

## Optimizing Data Collection in VA's Patient Surveys

The current method for collecting patient satisfaction data in veteran patient satisfaction surveys is a four-step process that includes a pre-notice, 1<sup>st</sup> survey, reminder post card and 2<sup>nd</sup> survey. It is both long and costly. Eliminating one or more of the steps offers the opportunity to redirect resources from less productive steps (e.g., 2nd survey mailings) to more productive steps (e.g., 1<sup>st</sup> survey mailings). Such a change may also shorten the data collection process by several weeks and lessen the delays between delivery of care and the data describing the patients' experiences of that care. However, as response rates underpin the reliability and validity of reported results, it is important that no changes to current methods be made without proper piloting in advance.

The double mailing of survey questionnaires is a key feature of the current VA survey method. Extensive analysis from recent survey cycles shows that in the Outpatient surveys, ~85% of surveys that will eventually be returned are received before the effect of the 2<sup>nd</sup> survey is felt. Despite several demographic differences in second wave respondents, extensive analytic comparison of VHSS scores based on first questionnaire data and both questionnaire data shows very little difference (i.e., < 1 % in the satisfaction scores) for all composite scores in the national data. Although response rates ran 15-20% less among Inpatient veterans, the response patterns and general agreement of scores described above for Outpatients applies in the Inpatient surveys, as well. The pre-notification ("pre-note") letter and thank you/reminder postcard improve response rates in general population surveys, but their influences on questionnaire returns and satisfaction scores in the veteran population have not been evaluated.

An "8-Way Pilot" was used to test the effects of pre-note, reminder postcard and second survey on response rates and composite scores. Separate pilots were used for Inpatients and Outpatients with total samples in each patient group of over 12,000 and 24,000, respectively. Results to be presented will demonstrate the degree to which dropping different facets of the survey process affects survey scores and response rates. If dropping one or more survey components does not have a large effect on response rates and does not appreciably affect scores, the resources saved could be used to expand the sample sizes across the board and strengthen the statistical power of results.

# Attachment A

## SHEP Pilot Response Rates and Performance Measure Scores

### Outpatient SHEP

For each site of care, patients were randomly assigned to one of the eight study arms. In each study arm patients were uniformly distributed across each of the 3 sampling groups; Specialist (Spec), Primary Care New (PC New), and Primary Care Established (PC Estab).

For each study arm and patient subgroup, the mean response is presented with standard error in parentheses. The approximate upper bound of the 95% confidence interval may be obtained by adding 2 times the standard error to the mean, and the approximate lower bound by subtracting twice the standard error from the mean.

**Table 1. Outpatient Response Rates (Unweighted)**

	Pre-note: Yes Postcard: Yes	Pre-note: No Postcard: Yes	Pre-note: Yes Postcard: No	Pre-note: No Postcard: No
1 Survey Mailing (28 days)	<b>Arm 1: 60.53% (0.79)</b> <i>Proposed Methodology</i>	<b>Arm 2: 55.07% (0.81)</b>	<b>Arm 3: 51.31% (0.82)</b>	<b>Arm 4: 47.66% (0.81)</b>
	Spec 54.93 (1.44)	Spec 51.24 (1.42)	Spec 45.95 (1.45)	Spec 41.96 (1.41)
	PC New 57.36 (1.40)	PC New 53.15 (1.42)	PC New 46.69 (1.45)	PC New 45.93 (1.39)
	PC Estab 67.49 (1.26)	PC Estab 59.79 (1.33)	PC Estab 59.13 (1.33)	PC Estab 53.81 (1.36)
2 Survey Mailings (49 days)	<b>Arm 5: 70.30% (0.74)</b> <i>Current Methodology</i>	<b>Arm 6: 68.03% (0.75)</b>	<b>Arm 7: 64.73% (0.77)</b>	<b>Arm 8: 59.58% (0.79)</b>
	Spec 64.94 (1.37)	Spec 62.39 (1.41)	Spec 58.73 (1.39)	Spec 52.49 (1.43)
	PC New 70.25 (1.30)	PC New 66.78 (1.33)	PC New 65.53 (1.36)	PC New 59.89 (1.37)
	PC Estab 74.72 (1.19)	PC Estab 73.50 (1.18)	PC Estab 69.20 (1.26)	PC Estab 65.23 (1.30)

