

## Creation of a Structured Performance-Based Assessment Tool in a Clinical Research Center Setting

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### Abbreviations

CSP *Cooperative Studies Program*

ORD *Office of Research and Development*

VA *Department of Veterans Affairs*

VAMCs *VA Medical Centers*

SMART *Specific, Measurable, Attainable, Realistic, Time-Bound*

PEP *Performance Evaluation Process*

PRP *Performance Review Period*

PEG *Performance Element Category*

ELT *Executive Leadership and Administration Team*

**Abstract:** *Employee performance is a critical factor in the success, or failure, of any organization. Therefore, it is paramount that the leadership and/or management team in an organization establishes and implements an approach that can effectively assess and evaluate the performance of its employees in an objective manner. Research administrators are often involved with the performance evaluation process at their respective institutions. However, there is a limited amount of publicly available information on the use of work performance and assessment methods in research settings. The primary aim of this pilot project was to establish a structured performance-based assessment tool that would allow for an objective and clearly articulated evaluation of staff performance at our clinical research*

*center. The secondary aim was to determine if a structured performance-based assessment tool would improve staff satisfaction with the Center's overall performance evaluation process (PEP). A baseline survey was conducted to examine employee perspectives of and satisfaction with the current performance evaluation process. A follow-up survey was conducted after the mid-year performance review period and implementation of the new PEP, including goals templates and performance evaluation guidance documents. The results of the baseline survey showed that staff had mixed reviews of the overall performance evaluation process (somewhat satisfied-33%, very dissatisfied, dissatisfied, neutral, satisfied -all 16%) and all thought the evaluation criteria could be improved (100%). The results of the follow-up survey showed that staff reviews of the overall mid-year performance evaluation process had improved (63% satisfied, 12% very satisfied, 25% somewhat satisfied) and that 50% of respondents were satisfied with the ease of use and clarity of the templates that were used to record their progress towards achieving their goals. Staff shared additional suggestions for strengthening and better aligning the templates with Center-specific roles and activities. Overall, the leadership/management team at our research Center was successful in creating a performance-based assessment approach that facilitated a more objective and clearly articulated evaluation of staff performance. There are numerous challenges to effectively evaluating staff performance in both research and non-research organizations. As a result, the strategies outlined here may be transferable to other types of work settings.*

Keywords: Management; Performance; Clinical Research; VA; CSP

## **Background**

Employee performance is a critical factor in the success, or failure, of any organization and the level of productivity has been demonstrated as being the single most important determinant of a country's standard of living (Economic Policy Institute, 2000; Fauth et al., 2009; Nielsen & Randall, 2012). Therefore, it is paramount that the senior leadership and/or management team in an organization establishes and implements an approach that can effectively assess and evaluate the productivity and performance of its employees in an objective manner. Preferably, an organization's employee performance assessment plan should involve its staff as key stakeholders during the process. Their participation should be encouraged by senior leadership since doing so provides an opportunity for them to become more engaged in decisions related to the determination of what their overall value is to the organization. Research administrators are often involved in hiring, management, and the performance evaluation process at their respective institutions (Kaplan, 1959; Tauginiene, 2009). Furthermore, many research positions have varying levels of complexity in their roles due to a variety of considerations, e.g. navigation of intricate study protocols, required knowledge of compliance and regulatory considerations, existing nuances between human subjects and basic science research, varying levels of leadership and/or management roles, etc. (Merry et al., 2010; Mentz & Peterson, 2017; Antes et al., 2016; Baer et al., 2011a). These and other factors legitimize the need for a structured, objective, performance

evaluation tool that research administrators can use to adequately assess their staff's performance. Employee engagement benefits organizations and has been demonstrated as having a positive impact on employee health and wellness, productivity, and retention (Burton et al., 2017; Harter et al., 2010; Tullar et al., 2016). There is a significant amount of literature on work performance and assessment methods (Amerine et al., 2017; Byrne et al., 2016; Shanafelt & Swensen, 2017; Wu et al., 2016) but there is a limited amount of publicly available information on their use in research settings.

