Measuring and Influencing Consumer Engagement

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prepared for:

Association of Marketing Health Care Research
How well do Americans manage their health?

Self-Ratings Their Physicians

*Results from survey conducted by GE Healthcare, Cleveland Clinic and Ochsner Health System, December 8-11, 2009.
Wellness Programs

Most carriers are focused on wellness programs, but they never seem to reach their potential due to lack of interest and limited participation.
Incentives

Offering broad-based incentives does increase participation levels, but doesn’t always get those with the greatest need into these programs. Healthy people participate to cash-in on the easy money.

Engagement

We need a means of identifying the level of engagement of consumers and determine how best to influence them to adopt healthy behaviors.
What is Health Care Engagement?

We define Health Care Engagement as:

- The level of involvement an individual has with their personal health and wellness.

- Not just a state of mind, but an active trait.
Who is more engaged?

An active, healthy, 25 year old woman

Or...

A 69 year old man with multiple chronic conditions
Background

The DSS Health Care Engagement Index™ is a metric that measures consumer involvement in their personal health care and the health care system overall. We capitalized on:

• Years of experience understanding the health care consumer.

• Specialized research and exploratory surveys conducted by DSS.

• Solid science and advanced statistical modeling.

• Analyses of millions of medical claims records.

• The ability to test the index with health insurance carriers.

• A tracking study funded by DSS to measure and monitor the index.
The DSS Health Care Engagement Scale was developed using the Domain Sampling Model*:

- **Specify domain of construct.**
  - Past research
  - Literature search
  - Expert opinion

- **The theoretical model of the engagement process includes four major sub-domains or constructs.**

Four constructs behind the Engagement Index

- Literacy
- Knowledge
- Attitudes
- Behaviors
The next steps were:

- **Generate sample of items.** Over 100 new and previously tested items expected to be associated with these constructs were generated for testing.

- **Collect data.** The sample items, along with cost data, plan information and respondent characteristics were organized into a questionnaire. The questionnaire was administered to a random sample of U.S. adults 18 and older (n = 1,000).
• **Purify measure.**

  ✓ Cronbach’s Alpha, Guttman Split-Half Coefficient, Intraclass correlation and factor analysis were employed to test the consistency of the items in each sub-domain and the strength of their correlations.

  ✓ The lowest performing items on each sub-domain were removed and the statistical tests were rerun until a stable set of items remained.

• **Collect data.** A second wave of data collection was conducted using the revised scale items and similar random sample.

Scale development

The final steps were:

• **Assess reliability.**
  - Rerun the same statistical measures used to purify the initial survey items.
  - Split-half tests between the first and second wave of data.

• **Assess validity.**
  - Compared correlations between the index and self-stated ratings of engagement, health care involvement and health insurance value, as well as, hypothesized correlations with education level, health plan selection and health status.
  - Engagement index was validated relative to medical claims data, expenditures on preventive care and adherence to recommended care and treatment.
Finalize index:

• **Weighted average.** A weighted average of the four constructs is used to calculate the final HCEI. Positive behaviors are assigned more weight than attitudes, knowledge or health literacy.

• **Shortened version.** HCEI contains 41 response items in its detailed form and 16 in its reduced form ($R^2$ of 0.91).

• **Categorizing the Index.** The HCEI was subdivided using ANOVA and CHAID. Optimal break points were adjusted slightly to produce four categories: 0 – 39, 40 – 59, 69 – 79 and 80 – 100 points.

• **Develop norms.** Conducted multiple waves of data collection with large samples in each wave. The Index is scaled from 0 to 100, with an initial mean around 50.
Closer look at the four constructs

**Health Care Literacy**

Ability to understand and interpret medical information is very high for the typical consumer.

**Health Care Knowledge**

Also high, but a few questions tripped up many consumers who did not know the correct answers related to common health care myths and facts.

**Health Care Attitudes**

We find more variation in attitudes toward health care issues, with most falling somewhere near the middle of scale.

**Health Care Behaviors**

Many are engaged in some healthy behaviors, but very few are doing all they can. Healthy behaviors include taking appropriate preventive measures and maintaining existing conditions.
National results for DSS Health Care Engagement Index

**National Engagement Index Results for Last Three Quarters**

- 54.8 2Q 2009
- 54.2 3Q 2009
- 55.2 4Q 2009

**Engagement Index Results for Selected Subgroups**

- 68.5 exercise 5+ times/week
- 65.9 know cholesterol
- 64.2 $75K+ HH income
- 63.6 age 65+
- 62.3 white collar occupation
- 61.5 college grad
- **60.0 U.S. average** (insured)
- **55.2 U.S. average** (with uninsured)
- 53.0 age 45 – 54
- 52.4 high school or less
- 50.1 <$15K HH income
- 45.3 obese (BMI 35+)
- 45.1 exercise < 1 time/month
**Engagement categories**

**Disengaged (index 0-39)**
This group is doing very little to manage their health. They are not very knowledgeable about health care issues nor motivated to become more involved.

**Engaged (index 80-100)**
These fully engaged consumers are living the healthiest lives possible and maximizing their health care dollars.

**Involved (index 60-79)**
Although more involved in their health than most consumers, there is still room for improvement.

**Reactive (index 40-59)**
Some good habits have been implemented, but most consumers in this group react to problems as they arise rather than preventing their occurrence.
Engagement: National vs. ACME results

ACME members are less engaged than the typical health plan member nationally.

Most engaged
(80 – 100)

Engaged
(60 – 79)

Involved
(40 – 59)

Reactive
(0 – 39)

Least engaged

Engaged

Involved

Reactive

Disengaged

U.S.

ACME

U.S.

ACME

U.S.

ACME

U.S.

ACME

Engaged: 13.5% vs. 9.0%
Involved: 36.5% vs. 28.1%
Reactive: 32.0% vs. 39.8%
Disengaged: 18.0% vs. 23.1%

Compare members to norms, develop and apply improvement strategies and track over time.
Some validating results:

- **Correlated with claims data.** Strong correlation with preventive care expenditures.
- **Goes beyond claims data.** Some preventive care does not show up in claims and new members have no claims data.
- Correlated with satisfaction.
- Correlated with perceived value.
- Correlated with education levels.
- Aligned with detailed health risk assessment survey results.
- Market segmentation.
Penalties

Employers and insurance carriers are limited on both ends. They are looking for powerful means of persuasion, but may rely more on coercion in the future.

Engagement

Engagement is correlated with overall responsiveness and willingness to respond to non-cash incentives, value-based benefit designs, etc. The engagement survey can also be supplemented to identify preferred communications channels and messaging.
Who is more engaged?

HCEI = 48.2

- Not confident reading insurance forms
- Unaware of many myths and facts concerning health care
- Avoids going to the doctor
- Only thinks about her health care when sick
- Does not know blood pressure, cholesterol level, or risk factors

An active, healthy, 25 year old woman

HCEI = 79.8

- Confident working through health system
- Goes for all check ups and preventive care
- Manages his chronic conditions to the best of his ability
- Seeks professional opinions and guidance
- Knows key metrics and adheres to prescription regimen

A 69 year old man with multiple chronic conditions