**Table 2. Outpatient Overall Quality (Weighted)**

	Pre-note: Yes Postcard: Yes	Pre-note: No Postcard: Yes	Pre-note: Yes Postcard: No	Pre-note: No Postcard: No
1 Survey Mailing (28 days)	<b>Arm 1: 73.52% (2.12)</b> <i>Proposed Methodology</i>	<b>Arm 2: 76.41% (2.20)</b>	<b>Arm 3: 75.61% (2.26)</b>	<b>Arm 4: 75.63% (2.43)</b>
	Spec 70.03 (3.08)	Spec 74.77 (3.08)	Spec 75.08 (3.28)	Spec 73.87 (3.50)
	PC New 81.16 (2.55)	PC New 83.49 (2.26)	PC New 80.26 (3.01)	PC New 78.50 (3.15)
	PC Estab 79.44 (2.46)	PC Estab 79.06 (2.60)	PC Estab 75.93 (2.93)	PC Estab 78.88 (2.94)
2 Survey Mailings (49 days)	<b>Arm 5: 76.90% (1.95)</b> <i>Current Methodology</i>	<b>Arm 6: 75.09% (2.08)</b>	<b>Arm 7: 75.68% (2.08)</b>	<b>Arm 8: 76.86% (2.18)</b>
	Spec 76.03 (2.75)	Spec 72.37 (3.08)	Spec 75.30 (2.96)	Spec 74.30 (3.19)
	PC New 80.64 (2.61)	PC New 77.41 (2.74)	PC New 76.56 (2.92)	PC New 82.54 (2.28)
	PC Estab 78.08 (2.68)	PC Estab 80.01 (2.34)	PC Estab 76.39 (2.43)	PC Estab 80.97 (2.61)

**Table 3. Outpatient Provider Wait Time (Weighted)**

	Pre-note: Yes Postcard: Yes	Pre-note: No Postcard: Yes	Pre-note: Yes Postcard: No	Pre-note: No Postcard: No
1 Survey Mailing (28 days)	<b>Arm 1: 66.13% (2.28)</b> <i>Proposed Methodology</i>	<b>Arm 2: 66.78% (2.44)</b>	<b>Arm 3: 74.20% (2.33)</b>	<b>Arm 4: 71.68% (2.56)</b>
	Spec 62.69 (3.24)	Spec 63.18 (3.41)	Spec 73.52 (3.50)	Spec 68.45 (3.75)
	PC New 77.95 (2.91)	PC New 71.69 (3.53)	PC New 79.34 (3.32)	PC New 77.78 (3.36)
	PC Estab 71.28 (3.01)	PC Estab 74.21 (3.02)	PC Estab 74.62 (2.83)	PC Estab 77.13 (3.03)
2 Survey Mailings (49 days)	<b>Arm 5: 71.54% (2.15)</b> <i>Current Methodology</i>	<b>Arm 6: 70.63% (2.19)</b>	<b>Arm 7: 67.06% (2.30)</b>	<b>Arm 8: 71.42% (2.29)</b>
	Spec 69.66 (3.04)	Spec 67.71 (3.19)	Spec 63.02 (3.27)	Spec 68.58 (3.35)
	PC New 80.55 (2.42)	PC New 79.21 (2.85)	PC New 86.10 (2.01)	PC New 77.23 (2.96)
	PC Estab 73.89 (2.94)	PC Estab 74.75 (2.79)	PC Estab 72.44 (2.79)	PC Estab 75.89 (2.90)

**Table 4. Outpatient Appointment As Soon As Wanted (Weighted)**

	Pre-note: Yes Postcard: Yes	Pre-note: No Postcard: Yes	Pre-note: Yes Postcard: No	Pre-note: No Postcard: No
<b>1 Survey Mailing</b> (28 days)	<b>Arm 1: 79.72% (1.98)</b> <i>Proposed Methodology</i>	<b>Arm 2: 80.21% (2.09)</b>	<b>Arm 3: 81.72% (2.17)</b>	<b>Arm 4: 81.73% (2.23)</b>
	Spec 78.26 (2.84)	Spec 77.45 (2.99)	Spec 79.63 (3.26)	Spec 79.81 (3.25)
	PC New 78.61 (2.81)	PC New 88.00 (2.06)	PC New 84.40 (2.64)	PC New 83.31 (3.25)
	PC Estab 82.90 (2.54)	PC Estab 85.12 (2.32)	PC Estab 85.26 (2.34)	PC Estab 85.57 (2.43)
<b>2 Survey Mailings</b> (49 days)	<b>Arm 5: 84.50% (1.69)</b> <i>Current Methodology</i>	<b>Arm 6: 81.86% (1.89)</b>	<b>Arm 7: 77.36% (2.16)</b>	<b>Arm 8: 79.82% (2.13)</b>
	Spec 82.78 (2.50)	Spec 81.03 (2.75)	Spec 72.99 (3.13)	Spec 76.44 (3.18)
	PC New 82.60 (2.39)	PC New 83.49 (2.61)	PC New 83.76 (2.15)	PC New 83.48 (2.38)
	PC Estab 88.57 (1.63)	PC Estab 83.22 (2.36)	PC Estab 86.03 (2.05)	PC Estab 85.81 (2.35)

