

# National VA Quality Improvement Survey 2000 Report

Results of FY00 Survey and Summary of Trends

HEALTH SERVICES RESEARCH AND DEVELOPMENT SERVICE

OFFICE OF RESEARCH AND DEVELOPMENT DEPARTMENT OF VETERANS AFFAIRS

# National VA Quality Improvement Survey (NQIS) 2000 Report Results of FY00 Survey and Summary of Trends

Mark Meterko, PhD Danielle Valley, MPH Gary Young, JD, PhD Martin Charns, DBA

Management Decision and Research Center

Health Services Research and Development Service VA Office of Research and Development

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### National VA Quality Improvement Survey 2000 Report: Highlights

The HSR&D Management Decision and Research Center (MDRC) administered the National VA Quality Improvement Survey (NQIS) to samples of VHA clinical, managerial and general staff in 1997, 1998 and again in 2000. All three data collections utilized paper-and-pencil questionnaires distributed by interoffice mail. National response rates ranged from 70 percent (n=12,406) in 1997 to 52 percent (n=8,454) in 2000. Organizational culture and five other dimensions related to the integration of quality improvement and a focus on customer service into daily work life were measured over time. Overall, the study results suggest that there were low to modest levels of risk taking and group culture within VHA, and that these levels declined while the level of hierarchical culture increased over the period of the study; see Table 1. Modest levels of general support for total quality improvement (TQI) were observed initially, but there were preliminary signs that this support is eroding. Emphasis on TQI among facility leaders declined, and general staff perceived a decline in the extent to which their efforts to improve service quality were recognized and rewarded; see Table 2. Because there is evidence in the literature suggesting that these organizational factors enhance performance, they are especially important to monitor.

Measure	Interpretation	Current Level Total: 100	Trend 1997 to 2000*
Risk Taking Culture	Facility culture emphasizes innovation and risk taking	13	
Group Culture	Facility culture emphasizes teamwork and cooperation	19	
Rational Culture	Facility culture emphasizes efficiency, productivity, and the achievement of performance goals	24	
Hierarchical Culture	Facility culture emphasizes rules and conformity with established processes and procedures	44	1

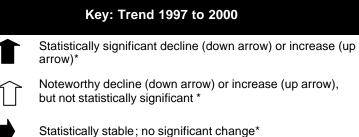
Table 1. VA National Culture Profile Over Time

\*Over for key.

## Table 2. Schematic Summary of Measures of TQI Implementation and Support

Measure	Interpretation	Current Level*	Trend 1997 to 2000*
QSS Scale	Facility is committed to total quality improvement	$\bigcirc$	
Leadership	Facility top managers are committed to quality improvement	$\bigcirc$	
Performance Goals	Job performance goals are related to service quality improvement	$\bigcirc$	$ \clubsuit $
Evaluation & Feedback	Staff receive sufficient feedback regarding their performance	$\bigcirc$	
Reward & Recognition	Efforts to improve service quality are recognized and rewarded	$\bigcirc$	

\*Over for key.



\*To be declared statistically significant at the national level, a score change had be sufficiently large as to be both (a) unlikely to have occurred by chance (p<.05), and (b) at least moderately strong (effect size  $\geq$  .40 as measured by Cohen's *d* statistic). Changes that met one but not both criteria were declared "noteworthy." Changes that met neither criterion were regarded as statistically stable.

General note. Statistical significance (defined as p<.05) does not depend solely on the magnitude (2 points, 5 points, etc.) of the change in score. If, for example, there is greater variability on measure X than on measure Y, then a larger score change will be necessary on measure X before one can confidently distinguish true change from random fluctuation. Thus a two-point change on one measure may be significant whereas a two-point change on another measure would not be significant.

Key: Current Level									
Respo	nse Option	Color Code	Scale Score Range						
1	Strongly disagree		1.00 to 1.50						
2	Disagree		1.51 to 2.50						
3	Neither agree nor disagree		2.51 to 3.50						
4	Agree		3.51 to 4.50						
5	Strongly agree		4.51 to 5.00						

# National VA Quality Improvement Survey 2000 Report

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# National VA Quality Improvement Survey 2000 Report

# 1. National Summary

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### National VA Quality Improvement Survey 2000 Report: National Summary

### Background

Since 1995, the Veterans Health Administration (VHA) has undertaken an extensive reorganization in an effort to improve the quality and efficiency of the delivery of health care. During this period 54 facilities have been integrated into multi-site healthcare systems, and some variant of service line structure has been implemented in primary care, mental health, or other clinical areas at more than 110 facilities. Staff and financial resources have been shifted from inpatient to outpatient care, exemplified by the opening of over 300 new Community-Based Outpatient Clinics. Perhaps most fundamentally, what had been a highly centralized organization was restructured into 22 geographic networks of facilities with considerable flexibility in determining how to reach national quality and performance goals.

These changes in reporting relationships and budget authority were not ends unto themselves, but were seen as providing an environment more conducive to the values, attitudes, and behaviors necessary to achieve the vision of "the new VA." The expectation was that this transformed organization would have a less bureaucratic, more entrepreneurial and team-oriented culture that practiced total quality improvement. The importance of service quality would be consistently communicated by leaders at all levels of the organization and exemplified in their behavior. Service quality goals would also be explicitly incorporated into individual employee performance goals. Staff at all levels would receive timely and helpful feedback about their progress toward those goals, and efforts to improve service quality would be recognized and rewarded.

The National Quality Improvement Survey (NQIS) was designed to measure and monitor these less tangible but nonetheless crucial aspects of the organizational change process within VHA. This report presents the results of the third administration of the NQIS by the HSR&D Management Decision and Research Center (MDRC). The first round of data collection was completed during the first half of fiscal year 1997, the second during the last half of fiscal year 1998, and the third during the first half of fiscal year 2000.

### Methods and Procedures

**Procedure.** As was done in 1997 and 1998, data for 2000 were collected by means of a confidential paper-and-pencil questionnaire distributed to staff at each VHA facility through interoffice mail. A postage-paid business reply envelope was provided so that respondents could send completed questionnaires directly to the data entry vendor. A second copy of the questionnaire was sent to all staff who did not respond to the first mailing.

