The effect of employee engagement on patient experience

BACKGROUND

The relationship between employee engagement and organizational-level customer outcomes, such as customer satisfaction, has been supported by numerous studies across industry and the Federal Government.[1] The Department of Veterans Affairs (VA), Veterans Health Affairs (VHA) are interested in exploring this relationship in their healthcare facilities as a means to improve customer experience.

OVERVIEW

Utilizing the VA All Employee Survey (AES) results and patient satisfaction surveys, VHA National Center for Organization Development (NCOD) investigated the relationship between employee engagement and patient/customer satisfaction. This study empirically assessed the existence of a positive relationship between employee engagement at VA healthcare facilities and patient experience, while controlling for the level of medical complexity across healthcare facilities and organizational psychological safety effects. Psychological safety was measured with the item, *"Members in my work group are able to bring up problems and tough issues."*

HYPOTHESES AND ANALYSIS

H1: Higher levels of VA employee engagement will correlate with higher levels of customer/patient satisfaction at VA inpatient mental health facilities.

H2: Higher levels of VA employee engagement will correlate with higher levels of customer/patient satisfaction at VA outpatient health facilities.

Customer/patient experience measure = f (Employee Engagement Index (EEI), control variables)

This study used mixed effects multivariate regression methodology to estimate the above specified general equation to empirically test the VA employee engagement connection to customer/patient satisfaction hypotheses using three outpatient and three inpatient models. The study used five percent coefficient two-tail tests to determine statistical significance. **A statistically significant positive coefficient for EEI validates the empirical tests of these hypotheses.**

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[1] See Harter, Schmidt, Agrawal, Plowman, and Blue (2016) for a meta-analysis and summary of some of the research on this topic.

This study measured customer/patient experience using patient survey data collected at each location and measured EEI using AES results. EEI is a composite score based on the following four AES questions:

1) Recommend My Organization - I recommend my organization as a good place to work.
2) Workplace Inspiration - This organization really inspires the very best in me in the way of job performance.
3) Extra Effort - I always do more than is actually required.
4) More Than Paycheck - My job is more than just a paycheck to me.

The analysis was done for two types of services provided by medical facilities: outpatient and inpatient mental healthcare.

OUTPATIENT FACILITY MODEL FINDINGS

The EEI calculation, based on 2018 and 2019 AES data, was limited to people who perform clinic duties (physicians, nurses, lab people, etc.) and schedulers, administrative people residing in clinical areas, and housekeeping people. All respondents stated that they work in the outpatient setting at least 20% of the time. The sample size is 278 and observations are at the VA healthcare facility (identified by VA Station ID number) level.

Table 1.1 Outpatient Modeling Results

Customer Outcome: My provider listened carefully to me (percent who agree or strongly agree).

EEI*	Coefficient	P-Value
-	0.109**	0.0067

Table 1.2 Outpatient Modeling Results

Customer Outcome: My provider explained things in a way that I could understand (percent who agree or strongly agree).

EEI*	Coefficient	P-Value
-	0.082	0.0352

Table 1.3 Outpatient Modeling Results

Customer Outcome: I trust [Facility Name] for my health care needs (percent who agree or strongly agree).

EEI*	Coefficient	P-Value
-	0.270	0.0005

*Five percent or below statistical significance.

**The model implies that a one percent increase in EEI causes a 0.109 percent increase in the customer outcome if my provider listened carefully to me. The coefficient interpretation is the same for the rest of the EEI coefficients.

INPATIENT MENTAL HEALTH MODEL FINDINGS

The EEI calculation, based on 2018 and 2019 AES data, was limited to people who reported that they are part of the Mental Health Service Line, worked in an inpatient setting at least 20% of the time, and excluded people who have little to no contact with patients such as (but not limited to) non-clinical scientists and human resource specialists. The sample size is 255 for the survey questions on overall hospital rating and willingness to recommend the hospital survey. The sample size is 253 for the survey questions on communication about pain. Observations are at the VA healthcare facility (identified by VA Station ID number) level.

Table 2.1. Inpatient Mental Health Modeling Results

Customer Outcome: Overall Rating of Hospital - Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay (percentage of responses that fall in the top two categories (9, 10)).

EEI	Coefficient	P-Value*
-	0.375	0.0009

Table 2.2. Inpatient Mental Health Modeling Results

Customer Outcome: Willingness to Recommend - Definitely no, Probably no, Probably yes, Definitely yes. The reporting measure is calculated as the percentage of responses in the top category (Definitely yes).

EEI	Coefficient	P-Value*
-	0.356	0.0019

Table 2.3. Inpatient Mental Health Modeling Results

Customer Outcome: Communication About Pain (percentage of patients who reported their pain was "Always" well controlled).

EEI	Coefficient	P-Value*
-	0.263	0.028

*Five percent or below statistical significance.

**The model implies that a one percent increase in EEI causes a 0.375 percent increase in the customer outcome of the overall rating of the hospital. The coefficient interpretation is the same for the rest of the EEI coefficients.

CONCLUSIONS

Both outpatient and inpatient mental healthcare models show that VA employee engagement at VA healthcare facilities and patient satisfaction are connected (e.g., higher engagement is associated with higher patient satisfaction). This study provides empirical validation for the hypotheses; and therefore, investments to improve VA employee engagement can bring about improved patient experiences.