### Inpatient SHEP

For each site of care, patients were randomly assigned to one of the eight study arms. In each study arm patients will be uniformly distributed across each of the 6 bed sections; Psy, Med, Surg, Neuro, Rehab, and SCI.

For each study arm and patient subgroup, the mean response is presented with standard error in parentheses. The approximate upper bound of the 95% confidence interval may be obtained by adding 2 times the standard error to the mean, and the approximate lower bound by subtracting twice the standard error from the mean. Bed sections marked with an “\*” have fewer than 30 patients responding.

**Table 5. Inpatient Response Rates (Unweighted)**

	Pre-note: Yes Postcard: Yes	Pre-note: No Postcard: Yes	Pre-note: Yes Postcard: No	Pre-note: No Postcard: No
<b>1 Survey Mailing</b> (28 days)	<b>Arm 1: 41.52% (0.70)</b> <i>Proposed Methodology</i>	<b>Arm 2: 38.75% (0.70)</b>	<b>Arm 3: 34.01% (0.69)</b>	<b>Arm 4: 31.65% (0.67)</b>
	Psy 30.03 (0.64)	Psy 17.61 (0.48)	Psy 17.78 (0.53)	Psy 15.46 (0.36)
	Med 41.61 (1.18)	Med 42.59 (1.19)	Med 35.84 (1.16)	Med 32.63 (1.11)
	Surg 53.16 (1.47)	Surg 50.00 (1.52)	Surg 45.76 (1.51)	Surg 45.16 (1.49)
	Neuro 37.21 (1.44)	Neuro 32.50 (1.33)	Neuro 35.90 (1.36)	Neuro 28.57 (1.07)
	Rehab * 43.48 (2.52)	Rehab * 47.62 (2.70)	Rehab * 36.00 (2.46)	Rehab * 45.45 (2.67)
	SCI 29.03 (1.63)	SCI 43.75 (1.82)	SCI * 24.00 (2.05)	SCI * 10.71 (1.55)
<b>2 Survey Mailings</b> (49 days)	<b>Arm 5: 52.22% (0.71)</b> <i>Current Methodology</i>	<b>Arm 6: 49.25% (0.72)</b>	<b>Arm 7: 44.73% (0.71)</b>	<b>Arm 8: 42.41% (0.71)</b>
	Psy 37.86 (0.68)	Psy 29.64 (0.59)	Psy 31.27 (0.68)	Psy 27.12 (0.64)
	Med 53.54 (1.20)	Med 52.40 (1.21)	Med 44.97 (1.20)	Med 44.26 (1.20)
	Surg 62.94 (1.46)	Surg 63.47 (1.49)	Surg 54.60 (1.49)	Surg 50.29 (1.47)
	Neuro 38.46 (1.60)	Neuro 42.11 (1.60)	Neuro 52.27 (1.28)	Neuro 55.56 (1.66)
	Rehab * 75.00 (2.32)	Rehab * 36.00 (2.06)	Rehab * 60.87 (2.61)	Rehab * 50.00 (2.20)
	SCI * 43.48 (2.50)	SCI * 34.48 (2.25)	SCI * 41.67 (2.77)	SCI * 38.46 (2.52)