**Sample.** Three samples were drawn at each facility: middle managers (service chiefs), frontline supervisors, and general staff. All managers were included; supervisors and general staff were randomly sampled. Up to 150 employees were selected at each facility depending on the size of the workforce. The sample was also stratified by service (e.g., fiscal, medical administration) to ensure representation from all service groups.

### Measures

Aggregate facility-level scores representing six aspects of a facility's potential for and commitment to service quality and customer satisfaction were derived from the questionnaire responses.

## (1) Organizational Culture

One sub-set of survey questions focused on organizational culture. Employees were asked to characterize their facility by distributing 100 points across four cultural attributes: risk taking/innovation, group orientation/teamwork, hierarchical/bureaucratic, and rational/task orientation. The more points assigned to an attribute, the more employees believed that attribute characterized their facility. In contrast to the other culture dimensions, a *lower* score for hierarchical/bureaucratic orientation would generally be considered *more favorable*. Employees typically did not allocate all 100 points to any one attribute.

### (2) Quality System Survey -- Overall Commitment to Quality Improvement

The NQIS survey also included a modified version of the VHA Quality System Survey (QSS), an instrument that is based on the Baldrige criteria and has been used in VHA for several years to assess facility commitment to service quality. The modified version of the QSS incorporated into the NQIS instrument consisted of 42 questions representing five dimensions: management efforts to promote quality, the availability and use of quality-related data, planning for quality, human resources and quality improvement, and overall quality focus. All QSS questions utilized a five-point response scale ranging from "strongly disagree" to "strongly agree." Five subscale scores were created by averaging respondents' answers to the items associated with each of the five dimensions listed above. An overall QSS summary score was then created by averaging together the five subscale scores. The higher this QSS score, the stronger the perceived commitment to service quality.

## (3) Leadership Commitment to Quality

Mid-level managers were asked a series of 10 questions about whether they believe their facility's top management team was committed to and involved in efforts supporting total quality improvement.<sup>1</sup> These items also utilized a 5-point agree/disagree response scale and were averaged together to create a summary scale score for each staff member. The higher the scale score, the stronger the perceived commitment to quality among top leadership at that facility.

### (4) Performance Goals, (5) Evaluation & Feedback, (6) Reward & Recognition

Employees were also asked a series of 5-point agree/disagree questions about whether they believed:

- their own performance goals were related to service quality
- they received adequate evaluation and feedback about their performance
- efforts to improve service quality were recognized and rewarded at their facility.

Each of these groups of survey items was averaged to create a summary scale. Items were scored so that a higher scale score was indicative of a stronger perception of synergy between the job characteristic in question – performance goals, evaluation and feedback, rewards and recognition – and the goal of service quality.

These measures are summarized in Table 1 below.

<sup>&</sup>lt;sup>1</sup> In an effort to shorten the survey, an item that did not enhance the reliability of the Leadership scale was dropped in 2000. The 1997 and 1998 scores for this scale were then recomputed without that item. The Leadership scores that appear throughout this report are for this shortened, revised scale and therefore may differ slightly from Leadership scores that appear in previous NQIS reports.

Table 1 Summary of Study Measures

Measure	Interpretation	Score Range
Risk Taking Culture	Facility culture emphasizes innovation and risk taking	0-100
Group Culture	Facility culture emphasizes teamwork and cooperation	0-100
Hierarchical Culture	Facility culture emphasizes rules and conformity with established processes and procedures	0-100
Rational Culture	Facility culture emphasizes efficiency, productivity, and the achievement of performance goals	0-100
QSS Scale	Facility is committed to total quality improvement	1-5
Leadership	Facility top managers are committed to quality improvement	1-5
Performance Goals	Job performance goals are related to service quality improvement	1-5
Evaluation & Feedback (1997 and 1998 only)	Staff receive sufficient feedback regarding their performance	1-5
Reward & Recognition (1997 and 1998 only)	Efforts to improve service quality are recognized and rewarded	1-5

### Main Findings

**Response Rate.** Questionnaires were mailed to staff at 141 VHA facilities in 2000 as compared to 147 facilities in 1998 and 161 facilities in 1997. This change in the number of facilities over the life of the project reflects facility integrations.

Nationally, completed questionnaires were received from 52 percent (n=8454) of staff contacted in 2000 (n=16,405). This compares to response rates of 62 percent in 1998 and 70 percent in 1997. This decline in response rate may reflect "survey fatigue" on the part of VHA staff. Also, due to administrative complications, the survey procedure followed in 2000 involved a longer delay between first and second questionnaire mailings than in previous years. This procedural variation may also account for the decline in participation.

As a consequence of this decline, the 2000 results should be interpreted with greater caution than past results. Response rates for individual facilities for 2000 may be found in Appendix A.

**Organization Culture (Figure 1).** Over the three years of the study, staff rated facility culture as increasingly bureaucratic (up from a baseline allocation of 41 out of 100 total points in 1997 to 44 points in 2000) and less risk taking and innovative (down to13/100 from a baseline of 15/100). Ratings of group orientation/teamwork also declined from about 21 percent to 19 percent. Ratings of the level of rational/task orientation were stable at about 24 out of 100 possible points over this same period.

**Quality System Survey (QSS) Scale (Figure 2).** Staff perceptions of their facility's overall commitment to total quality improvement (TQI) have hovered around 3.4 on the 5-point scale. Given that 4 equals "Agree" on this scale, this score suggests only modest commitment and orientation toward TQI, and the lower score in 2000 suggests that even this may be slipping.

**Leadership (Figure 2).** This scale was based on responses from mid-level managers (service chiefs) only and reflects their perceptions of the commitment of top management at their facilities to continuous quality improvement. Scores for all three years were about midway between 3 (neutral) and 4 (agree) and suggest only modest perceived commitment to TQI. The 2000 score of 3.3 was a statistically significant decrease from 1998. Factoring in the lower response rate in 2000, it is best to regard that decline as a potential early warning signal that requires further confirmation.

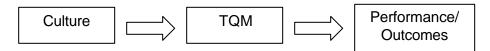
**Performance Goals (Figure 2).** This scale assessed staff perceptions of the extent to which their performance goals were related to and emphasized service quality. Scores on this scale were stable at about 3.7 out of 5 over all three years of the study. Given that 3 was the neutral mid-point of the scale and 4 indicated "Agree," scores on this measure suggest that a majority of staff saw some reference to service excellence in their performance goals, but that this was not the dominant value represented in their performance expectations.