The Department of Veterans Affairs (VA) is the United States' largest integrated healthcare system and provides comprehensive care to more than 8.9 million Veterans each year (2017). The Cooperative Studies Program (CSP), a division of the Department of Veterans Affairs (VA) Office of Research and Development (ORD), was established as a clinical research infrastructure to provide coordination and enable cooperation on multi-site clinical trials and epidemiological studies that fall within the purview of VA (2018a). The Cooperative Studies Program Epidemiology Center – Durham (CSPEC-Durham) is one of several epidemiology centers established by the Cooperative Studies Program (CSP) and serve as national resources for epidemiologic research and training in the U.S. Department of Veterans Affairs (VA) (2014, 2018b). The Center is comprised of three functional areas (Core groups) as follows: Project Management Core, Computational Sciences Core, and the Executive Leadership and Administration Core (ELT). Its workforce consists of research investigators, project managers, statisticians, programmers, research assistants, data managers, medical residents/fellows, and graduate student trainees. The CSPEC-Durham's current study portfolio consists of 17 active studies, and its primary areas of focus are cancer outcomes and Gulf War research.

The primary aim of this pilot project was to establish a structured performance-based assessment tool that would allow for an objective, and clearly articulated evaluation of staff performance at our clinical research center. The secondary aim was to determine if a structured performance-based assessment tool would improve staff satisfaction with the Center's overall performance evaluation process. The findings may inform individuals or groups in research administration and leadership roles seeking to improve their current staff performance evaluation process.

## Methods

### *Identification of Areas for Improvement in Employee Performance Evaluation Process*

Over the course of several months, prior to the start of the VA Fiscal Year 2018 (FY18) performance review period (10/1/2017-9/30/2018), the Center's Executive Leadership and Administration Core (ELT) met periodically to review and assess the Center's performance evaluation process. This review was initially conducted based on informal feedback from Center staff that they were not satisfied with the performance evaluation process (PEP) as it was performed at that time. As part of the Center's effort to create a culture of continuous process improvement, the ELT engaged in efforts to identify the weaknesses and potential areas of improvement in the Center's PEP. The review identified a major weakness in the Center's PEP in that its format led to a more subjective determination of what staff performance was, rather than the evaluation being based

on clear, agreed-upon expectations between the ELT and each respective staff member regarding what their level of work performance should have resembled. For example, one of the Center's positions had Performance Element Categories (PEGs) such as "Supports CSPEC and CSP Programs" and "Collaborates, Mentors, and Supports Center Mission." Both criteria are vague and ambiguous in nature, and neither of these examples contain enough substantive information for a management team to be able to objectively assess an employee's performance in that particular position.

### *Performance Evaluation Guide and Supplemental Document Development*

Based on the findings of the Center's PEP review, the ELT initiated a pilot project to develop a performance evaluation guide that could be employed to assess staff performance in a structured and more objective manner. Of note, this project was constructed as an operational quality improvement initiative and not a research project. Development of the performance evaluation guide (Appendix A) occurred over several months and was designed with the intent that it would be used to assess the performance of Center staff based on their achievement of pre-defined performance goals. Center employees were asked by the ELT to deliberate on what they wanted to accomplish over the course of the performance review period (PRP) and to create SMART goals that aligned with those expectations. Goals were to be specific, measurable, attainable, realistic, and time-bound (SMART) (Bjerke & Renger, 2017; Bovend'Eerd et al., 2009; Tichelaar et al., 2016). To facilitate their efforts, Center management provided staff with two supplemental templates (one used to capture their goals for the upcoming PRP and the other used to track their progress/achievement of those goals for review during their mid-year performance assessment) and examples of acceptable SMART goals that were identified online via various websites. Some staff members developed their goals subsequent to their initial review of the supplemental templates and goal examples, while others requested additional information and guidance on how best to develop their SMART goals. Additional clarification was provided to this subset of staff members either via email or in one-on-one in-person meetings with a member of the ELT.

The performance evaluation guide was distributed to Center staff prior to a scheduled staff meeting, at which ELT discussed the evaluation guide's purpose and its use for the upcoming FY18 PRP. During the staff meeting, employees had the opportunity to ask preliminary questions about the evaluation guide and to give initial feedback on the tool. Staff members provided several suggested revisions to the tool after their review and the ELT then incorporated this feedback into a subsequent version of the document prior to utilizing it for the upcoming PRP. Staff were also informed that Center management would work with each employee individually to ensure that their determined goals were aligned with the needs of the Center, and to come to a consensus on what the staff member's goals would be for the upcoming PRP.

