

**Request for Approval under the "Generic Clearance for Improving
Customer Experience: OMB Circular A-11, Section 280
Implementation"
(OMB Control Number:)**

TITLE OF INFORMATION COLLECTION: Telehealth Store and Forward Result Survey

PURPOSE OF COLLECTION:

Telehealth is an effective and convenient way for patients to *receive*, and for clinicians to *provide* quality care management. The initiative is a way to incorporate telecommunications technology to improve and modernize health care offered by the Veteran Health Administration (VHA). In order to assess patient satisfaction with the program and identify areas for intervention or further evaluation, the Telehealth Services Office within VHA enlisted the services of the VEO. The Veteran Telehealth Survey is designed to measure Customer Experience associated with utilizing VA electronic health services within the three major aspects, or *modalities*, of Telehealth: Clinical Video Telehealth (CVT), Home Telehealth (HT), and Store and Forward (SFT). The purpose of this report is to document the survey methodology and sampling plan of the survey. Information about quality assurance protocols, as well as limitations of the survey methodology, is included in this report. Once data collection is completed, the participant responses in the online survey will be weighted so that the samples will be more representative of the overall population. Iterative proportional fitting to create sample weights will be applied using variables: Modality/Stage, Gender, Age Group (18-39, 40-59, 60+), and District.

Once the data is collected, it is immediately available in Vsignals, the Medallia-based platform used by the Veterans Experience Office for CX data storage and analysis. Survey weights are incorporated into the system at the close of every weekly survey. The interface allows data users to analyze the survey results using interactive charts and sub-populations. Survey data may also be reviewed over differing time periods, ranging from weekly, to monthly, to quarterly estimates.

One of the surveys, Telehealth Store and Forward Result survey updating the language, the logic flow, and number of questions to reflect feedback from the field and to lower confusion from survey respondents; the A-11 Section 280 CX domains remain the same.

TYPE OF ACTIVITY: (Check one)

- ☐ Customer Research (Interview, Focus Groups, Surveys)
- ☒ Customer Feedback Survey

[] Usability Testing of Products or Services

ACTIVITY DETAILS

1. If this is a survey, will the results of this survey be reported to Touchpoints as part of quarterly reporting obligations specified in OMB Circular A-11 Section 280?

[] Yes

[x] No

[] Not a survey

2. How will you collect the information? (Check all that apply)

[x] Web-based or other forms of Social Media

[] Telephone

[] In-person

[] Mail

[] Other, Explain

3. Who will you collect the information from?

The target population of the TH survey is all Veterans having an Outpatient CVT, HT, or SFT event in the past 7 days. The identification of Telehealth patients utilizes weekly data extracts from the Corporate Data Warehouse (CDW), which houses the operational records of VHA. Each Telehealth event eligible for a VEO survey will be associated with one of these three modalities. The classification of TH events into a modality is based on a combination of primary and/or secondary stop codes. As indicated by VSSC documentation. Under each modality, three types of surveys are designed to inquire about veterans' experience in terms of different VA service domains.

Patients with SFT visits are derived from the general Outpatient visits database table from CDW. When either an actual CVT or SFT appointment occurs, the distinction between Offsite appointments (home, mobile, or non-VA facilities) vs. appointments taking place within a VAMC or CBOC is based on secondary stop codes. A subset of veterans in each modality and subtype will be randomly selected to participate in the survey. However, the subtypes of are sparsely populated so these will be selected into each weekly sample with certainty. Telehealth subtypes that are less than 10% of the modality population will be selected with certainty. In total, there will be 9 total sets of survey questions.

4. How will you ask a respondent to provide this information?

Patients with SFT appointments are derived from the general Outpatient visits database table from CDW. When either an actual CVT or SFT appointment occurs, the distinction between Offsite appointments (home, mobile, or non-VA facilities) vs. appointments taking place within a VAMC or CBOC is based on secondary stop codes. A subset of veterans in each modality and subtype will be randomly selected to participate in the survey. However, the subtypes of are sparsely populated so these will be selected into each weekly sample with certainty. Telehealth subtypes that are less than 10% of the modality population will be selected with certainty. In total, there will be 9 total sets of survey questions. Patients will complete these email invitation-based surveys on a voluntary basis. The burden times range from 3-5 minutes for completion.