**Evaluation and Feedback (Figure 2).** The Evaluation and Feedback score has been stable at about 3.4 out of 5, suggesting that staff do not feel that they receive adequate constructive feedback regarding their performance nor have information available to assess their own progress.

**Reward and Recognition (Figure 2).** With scores of 3 or less on the 5-point disagree/agree scale, Reward and Recognition has been the least favorably rated of the five measures of quality focus. Respondents did not feel that their efforts to improve service quality were being noticed and reinforced.

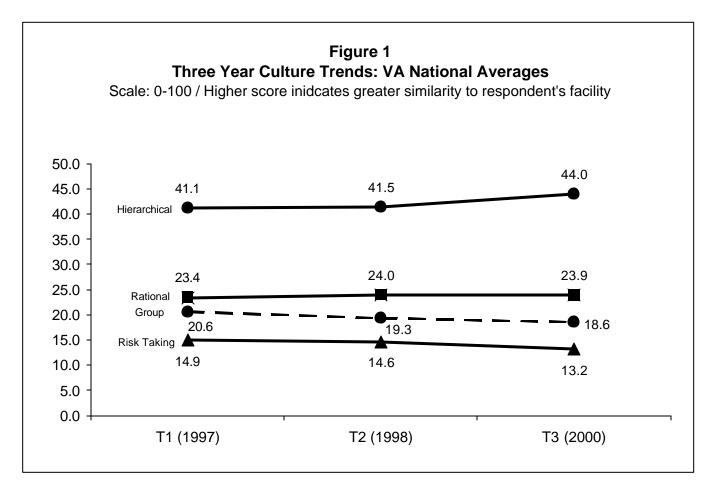
### Significance of Findings

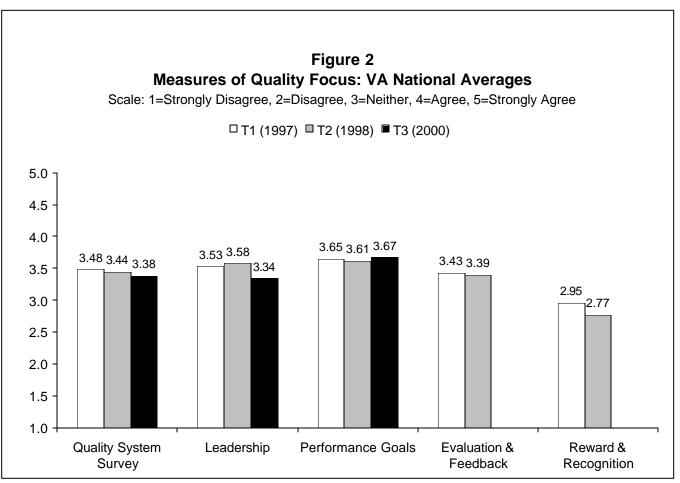
Why should we care about these findings? The measures included in the NQIS were selected because of the evidence in the research literature that an organizational culture that emphasizes empowerment, autonomy and risk-taking is related to the implementation of total quality management in healthcare, and that TQM in turn has a positive impact on performance and outcomes (see Appendix C). In summary:



In addition, the QSS scale used to measure TQM implementation was based on the Baldrige Award dimensions of leadership, information and analysis, human resource utilization, quality management, and strategic quality planning.

Overall, then, the three-year trends from the NQIS survey suggest that VHA's organizational culture is becoming less participative, flexible and entrepreneurial and more hierarchical and bureaucratic. This in turn could lead to less leadership support for TQM, a deterioration of the values and reward infrastructure necessary to sustain a focus on customer service, and less front-line initiative to make process improvements – in short, a more negative VHA profile on the Baldrige criteria. In the longer run, the cumulative effect of these changes could result in a decline in performance and quality outcomes.





HSR&D Management Decision and Research Center

# National VA Quality Improvement Survey 2000 Report

# 2. Network Results

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### Introduction

This chapter consists of the following:

- 1. **VISN Summary.** A written overview of the results for your VISN, including a description of the low and high performing facilities.
- VISN Overview Table. A one-page table that reports the VISN average and the VA national average for each measure for each of the three survey administrations (1997, 1998, 2000). This table also reports the number of facilities within your VISN that were significantly different from the national average and the number of facilities that changed significantly over time on each measure.
- 3. Facility Breakout Tables. This section consists of a series of seven tables, one for each of the NQIS measures for which comparable data was available for all three data collections: the four culture dimensions (risk taking, group, hierarchical and rational), plus the QSS, Leadership and Performance Goals scales. For each measure, individual facility scores are reported for the three NQIS administrations. Facility scores that were significantly different from the national average are flagged. The VISN and national averages are included for reference.

Each table also reports for each facility the change in score from 1998 to 2000, and from 1997 to 2000. Changes that were sufficiently large to be statistically significant are flagged.

In the case of facilities that were involved in mergers, separate scores are reported in pre-merger years. After the merger, scores for the combined system are listed under the division whose station number was retained. If the merger occurred between two NQIS survey administrations, change scores across that time period were not computed for the combined system because it would not be possible to distinguish between true change and change due to the aggregation of data across multiple facilities. Such cases are flagged as NA (not applicable) in the change score column.

A small number of facilities opted not to participate in the NQIS survey in one year or another. These facilities are flagged as NA (not available) for the year(s) in question.

Response rate information for your VISN overall and for each facility within the VISN may be found in Appendix A.

### VISN 9 Summary

- **Overview:** From 1997 to 2000, VISN 9 scores decreased on Risk Taking Culture, QSS Score, and Leadership. From 1998 to 2000, VISN 9 scores decreased on Risk Taking Culture, but remained stable on Group Culture, QSS Score, Leadership, and Performance Goals. In 2000, VISN 9 facility scores were generally consistent with VHA national averages.
- Weaknesses: From 1997 to 2000, Louisville and Mountain Home significantly declined on the Risk Taking Culture scale, and Leadership declined significantly at Memphis. From 1998 to 2000, Memphis decreased on its Risk Taking Culture score. Huntington and Memphis declined significantly on Leadership from 1998 to 2000. In 2000, Louisville scored below the national VHA average on Risk Taking Culture.
- Strengths: There were no significant improvements among VISN 9 facilities on NQIS measures either long-term (1997 to 2000) or short-term (1998 to 2000). In 2000, however, Huntington was above the VHA national average on Risk Taking Culture and Group Culture, and Huntington and Mountain Home were above the national average on QSS Score and Leadership.