**Table 6. Inpatient Overall Quality (Weighted)**

	Pre-note: Yes Postcard: Yes	Pre-note: No Postcard: Yes	Pre-note: Yes Postcard: No	Pre-note: No Postcard: No
1 Survey Mailing (28 days)	<b>Arm 1: 74.77% (1.28)</b> <i>Proposed Methodology</i>	<b>Arm 2: 75.71% (1.32)</b>	<b>Arm 3: 75.55% (1.42)</b>	<b>Arm 4: 78.40% (1.36)</b>
	Psy 62.43 (1.55)	Psy 71.70 (1.68)	Psy 68.99 (1.78)	Psy 73.75 (1.40)
	Med 74.45 (1.97)	Med 72.81 (1.90)	Med 74.19 (2.05)	Med 76.83 (2.03)
	Surg 81.38 (1.81)	Surg 84.24 (1.84)	Surg 80.49 (2.01)	Surg 84.03 (1.89)
	Neuro * 93.79 (2.14)	Neuro * 92.16 (1.80)	Neuro * 70.35 (2.12)	Neuro * 79.92 (1.68)
	Rehab * 73.84 (2.59)	Rehab * 69.46 (3.70)	Rehab * 87.69 (3.17)	Rehab * 90.20 (3.17)
	SCI * 32.44 (2.97)	SCI * 76.40 (3.21)	SCI * 100 (0.00)	SCI * 22.65 (5.47)
2 Survey Mailings (49 days)	<b>Arm 5: 74.08% (1.15)</b> <i>Current Methodology</i>	<b>Arm 6: 76.69% (1.14)</b>	<b>Arm 7: 74.25% (1.25)</b>	<b>Arm 8: 77.70% (1.19)</b>
	Psy 61.36 (1.43)	Psy 59.84 (1.38)	Psy 58.93 (1.62)	Psy 64.99 (1.51)
	Med 73.25 (1.71)	Med 76.95 (1.68)	Med 74.67 (1.90)	Med 79.85 (1.75)
	Surg 81.47 (1.76)	Surg 83.00 (1.61)	Surg 80.00 (1.92)	Surg 77.97 (1.95)
	Neuro * 93.47 (1.54)	Neuro * 87.24 (2.54)	Neuro * 75.76 (2.12)	Neuro * 75.35 (1.64)
	Rehab * 84.98 (2.06)	Rehab * 61.00 (4.94)	Rehab * 91.95 (2.64)	Rehab * 73.45 (4.39)
	SCI * 69.79 (4.09)	SCI * 68.14 (4.80)	SCI * 54.66 (5.22)	SCI * 77.66 (3.17)

**8-Way Results for CAHPS**

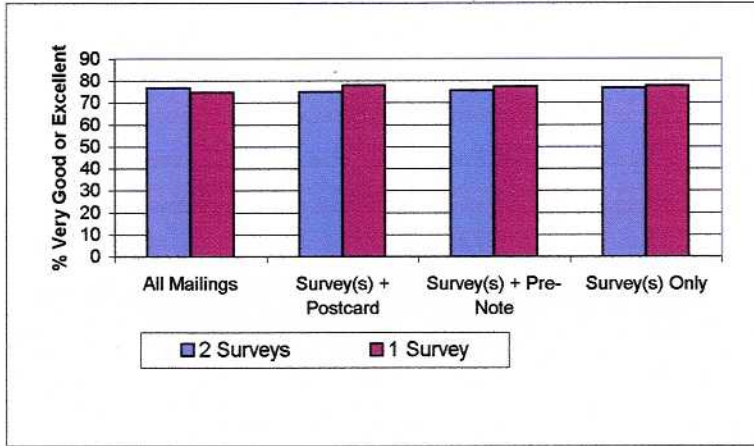
**Outpatient Overall Quality**

	All Mailings	Survey(s) + Postcard	Survey(s) + Pre-Note	Survey(s) Only
2 Surveys	76.9	75.09	75.68	76.86
1 Survey	74.87	77.95	77.46	77.59

**Diff in Outpatient Overall Quality**

All Mailings	Survey(s) + Postcard	Survey(s) + Pre-Note	Survey(s) Only
2.03	-2.86	-1.78	-0.73

Range = 3.08



**Inpatient Overall Quality**

	All Mailings	Survey(s) + Postcard	Survey(s) + Pre-Note	Survey(s) Only
2 Surveys	75.47	78.61	76.2	79.35
1 Survey	78.41	77.3	79.2	81.12

**Inpatient Overall Quality**

All Mailings	Survey(s) + Postcard	Survey(s) + Pre-Note	Survey(s) Only
-2.94	1.31	-3	-1.77

Range= 5.65