5. What will the activity look like?

Patients will complete these email invitation-based surveys on a voluntary basis. The burden times average 4 minutes for completion.

6. Please provide your question list.

See Attached.

7. When will the activity happen?

These are all ongoing surveys in which invitation surveys are sent out on a weekly basis to telehealth customers.

XXX

8. Is an incentive (e.g., money or reimbursement of expenses, token of appreciation) provided to participants?

☐ Yes ☒ No

If Yes, describe:

XXX

BURDEN HOURS

Category of Respondent	No. of Respondents	Participation Time	Burden Hours
Individuals	100,000	4 minutes	6,666 hours
Totals	100,000	4 minutes	6,666 hours

CERTIFICATION:

I certify the following to be true:

1. The collections are voluntary;
2. The collections are low-burden for respondents (based on considerations of total burden hours or burden-hours per respondent) and are low-cost for both the respondents and the Federal Government;
3. The collections are non-controversial;
4. Any collection is targeted to the solicitation of opinions from respondents who have experience with the program or may have experience with the program in the near future;
5. Personally identifiable information (PII) is collected only to the extent necessary and is not retained;
6. Information gathered is intended to be used for general service improvement and program management purposes
7. Upon agreement between OMB and the agency aggregated data may be released as part of A-11, Section 280 requirements only on performance.gov. Summaries of customer research and user testing activities may be included in public-facing customer journey maps.
8. Additional release of data will be coordinated with OMB.

Name and email address of person who developed this survey/focus group/interview:

Name: Brian Brown

Email address: brian.brown3@va.gov

All instruments used to collect information must include:

OMB Control No. 2900-0876

Expiration Date: 02/28/2026

HELP SHEET
(OMB Control Number: XXXX-XXXX)

TITLE OF INFORMATION COLLECTION: Provide the name of the collection that is the subject of the request. (e.g. Comment card for soliciting feedback on xxxx)

PURPOSE: Provide a brief description of the purpose of this collection and how it will be used. If this is part of a larger study or effort, please include this in your explanation.

TYPE OF COLLECTION: Check one box. If you are requesting approval of other instruments under the generic, you must complete a form for each instrument.

CERTIFICATION: Please read the certification carefully. If you incorrectly certify, the collection will be returned as improperly submitted or it will be disapproved.

Personally Identifiable Information: Agencies should only collect PII to the extent necessary, and they should only retain PII for the period of time that is necessary to achieve a specific objective.

BURDEN HOURS:

Category of Respondents: Identify who you expect the respondents to be in terms of the following categories: (1) Individuals or Households; (2) Private Sector; (3) State, local, or tribal governments; or (4) Federal Government. Only one type of respondent can be selected per row.

No. of Respondents: Provide an estimate of the Number of respondents.

Participation Time: Provide an estimate of the amount of time required for a respondent to participate (e.g. fill out a survey or participate in a focus group)

Burden: Provide the Annual burden hours: Multiply the Number of responses and the participation time and divide by 60.



*Service Level Measurements: Telehealth
Survey
Sampling Methodology Report*

Prepared by
Veteran Experience Office
Version 2 May 2023

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Executive Summary

Telehealth is an effective and convenient way for patients to *receive*, and for clinicians to *provide* quality care management. The initiative is a way to incorporate telecommunications technology to improve and modernize health care offered by the Veteran Health Administration (VHA). In order to assess patient satisfaction with the program and identify areas for intervention or further evaluation, the Telehealth Services Office within VHA enlisted the services of the VEO. The Veteran Telehealth Survey is designed to measure Customer Experience associated with utilizing VA electronic health services within the three major aspects, or *modalities*, of Telehealth: Clinical Video Telehealth (CVT), Home Telehealth (HT), and Store and Forward (SFT). The purpose of this report is to document the survey methodology and sampling plan of the survey. Information about quality assurance protocols, as well as limitations of the survey methodology, is included in this report.