# VISN 9 Overview Table

Number of facilities surveyed: seven in 1997, seven in 1998, seven in 2000

			VISN Average	Number of Facilities						
Scale	Year	VA National Average		Significantly Different from VA National Average		Changed Significantly from 1998 to 2000		Changed Significantly from 1997 to 2000		
				Below	Above	Decreased	Increased	Decreased	Increased	
Risk Taking Culture	1997 1998 2000	14.90 14.64 13.20	15.53 14.94 12.29	1 1 1	1 1 1	1	0	2	0	
Group Culture	1997 1998 2000	20.61 19.32 18.57	20.55 18.80 19.17	1 3 0	1 1 1	0	0	0	0	
Hierarchical Culture <sup>1</sup>	1997 1998 2000	41.13 41.45 44.00	42.01 42.62 46.15	0 2 1	1 2 2	0	1	0	2	
Rational Culture	1997 1998 2000	23.41 23.96 23.89	21.97 23.99 21.93	2 0 3	0 0 0	1	0	0	0	
QSS Score	1997 1998 2000	3.48 3.44 3.38	3.53 3.46 3.39	2 0 0	2 1 2	0	0	0	0	
Leadership	1997 1998 2000	3.53 3.58 3.34	3.60 3.45 3.32	0 1 0	1 1 2	2	0	1	0	
Performance Goals	1997 1998 2000	3.65 3.61 3.67	3.58 3.54 3.64	1 2 0	1 1 0	0	0	0	0	
Evaluation and Feedback	1997 1998 2000	3.43 3.39 NA	3.44 3.37 NA	0 1 NA	0 2 NA	NA	NA	NA	NA	
Reward and Recognition	1997 1998 2000	2.95 2.77 NA	3.04 2.75 NA	1 2 NA	1 2 NA	NA	NA	NA	NA	

<sup>1</sup>For hierarchical culture, lower scores/declining scores would generally be regarded as more favorable.

### VISN 9 Facility-Specific Breakdown Tables

VISN=9 Risk Taking Culture										
Name of Facility	FY97 Score (a)	FY97 Sig Diff(b)	FY98 Score (a)	FY98 Sig Diff(b)	FY00 Score (a)	FY00 Sig Diff(b)	FY98- FY00 Change	FY98-FY00 Sig Change(c)	FY97- FY00 Change	FY97-FY00 Sig Change(c)
HUNTINGTON W LEXINGTON KY LOUISVILLE KY MEMPHIS TN	15.54 12.26 16.16 15.85	SD-	18. 91 11. 82 12. 64 16. 47	SD+ SD-	17. 02 10. 82 10. 32 12. 21	SD+ SD-	- 1. 89 - 1. 00 - 2. 32 - 4. 26	SC-	1. 47 - 1. 44 - 5. 84 - 3. 64	SC-
MOUNTAIN HOME TN MURFREESBORO TN NASHVILLE TN VISN Average VHA National Average	15. 71 15. 57 17. 62 15. 53 14. 90	SD+	15. 50 13. 42 15. 80 14. 94 14. 64		11. 71 13. 06 10. 93 12. 29 13. 20		- 3. 79 - 4. 87 - 2. 64 - 1. 44	NA SC- SC- SC-	- 4. 00 - 6. 69 - 3. 24 - 1. 70	SC- NA SC- SC- SC-

National VA Quality Improvement Survey (NQIS) Results

- (a) Joint values are reported for integrated facilities.
- (b) Significant difference (SD) compared to VHA national average (95% confidence interval) SD+ = Significantly above national average SD- = Significantly below national average
- (c) Significant change (SC) over time (95% confidence interval)
  - SC+ = Significant improvement
  - SC- = Significant decline
  - NA = Not appropriate: integration occurred between the two data collections involved, or Not available: non-participating facility for one or both data collections

National	VA Qu	uality	Improvement	Survey	(NQIS)	Results

Group Culture										
Name of Facility	FY97 Score (a)	FY97 Sig Diff(b)	FY98 Score (a)	FY98 Sig Diff(b)	FY00 Score (a)	FY00 Sig Diff(b)	FY98- FY00 Change	FY98-FY00 Sig Change(c)	FY97- FY00 Change	FY97-FY00 Sig Change(c)
HUNTI NGTON W	26.03	SD+	25.68	SD+	24.80	SD+	- 0. 88		- 1. 23	
LEXINGTON KY	13.07	SD-	17.00		15.40		- 1.60		2.33	
LOUISVILLE KY	18. 21		15.03	SD-	16.46		1.43		- 1. 75	
MEMPHIS TN	19.59		15.62	SD-	15.77		0.14		- 3. 83	
MOUNTAIN HOME TN	24.22		22.00		22.76		0.76		- 1. 46	
MURFREESBORO TN	20.13		14.59	SD-	20.63			NA		NA
NASHVILLE TN	22.61		21.69		18.36		- 3. 33		- 4. 25	
VISN Average	20.55		18.80		19.17		0.36		- 1. 38	
VHA National Average	20.61		19. 32		18.57		- 0. 75		- 2. 05	

VISN=9 Group Culture										
Group	<b>Cul ture</b>									

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Note. For hie	rarchi cal	culture,	lower sco	ores/decli	ning scor	res would g	generally be	regarded as	more favoral	ole.
	FY97	FY97	FY98	FY98	FY00	FY00		FY98- FY00		FY97- FY00
	Score	Si g	Score	Si g	Score	Si g	FY98- FY00	Si g	FY97- FY00	Si g
Name of Facility	(a)	Diff(b)	(a)	Diff(b)	(a)	Diff(b)	Change	Change(c)	Change	Change(c)
HUNTI NGTON W	40.07		34.01	SD-	37.22	SD-	3. 22		- 2. 85	
LEXINGTON KY	51.36	SD+	49.38	SD+	49.52		0.14		- 1. 84	
LOUI SVI LLE KY	42.35		45.11		51.50	SD+	6.38		9.15	SC+
MEMPHIS TN	42.22		45.57		49.32	SD+	3.75		7.10	
MOUNTAIN HOME TN	39.13		40.77		43.35		2.58		4.22	
MURFREESBORO TN	42.39		47.35	SD+	44.27			NA		NA
NASHVILLE TN	36.57		36.13	SD-	47.88		11.74	SC+	11.31	SC+
VISN Average	42.01		42.62		46.15		3.53		4.14	
VHA National Average	41.13		41.45		44.00		2.55	SC+	2.87	SC+

