experience.
- Program structure and text templates used for coaching goals may have introduced an unintended bias into the text clusters. Frequently repeated standard responses produced strong noise signals potentially masking some of the underlying text variability. Additional exploration with more unstructured data may provide additional insights.

## References

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- Wolever, RQ, Simmons, LA, Sforzo, GA, et al. A systematic review of the literature on health and wellness coaching: Defining a key behavioral intervention in healthcare. *Global Advances in Health Med* 2013; 2: 38-57.