Part I – Introduction

A. Background

The Enterprise Measurement and Design team (EMD) within the Veterans Experience Office (VEO) is tasked with conducting transactional surveys of the customer population to measure their satisfaction with the Department of Veterans Affairs (VA) numerous benefit services. Thus, their mission is to empower Veterans by rapidly and discreetly collecting feedback on their interactions with such VA entities as National Cemetery Administration (NCA), Veterans Health Administration (VHA), and Veterans Benefits Administration (VBA). VEO surveys generally entail probability samples which only contact minimal numbers of participants necessary to obtain reliable estimates. This information is subsequently used by internal stakeholders to monitor, evaluate, and improve processes. Participants are always able to decline participation and can opt out of future invitations. A quarantine protocol is maintained to limit the number of times a customer may be contacted over a period of time across all VEO surveys, in order to prevent survey fatigue.

Surveys issued by EMD are generally brief in nature and present a low amount of burden on participants. Structured questions directly address the pertinent issues regarding the surveyed population. The opportunity to volunteer open-ended text responses is provided within most surveys. This open text has been demonstrated to yield enormous information. Machine learning tools are used for text classification, ranking by sentiment scores, and screening for homelessness, depression, etc. Modern survey theory is used to create sample designs which are representative, statistically sound, and in accordance with OMB guidelines on federal surveys.

VA uses a wide variety of technologies to facilitate quality healthcare to its beneficiaries. Telehealth services are a critical aspect to modernizing the VA health care system. **Telehealth (TH)** increases access to high quality services by using information technology and telecommunication for Veterans, especially those that live in remote areas or are incapacitated. In FY 2017, over 700,000 patients received care via the three central telehealth modalities¹. **Clinical Video Telehealth (CVT)** is the use of real-time interactive video conferencing to assess, treat and provide patient care remotely. Veterans may be linked to physicians from a local clinic or even from home, for over 50 clinical applications, ranging from primary care to numerous specialties (e.g. tele-dermatology). **Home Telehealth (HT)** is applied to high-risk Veterans with chronic disease requiring long-term care. Care management is augmented through such technologies as in-home and mobile monitoring, messaging, and/or video conferencing. The goal of HT is to reduce complications, hospitalizations, and clinical/ER visitations, so at-risk patients may remain in their own homes. Finally, **Store and Forward Telehealth (SFT)** concerns the acquisition and storage of electronic patient information (e.g., images, sounds, and video) collected at a VA clinic or medical center. The information is forwarded and retrieved by healthcare professionals at another VA medical facility where an assessment is performed.

The Veteran Experience Office (VEO) has been commissioned by the Veteran Health Administration (VHA) to measure the satisfaction of Telehealth recipients regarding their electronic interaction with physicians, nursing professionals, and other medical staff. It also seeks Veteran input on the quality of the treatment they received via the three modalities listed above. VEO proposes to conduct a **brief transactional survey** on Veterans who utilized the

¹ VA Telehealth Services Fact Sheet FY17, Office of Connected Care, VHA, VA

service within the past week. A subset of veterans will be randomly selected to participate. Sampled patients will be contacted through an invitation email. A link will be enclosed so the survey may be completed using an online interface, with customized patient information. The survey itself will consist of a handful of questions revolving around a human-centered design, focusing on such elements as trust, emotion, effective, and ease with the care they received.

B. Basic Definitions

Coverage	The percentage of the population of interest that is included in the sampling frame.
Measurement Error	The difference between the response coded and the true value of the characteristic being studied for a respondent.
Non-Response	Failure of some respondents in the sample to provide responses in the survey.
Transaction	A <i>transaction</i> refers to the specific time a Veteran interacts with the VA that impacts the Veteran's journey and their perception of VA's effectiveness in caring for Veterans.
Response Rate	The ratio of participating persons to the number of contacted persons. This is one of the basic indicators of survey quality.
Sample	In statistics, a data sample is a set of data collected and/or selected from a statistical population by a defined procedure.
Sampling Error	Error in estimation due to taking a particular sample instead of measuring every unit in the population.
Sampling Frame	A list, map, or other specification of units in the population from which a sample may be selected.
Reliability	The consistency or dependability of a measure. Also referred to as <i>standard error</i> .