VI SN=9

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	Rational Culture													
Name of Facility	FY97 Score (a)	FY97 Sig Diff(b)	FY98 Score (a)	FY98 Sig Diff(b)	FY00 Score (a)	FY00 Sig Diff(b)	FY98- FY00 Change	FY98-FY00 Sig Change(c)	FY97- FY00 Change	FY97-FY00 Sig Change(c)				
HUNTI NGTON W	18.36	SD-	22.59		19. 91	SD-	- 2. 68		1.55					
LEXINGTON KY	23. 31		21.83		25.27		3.44		1.96					
LOUISVILLE KY	23.75		25.91		20.69	SD-	- 5. 22	SC-	- 3. 06					
MEMPHIS TN	22.34		26.45		23.35		- 3. 10		1.01					
MOUNTAIN HOME TN	20.94		22.31		22. 31		- 0. 00		1.37					
MURFREESBORO TN	21.92		22.77		20.16			NA		NA				
NASHVILLE TN	23. 20		26.04		21.85		- 4. 19		- 1. 35					
VISN Average	21.97	SD-	23.99		21.93	SD-	- 2.05		- 0. 04					
VHA National Average	23.41		23.96		23.89		- 0. 07		0.48					

VI SN=9										
Rati onal	Culture									

(a) Joint values are reported for integrated facilities.

- (b) Significant difference (SD) compared to VHA national average (95% confidence interval)  $SD_{+} = Significantly above national average$ 
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				QSS Score													
Name of Facility	FY97 Score (a)	FY97 Sig Diff(b)	FY98 Score (a)	FY98 Sig Diff(b)	FY00 Score (a)	FY00 Sig Diff(b)	FY98- FY00 Change	FY98-FY00 Sig Change(c)	FY97- FY00 Change	FY97-FY00 Sig Change(c)							
HUNTI NGTON W	3. 73	SD+	3.63		3.62	SD+	- 0. 01		- 0. 11								
LEXINGTON KY	3.19	SD-	3. 38		3.25		- 0. 13		0.05								
LOUISVILLE KY	3. 32	SD-	3.27		3.25		- 0. 02		- 0. 08								
MEMPHIS TN	3.59		3.43		3.45		0.02		-0.14								
MOUNTAIN HOME TN	3.74	SD+	3.66	SD+	3.60	SD+	- 0. 06		-0.14								
MURFREESBORO TN	3.51		3.36		3. 21			NA		NA							
NASHVILLE TN	3.60		3.46		3. 38		- 0. 08		- 0. 22								
VISN Average	3. 53		3.46		3.39		- 0. 06		- 0. 13								
VHA National Average	3.48		3.44		3.38		- 0. 06		- 0. 10								

VIS	SN=9
QSS	Score

(a) Joint values are reported for integrated facilities.

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				Le	eadershi p					
Name of Facility	FY97 Score (a)	FY97 Sig Diff(b)	FY98 Score (a)	FY98 Sig Diff(b)	FY00 Score (a)	FY00 Sig Diff(b)	FY98- FY00 Change	FY98-FY00 Sig Change(c)	FY97- FY00 Change	FY97-FY00 Sig Change(c)
HUNTI NGTON W	3.69		3. 95	SD+	3. 55	SD+	- 0. 41	SC-	- 0. 15	
LEXINGTON KY	3. 31		2.97	SD-	3.17		0. 20		-0.14	
LOUI SVILLE KY	3.37		3.16		3.15		- 0. 01		- 0. 22	
MEMPHIS TN	3.82		3.86		3.36		- 0. 51	SC-	-0.47	SC-
MOUNTAIN HOME TN	3.58		3. 53		3.65	SD+	0.13		0.07	
MURFREESBORO TN	3.45		3.14		3.07	SD-		NA		NA
NASHVILLE TN	3.96	SD+	3.52		3.26		- 0. 26		- 0. 70	SC-
VISN Average	3.60		3.45		3.32		- 0. 13		- 0. 28	SC-
VHA National Average	3. 53		3. 58		3.34		- 0. 24	SC-	- 0. 20	SC-

VI SN=9	
Leadershi p	

(a) Joint values are reported for integrated facilities.

- (b) Significant difference (SD) compared to VHA national average (95% confidence interval) SD+ = Significantly above national average
  - SD- = Significantly below national average
- (c) Significant change (SC) over time (95% confidence interval)
  - SC+ = Significant improvement
  - SC- = Significant decline
  - NA = Not appropriate: integration occurred between the two data collections involved, or Not available: non-participating facility for one or both data collections

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				Perfo	rmance Go	oal s				
Name of Facility	FY97 Score (a)	FY97 Sig Diff(b)	FY98 Score (a)	FY98 Sig Diff(b)	FY00 Score (a)	FY00 Sig Diff(b)	FY98- FY00 Change	FY98-FY00 Sig Change(c)	FY97- FY00 Change	FY97-FY00 Sig Change(c)
HUNTI NGTON W	3. 55		3. 59		3. 81		0. 22		0. 26	
LEXINGTON KY	3.35	SD-	3. 32	SD-	3.63		0.30		0.27	
LOUISVILLE KY	3.40	SD-	3.25	SD-	3.53		0. 28		0.12	
MEMPHIS TN	3.75		3.62		3.55		- 0. 07		- 0. 20	
MOUNTAIN HOME TN	3.67		3.64		3.79		0.15		0.12	
MURFREESBORO TN	3.49		3.44		3.64			NA		NA
NASHVILLE TN	3.90	SD+	3.81	SD+	3.55		- 0. 26		- 0. 36	SC-
VISN Average	3.59		3.52		3.64		0.12		0.05	
VHA National Average	3.65		3.61		3.67		0.06		0. 02	

VI SN=9	
Performance	Goal s

(a) Joint values are reported for integrated facilities.