### *Implementation, Evaluation, and Feedback*

An anonymous baseline survey (Figure 1) was conducted to examine employee perspectives of and satisfaction with the Center's current performance evaluation process. After the mid-year performance review and utilization of the guidance documents, an anonymous follow-up survey (Figure 2) was used to evaluate if employee perspectives and satisfaction had changed subsequent

to what was reported in the baseline survey. The surveys were administered through REDCap, an online data capture application for research studies and operations (Harris et al., 2009). Surveys were designed to be quick and convenient for staff to complete and included both multiple choice and open-ended question/comment fields.

### Performance Evaluation Process Survey

The purpose of this survey is to assess employee satisfaction with the performance evaluation process [before](#) the implementation of the CSPEC Performance Evaluation Guide.

Your responses are anonymous and confidential. Please complete the survey below.

Thank you!

1. Please rate your satisfaction with the following:

	Very Satisfied	Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Dissatisfied	Very Dissatisfied
a. Overall performance evaluation process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Information received about the evaluation process before your review(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Evaluation criteria used to rate your performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Performance feedback from supervisor/evaluator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Are you in agreement with your last performance evaluation rating? (Outstanding, Excellent, Fully Successful, Minimally Satisfactory, Unacceptable)

reset

3. Do you think the evaluation criteria can be improved?


reset

4. Please provide any additional comments or feedback related to the performance evaluation process/criteria.

Expand

Figure 1. Baseline Survey Questions.

A total of six baseline surveys were completed and returned (n=6/11) for a 55% response rate, and a total of eight follow-up surveys (n=8/8) were completed and returned for a 100% response rate. This outcome constituted an overall survey response rate of 74% (n=14/19). New employees that were within their 90-day probation/trial period, supervisors/performance evaluators (ELT), volunteers, and contract employees did not participate in the survey.



**MIDYEAR GOAL REVIEW**

### Mid-Year Evaluation Survey (Post Guide)

The purpose of this survey is to assess employee satisfaction with the mid-year performance evaluation process *after* the implementation of the CSPEC Performance Evaluation Guide.

Your responses are anonymous and confidential. Please complete the survey below.

Thank you!

**1. Please rate your satisfaction with the following:**

	Very Satisfied	Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Dissatisfied	Very Dissatisfied
a. Mid-Year performance evaluation process (overall)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Information received about the evaluation process before your review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Evaluation criteria used to rate your performance (new CSPEC Performance Evaluation Guide)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Performance feedback received from supervisor/evaluator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Goals template (ease of use, clarity)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Mid-year performance assessment template (ease of use, clarity)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2. Please provide any additional comments or feedback related to the mid-year performance evaluation process or evaluation criteria.**

Figure 2. Follow-Up Survey Questions.

## Results

### Baseline Survey

The response rate for the baseline survey was 55% (n=6/11). The results of the baseline survey showed that staff had mixed reviews of the overall performance evaluation process (somewhat satisfied - 33%, very dissatisfied, dissatisfied, neutral, satisfied - all 16%) (Table 1). Most were either very dissatisfied (33%) or somewhat dissatisfied (33%) with information received about the evaluation process before their review. Staff also had mixed reviews about the evaluation criteria, or lack thereof, used to rate their performance (dissatisfied, somewhat satisfied - both 33%) and performance feedback from their supervisor/evaluator (somewhat satisfied - 50%). Most respondents agreed with their last performance evaluation rating (83%) and all thought the evaluation criteria could be improved (100%). The use of SMART goals was encouraged by ELT prior to this pilot project but had not been mandated, and respondents expressed that the evaluation process was mysterious, with no concrete examples of Center-specific SMART goals. Staff also expressed frustration that there was not a dedicated training effort provided on how to write SMART goals, or a standard reference provided to learn about them. Furthermore, the survey results showed that there was a desire from staff to receive suggestions from the ELT on how to get a higher performance rating, and they also revealed staff members' desire for additional one-on-one assistance with crafting their SMART goals.