C. Application to Veterans Affairs

This measurement may bring insights and value to all stakeholders at VA. Front-line VA staff can resolve individual feedback from participant and take steps to improve their experience; meanwhile VA executives can receive real-time updates on systematic trends that allow them to make changes.

- 1) To collect continuous participant experience data to monitor the relative success of programs designed to improve Telehealth service delivery
- 2) To help field staff and the national office identify need of the specific population they serve
- 3) To better understand why veterans provide positive or negative feedback about telehealth services

Part II – Methodology

A. Target Population and Frame

The target population of the TH survey is all Veterans having an Outpatient CVT, HT, or SFT event in the past 7 days. The identification of Telehealth patients utilizes weekly data extracts from the Corporate Data Warehouse (CDW), which houses the operational records of VHA. Each Telehealth event eligible for a VEO survey will be associated with one of these three modalities. Under CVT and SFT modalities, three types of surveys are designed to inquire about veterans' experience in terms of different VA service domains—HT only has 1 type of survey (see Table 1).

The sample frame is limited to those that have a valid email address and excludes anyone that has been invited to take any vSignals survey in the prior 30 days or has opted out from receiving surveys.

Table 1. Survey Types under Telehealth Modalities

Telehealth Modality	Subtype 1	Subtype 2	Subtype 3
Clinical Video Telehealth	Appointment Scheduling	Clinic Appointment	Home or Mobile Appointment
Store and Forward	Clinic Appointment	Home or Mobile Appointment	Result
Home Telehealth	Continuing Patient Survey		

B. Sample Size Determination

For a given margin of error and confidence level, the sample size is calculated as below (Lohr, 1999):

For population that is *large*, the equation below is used to yield a representative sample for proportions:

$$n_0 = \frac{Z_{\alpha/2}^2 pq}{e^2}$$

where

- $Z_{\alpha/2} = 1.96$, which is the critical Z score value under the normal distribution when using a 95% confidence level ($\alpha = 0.05$).
- p = the estimated proportion of an attribute that is present in the population, with $q=1-p$.
 - Note that pq attains its maximum when value $p=0.5$, and this is sometimes used for a conservative sample size (i.e., large enough for any proportion).
- e = the desired level of precision; in the current case, the margin of error $e = 0.03$, or 3%. Also referred to as **MOE**.

For a population that is relatively *small*, the finite population correction is used to yield a representative sample for proportions:

$$n = \frac{n_0}{1 + \frac{n_0}{N}}$$

Where

- n_0 = Representative sample for proportions when the population is large.
- N = Population size.

The margin of error surrounding the baseline proportion is calculated as:

$$\text{Margin of error} = z_{\alpha/2} \sqrt{\frac{N-n}{N-1}} \sqrt{\frac{p(1-p)}{n}}$$

Where

- $Z_{\alpha/2} = 1.96$, which is the critical Z score value under the normal distribution when using a 95% confidence level ($\alpha = 0.05$).
- N = Population size.
- n = Representative sample.
- p = the estimated proportion of an attribute that is present in the population, with $q=1-p$.

Sample sizes was originally calibrated to ensure monthly a 3% MOE at a 95% Confidence Level at the modality level. This represents an industry standard for reliability widely used by survey administrators (Lohr, 1999). With the expansion of Telehealth services more localized measurement was desired to evaluate at the Medical Center level (STA3N) and/or the VISN level. Each survey's target was set as either a fixed number of invites or as a set sample rate. For the 2 surveys with the largest population the target was fixed at 64,092 invites per month. For the Telehealth Store & Forward Result survey a fixed sample of 13,036 was chosen to maximize the returns for key measures. While we try to minimize the sampling rate of surveys to below 50%, the Home Telehealth Continuing Patient survey is a census to maximize returns for this modality. The Telehealth Store & Forward at the Clinic Appointment & Telehealth Store & Forward at Home or Mobile Appointment surveys targets were fixed at a 40% sample rate to assure that, after quarantine, sufficient sample remained for the Telehealth Store & Forward Result survey.

Table 2 shows the estimated monthly population and survey targets. Annually we expect 252,000 survey responses from roughly 2.1 million invites.