- (b) Significant difference (SD) compared to VHA national average (95% confidence interval) SD+ = Significantly above national average
  - SD- = Significantly below national average
- (c) Significant change (SC) over time (95% confidence interval)
  - SC+ = Significant improvement
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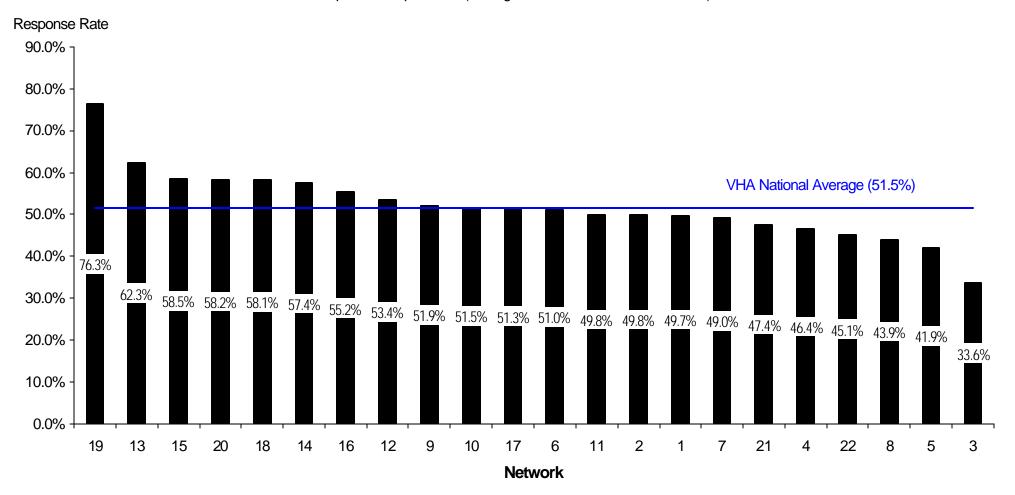
# National VA Quality Improvement Survey 2000 Report

# 3. Appendices

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C.	Significance of Findings: Background Information	31

## Appendix A, Figure 1 Response Rates by VISN National Quality Improvement Survey (NQIS) 2000 Response Rate = (N Respondents/N Contacted) x 100

Sample: All Respondents (Managers and General Staff Combined)



## Appendix A, Table 1 VISN 9 Response Rates by Facility National VA Quality Improvement Survey 2000

VISN	STA3N	Facility Name		General Staff					Managers					Total			
			Selected	Unable to Contact <sup>1</sup>	Contact- ed	Resp	onded	Selected	Unable to Contact <sup>1</sup>	Contact- ed	Resp	onded	Selected	Unable to Contact <sup>1</sup>	Contact- ed	Resp	onded
						Count	Pct <sup>2</sup>				Count	Pct <sup>2</sup>				Count	Pct <sup>2</sup>
9	581	HUNTINGTON WV	99	9	90	45	50.0%	18	0	18	15	83.3%	117	9	108	60	55.6%
9	596	LEXINGTON KY	121	15	106	52	49.1%	20	1	19	10	52.6%	141	16	125	62	49.6%
9	603	LOUISVILLE KY	124	6	118	60	50.8%	21	0	21	12	57.1%	145	6	139	72	51.8%
9	614	MEMPHIS TN	121	5	116	65	56.0%	21	1	20	13	65.0%	142	6	136	78	57.4%
9	621	MOUNTAIN HOME TN	125	4	121	62	51.2%	23	0	23	11	47.8%	148	4	144	73	50.7%
9	622	MURFREESBORO TN	100	11	89	31	34.8%	21	2	19	12	63.2%	121	13	108	43	39.8%
9	626	NASHVILLE TN	124	7	117	63	53.8%	25	1	24	17	70.8%	149	8	141	80	56.7%
9	ALL	VISN TOTAL	814	57	757	378	49.9%	149	5	144	90	62.5%	963	62	901	468	51.9%
ALL	ALL	VHA TOTAL	15086	1201	13885	7057	50.8%	2675	155	2520	1397	55.4%	17761	1356	16405	8454	51.5%

<sup>1</sup>Survey returned as undeliverable <sup>2</sup>Respondents as a percent of the number contacted

### Appendix B National VA Quality Improvement Survey 2000 Item-to-Scale Listing

The following table lists the component items for each of the summary scales derived from the NQIS instrument and analyzed for this report.

With the exception of background information questions, all items utilized a 5-point Likert response scale as follows:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neither Agree nor Disagree
- 4 = Agree
- 5 = Strongly Agree

Scale Subs Samp	cale: Management Role
1.	The director of my facility works hard to promote an image of "quality first" to the facility community.
2.	My immediate supervisor makes quality a priority.
3.	Senior managers take an active part in promoting quality throughout my facility.
4.	My supervisor actively promotes quality throughout our service.
5.	People in this facility feel that quality is everyone's responsibility.
6.	Goals and objectives related to improving the quality of work in this facility are clearly spelled out.
7.	When employees attempt to improve quality, senior management is supportive and provides resources (such as time, money, etc.).
8.	In this facility, managers from all levels get involved in promoting quality.
9.	Senior managers have a thorough understanding of how to improve the quality of services.
10.	Senior management encourages all employees to think of the "customer" first, even if the "customer" happens to be another employee from a different part of the facility.
11.	The managers in my service take advantage of every opportunity to promote quality awareness among our external suppliers and vendors.

Scal Subs Sam	scale: Information and Analysis	Scale Subse Samp	cale: Planning for Quality
1.	In my service, we routinely collect quality data related to most of our important work.	1.	I have a clear understanding of my service's goals and objectives for improving quality.
2.	Whenever I need information on a quality issue, I can count on getting the data promptly.	2.	My facility's long-range goal is to be the "quality leader" in health care.
3.	In my service, we try to use data about quality to prevent problems, not just fix them once they have occurred.	3.	In my facility, non-managerial employees are playing a key role in setting priorities for quality improvement.
4.	In my service, when we discover a defect or problem in work, we set aside time to study the problem in order to find its cause.	4.	In my service, the specific behaviors and actions required to meet service quality objectives are clear to employees.
5.	The right kinds of training on problem-solving techniques for improving quality have been made available to my service.	5.	In my facility, we believe it is important to compare the quality of our work to that of similar facilities.
6.	In my service, we continually try to improve the use of data and information on quality.	6.	In my service, we use the data we collect on the quality of our work for planning purposes.
7.	In my service, when we take action to improve quality we always follow up to see how successful our ideas are.	7.	In my service, when we undertake an effort to improve the quality of our work we first look at successful strategies both inside and outside our facility.