Table 1. Baseline and Follow-Up Survey Results

Satisfaction Indicator	Baseline Survey (N=6)	Follow-up/Mid-Year Survey (N=8)
Overall performance evaluation process	VD-1, D-1, N-1, SS-2, S-1	SS-1, S-5, VS-2
Information received about the evaluation process before review	VD-2, SD-2, SS-1, S-1	SS-1, S-4, VS-3
Evaluation criteria used to rate performance	D-2, N-1, SS-2, S-1	N-2, SS-2, S-2, VS-2
Performance feedback received from supervisor/evaluator	D-1, SS-3, S-2	S-3, VS-5
Goals template (ease of use, clarity)	N/A	SD-3, SS-1, S-4
Mid-Year performance assessment template (ease of use, clarity)	N/A	SD-1, N-1, SS-2, S-4

Very Dissatisfied (VD)	Somewhat Satisfied (SS)
Dissatisfied (D)	Satisfied (S)
Somewhat Dissatisfied (SD)	Very Satisfied (VS)
Neutral (N)	

### Follow-Up Survey

The response rate for the follow-up survey was 100% (n=8/8). The results of the follow-up survey showed that staff reviews of the overall mid-year performance evaluation process had improved (satisfied - 63%, very satisfied - 12%, somewhat satisfied - 25%). Most staff were either satisfied (50%) or very satisfied (38%) with information received about the evaluation process before their review. Staff still had mixed reviews about the new evaluation criteria, but none were dissatisfied (neutral, somewhat satisfied, satisfied, very satisfied - all 25%). All respondents were either very satisfied (63%) or satisfied (37%) with performance feedback from their supervisor/evaluator. The survey also revealed that the two templates developed by the ELT could still benefit from additional revisions, but half (50%) of respondents were satisfied with their ease of use and clarity. Staff shared that the templates could be better aligned with Center-specific roles and activities.

Overall, the Center was successful in developing and implementing a structured, performance evaluation guide that outlined what level (%) of goals were necessary to achieve one of three levels of achievement: Exceptional, Fully Successful, or Unacceptable, for each of an employee's PEGs. For context, each employee has 4-5 PEGs in their performance appraisal plan that encompass a broader theme of service, e.g. Supports CSPEC and CSP Programs, Customer Service, Program Planning and Management, etc. and are weighted as either "Critical" or "non-Critical". Each Center employee created SMART goals that were relevant to each of the PEGs listed in their performance appraisal plan. It is important to note that these levels of achievement were then used to assign a final performance rating (Outstanding, Excellent, Fully Successful, Minimally Satisfactory, and Unacceptable) based on the collective levels of achievement for their PEGs (Table 2).

Table 2. Final Performance Rating Table

<b>Outstanding</b>	Achievement Levels for <u>all</u> elements are designated as Exceptional.
<b>Excellent</b>	Achievement Levels for all critical elements are designated as Exceptional. Achievement Levels for non-critical elements are designated as at least Fully Successful. Some, but not all, non-critical elements may be designated as Exceptional.
<b>Fully Successful</b>	The achievement level for at least one critical element is designated as Fully Successful. Achievement Levels for other critical and non-critical elements are designated as at least Fully Successful or higher.
<b>Minimally Satisfactory</b>	Achievement Levels for all critical elements are designated as at least Fully Successful. However, the achievement level(s) for one (or more) non-critical element(s) is (are) designated as Unacceptable.
<b>Unacceptable</b>	The achievement level(s) for one (or more) critical element(s) is (are) designated as Unacceptable.



These performance ratings were then able to be clearly aligned to rating-based performance award recommendations. This approach yielded a more objective employee rating than the Center's previous PEP format because the evaluation was based on clear, agreed-upon expectations between the ELT and each respective staff member regarding what their level of work performance should have resembled. To rate an employee's performance, the ELT only had to measure the employee's achievement (or non-achievement) of clearly outlined goals, as opposed to subjectively rating their performance on position responsibilities that may not have been clearly described to the employee and/or not be specific to the position due to the generalized and ambiguous nature of the previous performance evaluation criteria.

## Discussion

Organizations are only as successful as their employees, and their contributions to an institution's missions, goals, and objectives, as measured through their performance and productivity, are critical for leadership and management teams to be able to assess (Mankins, 2017; Vali et al., 2015; Loeppke et al., 2009). Research administrators are often tasked with the responsibility of evaluating staff performance, in conjunction with other management duties (Kaplan, 1959; Tauginiene, 2009), and being able to utilize a tactic that facilitates an objective, unbiased, performance appraisal process would most likely be advantageous to them. Considering that many research positions have varying levels of complexity in their roles due to a variety of factors, e.g. navigation of intricate study protocols, required knowledge of compliance and regulatory considerations, situations in which research staff work across multiple studies due to limited or delayed research funding, varying levels of leadership and/or management roles, etc. (Purdum et al., 2017; Baer et al., 2011b; Larkin et al., 2012), research administrators would also likely benefit from a structured approach that alleviates some of the challenges associated with evaluating the performance of staff in complex roles. Our efforts demonstrated that the creation of a structured performance-based assessment tool that allowed for an objective and clearly articulated evaluation of staff performance was feasible in a clinical research center setting. The use of this strategy was also effective in improving staff satisfaction with the overall performance evaluation process in this setting.