Table 2. Monthly Population and Survey Targets

	Survey	Available Email Population	Invites	Sample Rate	Return Rate	Responses
CVT	Telehealth Appointment Scheduling	306,520	64,092	21%	10.8%	6,930
CVT	Telehealth at the Clinic Appointment	9,850	4,925	50%	18.5%	914
CVT	Telehealth at Home or Mobile Appointment	250,179	64,092	26%	11.2%	7,159
HT	Home Telehealth Continuing Patient	23,709	23,709	100%	18.2%	4,324
SFT	Telehealth Store & Forward at the Clinic Appointment	11,378	4,551	40%	12.2%	554
SFT	Telehealth Store & Forward at Home or Mobile Appointment	1,680	672	40%	7.6%	51
SFT	Telehealth Store & Forward Result	21,639	13,036	60%	8.1%	1,051
	Total	624,955	175,077	28%	12.0%	20,983

Source: Telehealth Survey 4/1/2022 through 3/31/2023

C. Stratification

As noted in the section above, stratification is employed to ensure that sufficient number of Veterans will be sampled for each of the seven surveys. These strata, whether defined by fixed targets or by a fixed sample rate, are considered explicit strata.

To ensure samples are balanced with respect to the following demographic variables: Age Group, Gender, District and VAMC/CBOC, the random selection of patients within each stratum will follow a systematic sampling design. The Veterans are sorted according to the demographic variables, and every n^{th} patient will be selected for survey invitation at a randomly selected starting point—the value of n will change with each explicit strata so that all cases have an equal probability of selection. This mechanism ensures that resulting respondent sample resembles the email population with respect to the demographic variables. Since these stratification variables do not have explicit targets for each permutation, they are deemed to be implicit stratification variables.

Although we do not expect differences between the email population and the general population with regard to geography, email populations tend to skew somewhat younger and more female. Since these groups are less represented in the Veteran population, it is not problematic for these demographics to be marginally oversampled – sample weighting calibrated to the general population will ensure valid representation and correct for any imbalances.

Stratification Type	Variables
Explicit	Survey Type
Implicit	Age Group, Gender, District, VAMC, CBOC

D. Data Collection Methods

At the beginning of every measurement period, VEO data analysts will access the Corporate Data Warehouse (CDW), which contains the governmental database for nearly all VHA interactions. The remaining population will be extracted from the Cerner database that is being piloted at a number of sites. This will become a larger proportion of the population as Cerner implementation progresses. The telehealth target population will be extracted and recorded with each new iteration. Those veterans with a valid email address will be included in the survey frame. A new random sample, according to the stratification and quarantine protocol defined below will be used to create an invitation file. Emails are immediately delivered to all selected patients. Selected respondents will be contacted within 8 days of their Telehealth interaction. They will have 14 days to complete the survey. Estimates will be accessible to data users instantly, with the final results available 14 days after the beginning of the survey.

Table 3. Survey Mode

Mode of Data Collection	Recruitment Method	Time After Transaction	Recruitment Period	Invitation Days
Online Survey	Email Recruitment	Within 8 days after Telehealth Interaction	14 Days (Reminder after 7 Days)	Friday

E. Reporting

Researchers will be able to use the vSignal (powered by Medallia) for interactive reporting and data visualization. Trust, Ease, Effectiveness, and Emotion scores can be observed for each Modality and Subtype (or Survey Type). The scores may be viewed by Age Group, Gender, and Race/Ethnicity in various charts for different perspective. They are also depicted within time series plots to investigate trends. Finally, filter options are available to assess scores at varying time periods and within the context of other collected variable information.

The survey results become available in vSignals in real-time. Cell based weights are applied at the time each query is run based on targets set at the beginning of each month. Targets are calculated by dividing the target proportion of the cell by the total number respondents within the cell. Weight cells are defined by survey, age group, gender, and district.