Scale: QSS Scale Subscale: Human Resources Utilization Sample: General Staff		
1.	My supervisor is usually responsive to feedback from employees.	
2.	In my facility, we are encouraged to take necessary risks to improve the quality of services.	
3.	Senior management believes that people are the key to good quality.	
4.	In my service, we are encouraged to participate as members of quality improvement teams.	
5.	Senior management gives serious consideration to employee suggestions for improving quality.	
6.	Employees in my service have control over their quality of work.	
7.	Employees in my service serve or have served on quality improvement teams with employees from other services and/or other facilities.	
8.	In my service, we are given sufficient training on how to evaluate and improve quality.	
9.	In my service, the service chief makes an effort to recognize the employee for his/her contribution when the employee suggests a way to improve quality.	
10.	Senior management provides employees with feedback related to how well the facility is doing in accomplishing its quality objectives.	

	ole: General Staff
1.	The quality management staff effectively coordinate their efforts with other employees to improve the quality of services the facility provides.
2.	In my facility, we use information on patient preferences and desires as a basis for decisions about design of new programs and services.
3.	In my facility, we view quality as the joint responsibility of all services.
4.	In my facility, we have policies and guidelines designed to promote quality throughout the entire facility.
5.	In my facility, we view quality assurance as a continuing search for ways to improve.
6.	In my facility, we are always searching for better indicators of quality.
7.	In my service, we are encouraged to keep records of our quality measurements.

Scale: Performance Goals Sample: General Staff and Managers	
1.	My performance is evaluated against my progress toward accomplishing specific performance goals.
2.	My performance goals focus on my contribution to improving service quality.

Scal Sam		Scales: Risk Taking Culture, Group Culture, Hierarchical Culture, Rational Culture Sample: General Staff
1.	My performance is evaluated against my progress toward accomplishing specific performance goals.	This set of questions relates to your facility's culture. The following items
2.	I have access to the information I need to assess my own progress toward accomplishing my performance goals.	contain four descriptions of health care facilities. Please distribute 100 points among the four descriptions depending on how similar each description is to your facility. None of the descriptions is any better than
3.	My supervisor provides me with timely feedback about my progress toward accomplishing my performance goals.	the others; they are just different.
4.	My supervisor provides me with constructive feedback about my progress toward accomplishing my performance goals.	For example: In question 1, if Facility A seems very similar to mine, B seems somewhat similar, and C and D do not seem similar at all, I might give 70 points to A and the remaining 30 points to B.
5.	In developing my performance appraisal, my supervisor obtains feedback about my work from the employees with whom I work.	Facility Character (Please distribute 100 points)
6.	My supervisor understands when errors or defects are outside my individual control.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
		Each should total 100 points.
Scal	e: Reward and Recognition ple: General Staff and Managers, 1997 & 1998 Only	
Sam	pre. General Starr and Managers, 1997 & 1998 Only	1. <b>Facility Character</b> (Please distribute 100 points)
1.	Efforts to improve one's job skills are given recognition.	A Facility A is a very personal place. It is a lot like an extended family. People seem to share a lot of themselves.
2.	Financial rewards are tied to individual and team contributions concerning improvements in service quality.	B Facility B is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.
3.	Financial rewards for good work are distributed fairly among	C Facility C is a very formalized and structured

C. \_\_\_\_\_ Facility C is a very formalized and structured place. Bureaucratic procedures generally govern what people do.

D. \_\_\_\_\_ Facility D is very production oriented. A major concern is with getting the job done. People aren't very personally involved.

Total = 100

Participation in teams is given recognition.

employees.

4.

. Facility Managers (Please distribute 100 points)	4. <b>Facility Emphases</b> (Please distribute 100 points)
<ul> <li>A Managers in Facility A are warm and caring. They seek to develop employees' full potential and act as their mentors or guides.</li> <li>B Managers in Facility B are risk-takers. They encourage employees to take risks and be innovative.</li> <li>C Managers in Facility C are rule-enforcers. They expect employees to follow established rules, policies, and procedures.</li> <li>D Managers in Facility D are coordinators and coaches. They help employees meet the facility's goals and objectives.</li> </ul>	<ul> <li>A Facility A emphasizes human resources. High cohesion and morale in the organization are important.</li> <li>B Facility B emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.</li> <li>C Facility C emphasizes permanence and stability. Efficient, smooth operations are important.</li> <li>D Facility D emphasizes competitive actions and achievement. Measurable goals are important.</li> <li>Total = 100</li> </ul>
Total = 100	5. Facility Rewards (Please distribute 100 points)
Facility Cohesion (Please distribute 100 points)         A The glue that holds Facility A together is loyalty and tradition. Commitment to this facility runs high.         B The glue that holds Facility B together is commitment to innovation and development. There is an emphasis on being first.         C The glue that holds Facility C together is formal rules and policies. Maintaining a smooth running operation is important here.         D The glue that holds Facility D together is the emphasis on tasks and goal accomplishment. A production orientation is commonly shared.	<ul> <li>A Facility A distributes its rewards fairly equally among its members. It's important that everyone from top to bottom be treated as equally as possible.</li> <li>B Facility B distributes its rewards based on individual initiative. Those with innovative ideas and actions are most rewarded.</li> <li>C Facility C distributes rewards based on rank. The higher you are, the more you get.</li> <li>D Facility D distributes rewards based on the achievement of objectives. Individuals who provide leadership and contribute to attaining the facility's goals are rewarded.</li> <li>Total = 100</li> </ul>