Performance evaluation tools have been developed to assess the performance of research institutions (Rajan et al., 2012; Schapper et al., 2012) but the amount of publicly available literature on their use to assess individual research staff performance is limited (Ekeroma et al., 2016). Ekeroma, Shulruf, McCowan, Hill, and Kenealy (2016) described their efforts to "develop a research performance-appropriate tool for clinicians working in low-resource settings such as those in the Pacific Islands" (p. 2). Their work was significantly different than ours in that their performance tool was targeted specifically to assess the research productivity of clinicians (physicians, midwives/nurses) in low-resource countries. Furthermore, their development process included "a modified Delphi technique that established a consensus among identified research experts for the most appropriate research indicators for the Pacific Islands" (Ekeroma, 2016, p. 2). Our performance-based assessment tool is not limited to a specific type of research position, nor is it intended for use in a specific type of research setting, e.g. clinical, biomedical, epidemiologic, etc. One of its primary strengths is that the foundation of the tool is based on pre-

defined SMART goals that both the individual employee and our Center management agreed on prior to the start of the performance evaluation process. Therefore, each staff member's goals are inherently tailored to their specific role and this allows the approach to be seamlessly utilized across any type of position in a research setting. Additionally, since this work was conducted in a clinical research setting, the SMART goals that were created were generally predisposed to be research-specific, but this approach should be adaptable to other settings. Lastly, the stakeholders that were involved in the development of our tool were our Center's ELT and staff members, as opposed to involving a panel of research experts that would be used in a Delphi method approach (Humphrey-Murto et al., 2017; Diamond et al., 2014).

We believe that the primary reason for the success of this pilot project, in terms of both the development of the performance-based assessment tool and the improvement of staff satisfaction with the Center's overall performance evaluation process, is related to the involvement of Center staff in the development process for the tool. A stakeholder can be defined as a person, group, or organization involved in or affected by a course of action, while stakeholder engagement refers to the process by which an organization involves people who may be affected by the decisions it makes or who can influence the implementation of decisions (Lemke & Harris-Wai, 2015). Substantial evidence has now been provided that stakeholder involvement is essential for management effectiveness in clinical research, and feedback from stakeholders has critical value for research managers inasmuch as it alerts them to the social, environmental, and ethical implications of research activities (Pandi-Perumal et al., 2015). The Center's staff served as both stakeholders and active participants during the development of the performance evaluation guide, as well as during the development of their respective SMART goals that outlined what they wanted to accomplish over the course of the PRP. Furthermore, the ELT initially decided to review the Center's performance evaluation process to identify its weaknesses and potential areas of improvement based on informal feedback from Center staff that they were not satisfied with the PEP as it had been performed previously. Therefore, our staff's participation with this undertaking was critical in ensuring both its initial success and will also be important for the sustainment of our efforts to continuously improve our Center's performance evaluation process.

There are two significant limitations of our work that should be further discussed due to their potential impact on our findings and the possibility that they may present challenges to its implementation in other settings. The first is related to the sample size of staff that participated in the survey component of our evaluation process for this initiative. New employees that were within their 90-day probation/trial period, supervisors/performance evaluators (ELT), volunteers, and contract employees did not participate in the survey and because of these exclusion criteria, the number of employees that were eligible to take the survey decreased. At the time that the baseline survey was distributed, there were 23 total employees at the CSPEC-Durham and after excluding the aforementioned employee types, only 11 employees were eligible to take the baseline survey. Furthermore, there were 21 total employees working for the Center at the time that the follow-up survey was disseminated, and after excluding employees that met the criteria listed above, only 8 employees were eligible to take the follow-up survey. These figures represent a decrease of 10% in the number of employees that were eligible to take the baseline survey (48%) and follow-up survey (38%), respectively. The changes in the composition of staff

between the baseline and follow-up survey was also significant. Although the number of ELT members that served as supervisors/performance evaluators remained the same during the time between the two surveys ( $n=2$ ), there were slightly less new, contract, and volunteer employees at the time when the baseline survey was administered ( $n=10$ ) than when the follow-up survey was administered ( $n=11$ ). The differences in the composition of Center staff between the two surveys may have had an impact on the results of the survey.