Recruitment is continuous (weekly) but the results from several weeks may be combined into a *monthly* estimate for more precise estimates, which is the recommended reporting level. Weekly estimates are unweighted, but allow analysts to review scores more quickly and within smaller time intervals. Weekly estimates are less reliable for small domains, and should only be considered for aggregated populations. Monthly estimates will have larger sample sizes, and therefore higher reliability set to a 3% MOE at the 95% Confidence level (at the Modality Level for Veterans 18+). Monthly estimates are also weighted for improved representation and less bias (non-response and coverage, see section G on Sample Weighting). Quarterly estimates are the most precise, but will take the greatest amount of time to obtain (12 weeks of collection). However, Quarterly estimates are the most suitable for the analysis of small populations (e.g. VAMC, Female Veterans 18-29, etc.).

F. Quality Control

To ensure the prevention of errors and inconsistencies in the data and the analysis, quality control procedures will be instituted in several steps of the survey process. Records will undergo a cleaning during the population file creation. The quality control steps are as follows.

1. Records will be reviewed for missing data. When records with missing data are discovered, they will be either excluded from the population file when required or coded as missing.
2. Any duplicate records will be removed from the population file to both maintain the probabilities of selection and prevent the double sampling of the same customer.
3. Invalid emails will be removed.

The survey sample loading and administration processes will have quality control measures built into them.

1. The extracted sample will be reviewed for representativeness. A secondary review will be applied to the final respondent sample.
2. The survey load process will be rigorously tested prior to the induction of the survey to ensure that sampled participants is not inadvertently dropped or sent multiple emails.
3. The email delivery process is monitored to ensure that bounce-back records will not hold up the email delivery process.

The weighting and data management quality control checks are as follows:

1. The sum of the weighted respondents will be compared to the overall population count to confirm that the records are being properly weighted. When the sum does not match the population count, weighting classes will be collapsed to correct this issue.
2. The unequal weighting effect will be used to identify potential issues in the weighting process. Large unequal weighting effects indicate a problem with the weighting classes, such as a record receiving a large weight to compensate for nonresponse or coverage bias.

G. Sample Weighting, Coverage Bias, and Non-Response Bias

Weighting is commonly applied in surveys, to adjust for nonresponse bias and/or coverage bias. Nonresponse is defined as failure of selected persons in the sample to provide responses. This is observed virtually in all surveys, in that some groups are more or less prone to complete the survey. The nonresponse issue may cause some groups to be over- or under-represented. Coverage bias is another common survey problem in which certain groups of interest in the population are not included in the sampling frame. The reason that these beneficiaries cannot participate is because they cannot be contacted (no email address available). In both cases, the exclusion of these portions of beneficiaries from the survey contributes to the measurement error. The extent that the final survey estimates are skewed depends on the nature of the data collection processes within an individual line of business and the potential alignment between beneficiary sentiment and their likelihood to respond.

Survey practitioners recommend the use of sample weighting to improve inference on the population so that the final respondent sample more closely resembles the true population. It is likely that differential response rates may be observed across different age and gender groups. Weighting can help adjust for the demographic representation by assigning larger weights to underrepresented group and smaller weights to over-represented group. Stratification can also be used to adjust for nonresponse by oversampling the subgroups with lower response rates. In both ways of adjustments, weighting may result in substantial correction in the final survey estimates when compared to direct estimates in the presence of non-negligible sample error.

The Telehealth Survey will also rely on what are often referred to as design weights—weights that correct for disproportional sampling where respondents have different probabilities of selection. Therefore, the weights are applied to make the explicit strata (the Survey Type) proportional to the number of beneficiaries.

Weights are updated live within the VSignals reporting platform². Proportions are set based on the monthly distribution of the previous month.³

If we let w_{ij} denote the sample weight for the i^{th} person in group j ($j=1, 2$, and 3), then the CW formula is:

$$w_{ij} = \frac{\% \text{ Veterans in population in group } j}{\# \text{ Veterans in group } j \text{ in the sample}}$$

As part of the weighting validation process, the weights of persons in an age and gender group are summed and verified that they match the universe estimates (i.e., population proportion). Additionally, we calculate the *unequal weighting effect*, or UWE (see Kish, 1992; Liu et al., 2002). This statistic is an indication of the amount of variation that may be expected due to the inclusion of weighting. The unequal weighting effect estimates the percent increase in the variance of the final estimate due to the presence of weights and is calculated as:

$$UWE = 1 + cv_{weights}^2 = \left(\frac{s}{\bar{w}}\right)^2$$

where

- cv = coefficient of variation for all weights w_{ij} .
- s = sample standard deviation of weights.
- \bar{w} = sample mean of weights, $\bar{w} = \frac{1}{n} \sum_{ij} w_{ij}$.