Scal Sam	e: Leadership ple: Managers Only		ground Information
1.	The top management team is personally involved in setting quality assurance/improvement goals, objectives and plans.	as fo	llows: = General staff
2.	The top management team personally participates in quality assurance/improvement activities.		<ul><li>= Managers</li><li>= Both general staff and managers</li></ul>
3.	The facility director is the biggest promoter of quality assurance/improvement values.	1. GS	Which statement best describes your function at your facility? (Please select one.)
4.	The top management team is not as involved as it might be in teaching quality assurance/improvement to others.		<ul> <li>Section Chief</li> <li>Other Type of Manager/Supervisor</li> <li>Non-Managerial Employee</li> </ul>
5.	The top management team regularly reviews quality assurance/improvement principles and methods.	2.	Do you work in a service line (also known as a product line, care line, patient care center, etc.)?
6.	The top management team is not as educated as it might be in quality assurance/improvement principles and methods.	<ul> <li>GS</li> <li>Yes</li> <li>No</li> <li>If you answered "Yes" to Question #2, please pl #3. If you answered "No" to Question #2, please Question #6.</li> <li>3. In which service line (product line, care line, pate etc.) do you work?</li> <li>GS</li> <li>Primary Care</li> <li>Mental Health</li> </ul>	
7.	The top management team does not do as good a job as it might in establishing quality standards for suppliers of products and services needed by the facility.		If you answered "Yes" to Question #2, please proceed to Question #3. If you answered "No" to Question #2, please proceed to Question #6.
8.	The top management team has a good understanding of physician needs.		In which service line (product line, care line, patient care center, etc.) do you work?
9.	The top management team has a good understanding of external community needs.		Mental Health
10.	The facility at large looks to the top management team as a role model for implementing quality assurance/improvement values.		<ul> <li>Extended Care</li> <li>Other</li> <li>(Please specify.)</li> </ul>

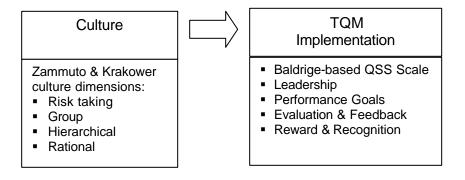
<b>4</b> . MGR	<ul> <li>Which statement best describes your function at your facility?</li> <li>(Please select one.)</li> <li>Service Chief/ Department Head</li> </ul>	9.       In what type of facility are you employed? (Please select one.)         ALL <ul> <li>Medical Center</li> <li>Freestanding Outpatient Clinic/CBOC</li> </ul>
	<ul> <li>Associate Chief of Staff (ACOS)</li> <li>Service Line/ Care Line/ Product Line Manager</li> <li>Other</li></ul>	<ul> <li>Freestanding Outpatient Clinic/CBOC</li> <li>Satellite Outpatient Clinic</li> <li>Freestanding Domiciliary</li> <li>Other</li></ul>
<b>5</b> . MGR	If you checked the third box for question #4, is this full-time or collateral duty (i.e., do you serve dual functions)? (Please select one.)	
WOR	<ul> <li>Full-Time</li> <li>Collateral</li> <li>Not Applicable</li> </ul>	10.       If you selected "Medical Center" in Question #9, do you spend the majority of your time in any of the following components?         ALL       Image: Nursing Home majority of your time in any of the following components?         Image: Domiciliary       Image: Domiciliary
6. All	Is your service area clinical or administrative? (Please select one.) Clinical Administrative	<ul> <li>Other</li></ul>
7.	If clinical, are you a: (Please select one.)	End of NQIS Question Listing
GS	<ul> <li>Physician</li> <li>Registered Nurse</li> <li>Licensed Practical Nurse</li> <li>Social Worker</li> <li>Psychologist</li> <li>Other</li></ul>	
8.	How long have you worked at this facility? (Please select one.)	
ALL	<ul> <li>Less than one year</li> <li>One to two years</li> <li>Two to five years</li> <li>Five to ten years</li> <li>More than ten years</li> </ul>	

## Appendix C Significance of Findings: Background Information

The importance of the VA National Quality Improvement Survey (NQIS) findings rests on the connections between culture, quality improvement, and performance. In a study of 61 hospitals involving data collected from over 7000 staff, Shortell, O'Brien and colleagues (1995) found a significant relationship between a participative, flexible, risk-taking culture and the implementation of continuous improvement/total quality management (CQI/TQM). CQI/TQM was, in turn, positively associated with better perceived patient outcomes and greater perceived human resource development.

In that same study, Shortell and colleagues also analyzed the relationship between quality improvement and clinical efficiency as objectively measured by length of stay and charge data for six highcost/high-volume conditions: acute myocardial infarction, chronic obstructive pulmonary disease, congestive heart failure, pneumonia, stroke, and total hip replacement. They did not find a meaningful pattern of significant relationships between CQI/TQM implementation and these objective outcomes. However, Shortell did find that larger hospitals were less likely to have cultures that emphasized teamwork, empowerment, and risk-taking. Furthermore, when hospital size was not included in the prediction equation, CQI/TQM implementation was significantly associated with shorter LOS and lower charges in 11 of the 12 possible models (2 outcomes x 6 conditions). Taken together, Shortell interpreted this pattern of relationships between culture, CQI/TQM, bed size and outcomes to mean that larger hospitals experienced lower clinical efficiency (higher chargers, longer LOS) in part because they tended toward more bureaucratic and hierarchical cultures that made the implementation of CQI/TQM more difficult.

An organizational culture that emphasized empowerment, autonomy and risk taking was also found to be associated with higher efficiency of utilization, lower nurse turnover, and better perceived outcomes within intensive care units (Shortell, Zimmerman et al., 1994), and with the staff satisfaction within VA long-term care facilities (Berlowitz, Young et al., under review). The NQIS incorporated the same measure of culture (Zammuto and Krakower, 1991) used by Shortell. Also following Shortell, the QSS component of the NQIS was based on the Baldrige Award dimensions of leadership, information and analysis, human resource utilization, quality management, and strategic quality planning. The leadership, performance goals, evaluation and feedback, and reward and recognition scales of the NQIS also measured the extent to which an ethic of customer service and a focus on process improvement have permeated the VHA value system. These relationships between key constructs and contents of the NQIS may be summarized as follows:



The studies discussed above suggest that TQM implementation, in turn, has an impact on delivery system performance and outcomes.

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