H. Quarantine Rules

VEO seeks to limit contact with participants as much as possible, and only as needed to achieve measurement goals. These rules are enacted to prevent excessive recruitment attempts upon VA's participants. All VEO surveys offer options for respondents to opt out, and ensure they are no longer contacted for a specific survey. VEO also monitors participation within other VEO surveys, to ensure participants do not experience survey fatigue.

Table 4. Quarantine Protocol

Quarantine Rule	Description	Elapsed Time
Repeated Sampling for Telehealth Survey	Number of days between receiving/completing online survey, prior to receiving email invitation for the Telehealth Survey	30 Days
Other VEO Surveys	Number of days between receiving/completing online survey and becoming eligible for another VEO survey	30 Days

² Realtime weighting may cause some distortions at the beginning of each cycle due to empty cells or random variance in small sample distributions.

³ Using previous months data is a design option for handling the problem of setting targets prior to fielding each month. An alternative design is to set targets off annualized estimates to create more stability month to month. If the population is known to fluctuate from month to month, past month population estimates may not be the optimal solution.

Opt Outs	Persons indicating their wish to opt out of either phone or online survey will no longer be contacted.	N/A
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Part III – Assumptions and Limitations

A. Coverage Bias

Since the Telehealth Survey is email only, there is a substantial population of qualifying veterans that cannot be reached by the survey. Veterans that lack access to the internet or do not use email may have different levels of Trust and satisfaction with their service. As such, it is thought that Veterans in this latter category do not harbor any tangible differences to other program participants who do share their information.

C. Other Issues

The telehealth service may have limited use to the diagnosis and treatment of common illnesses and conditions. Veterans who have complex disease types, such as cancer or tumor, may not choose to use telehealth to pursue the medical care even if they are located in the remote area. The telehealth service users do not cover Veterans with a wide spectrum of diseases. Therefore, the Veteran respondent types should be incorporated into consideration when interpreting the survey results and applications.

The telehealth service rating may require Veterans to be familiar with and have access to modern technologies (e.g., Apps, Mobil Appt, Online Video Chat). Therefore, Veterans who use the telehealth services and respond to the survey may be younger in age. The demographic distribution of the survey respondents will be reviewed by the VEO when receiving the survey results.

Home Telehealth is designed to provide medical care and services to high-risk Veterans with chronic disease. When such patients receive the survey, their family members, caregivers, or nurses are likely to respond to the survey on behalf of them. Therefore, the feedback and information from the primary source may be missing. VEO will continue to identify these responses in the VA databases and assess the effect of them on the Telehealth Survey estimates.

Part IV - Appendices

Appendix 1. References

- Choi, N.G. & Dinitto, D.M. (2013). Internet Use Among Older Adults: Association with Health Needs, Psychological Capital, and Social Capital. *Journal of Medical Internet Research*, 15(5), e97
- Kalton, G., & Flores-Cervantes, I. (2003). Weighting Methods. *Journal of Official Statistics*, 19(2), 81-97.
- Kish, L. (1992). Weighting for unequal P. *Journal of Official Statistics*, 8(2), 183-200.
- Kolenikov, S. (2014). Calibrating Survey Data Using Iterative Proportional Fitting (Raking). *The Stata Journal*, 14(1): 22–59.
- Lohr, S. (1999). *Sampling: Design and Analysis* (Ed.). Boston, MA: Cengage Learning.
- Liu, J., Iannacchione, V., & Byron, M. (2002). Decomposing design effects for stratified sampling. *Proceedings of the American Statistical Association's Section on Survey Research Methods*.
- Wong, D.W.S. (1992) The Reliability of Using the Iterative Proportional Fitting Procedure. *The Professional Geographer*, 44 (3), 1992, pp. 340-348