Furthermore, it is possible that the exclusion of new employees undergoing a 90-day performance evaluation, supervisors/performance evaluators (ELT), volunteers, and contract employees in this process yielded results that might have been different had these types of employees been considered eligible to participate in this effort. The rationale behind the exclusion of new employees from taking the baseline and follow-up surveys was that their performance would not be evaluated to the same extent as more established employees given that they were within their 90-day probation/trial period, still learning the nuances of their position, and gaining familiarity with the Center, CSP, and the larger VA. Supervisors/performance evaluators (ELT) receive their performance evaluations from CSP leadership and were not included in this effort as survey participants since the individuals that perform their evaluations were not initially included as stakeholders in this initiative. Contract employees at our Center often receive salary funding from multiple departments, perform work across various areas, and have multiple supervisors. We made the decision to not include our contract workers in this pilot given the complexity of their roles and reporting structures. Lastly, volunteers also receive a different type of performance evaluation than full-time, paid staff and were excluded from participating in this effort given their unique roles and contributions to the Center as unpaid staff with an interest in contributing to improving the overall health and well-being of our nation's Veterans.

Secondly, the setting in which this pilot project was conducted may have had a potential influence on our results. From an organizational perspective, the CSPEC-Durham is housed in a clinical research program within a large, integrated healthcare system that is managed by the United States federal government. Therefore, neither Center staff nor members of the leadership team were unduly influenced by financial considerations in their decision-making efforts. This point is noteworthy because of its potential impact on the transferability of this strategy to other settings such as for-profit clinical research organizations or healthcare systems. In these types of settings, a greater emphasis could be placed by a supervisor or leadership team on employee goals in the context of their potential to increase revenue for the organization. For example, a supervisor might request that an employee either increase their number of targeted goals or take on specific goals that would generate additional revenue for the organization. The additional stress of having to develop and agree upon goals in the context of revenue or other financial implications could potentially alter the collaborative process that should exist between the supervisor and employee as they work together to develop the employee's goals. The likelihood of developing goals that are important to both the organization and the employee may be decreased if the organization's "bottom-line" ends up being a constant theme during this process and as a result, a higher number of goals that are of no interest to the employee may be selected by the employer. The importance of receiving stakeholder buy-in and the need for employees to be involved in decision-making as it relates to their positions and work areas, has been demonstrated as key factors in employee

engagement, and were critical aspects of our approach (Amerine et al., 2017; Hung et al., 2006). Having buy-in from both parties (employer and employee) is paramount not only to the success of this type of effort, but also to its potential to be sustained over time.

Lastly, the survey results that we received may have been different if the timepoints that were used to distribute the baseline and follow-up survey were altered. The baseline survey was conducted in December 2017 and the follow-up survey was distributed to staff after their mid-year performance reviews were held (June 2018). It is possible that conducting the follow-up survey after completion of the fiscal year, i.e. post-September 2018 as opposed to the mid-year, may have resulted in the receipt of different responses. Furthermore, the follow-up survey was not distributed until late June 2018, while the mid-year performance evaluations were held in April 2018. It is possible that the survey results were subject to recall bias due to the two-month time period between the mid-year evaluations and distribution of the follow-up survey.

Our project demonstrated several notable strengths considering the aforementioned limitations.

To date, the amount of publicly available literature on the use of performance evaluation tools to assess individual research staff performance is limited. This approach was novel in that regard and our work establishes that a structured, performance-based assessment tool can be developed in a collaborative process involving both the employer and employee in a clinical research center setting. It also provides evidence that this type of tool is conducive to increasing staff satisfaction with the overall performance evaluation process in this setting. The collaborative nature of the development process for the performance evaluation guide and the evaluation process itself, were also notable strengths. It is imperative that staff feel involved in the decision-making process for determining the metrics that will be used to assess their performance, and the increase in staff satisfaction with the overall evaluation process served as a reminder of the benefit of this strategy. The diversity of perspectives and experiences of all parties involved undoubtedly strengthened the performance evaluation guide and the overall evaluation process.

In conclusion, the utilization of a performance-based assessment tool was an effective approach to objectively assess staff performance in a clinical research center setting. The tool was also successful in improving staff satisfaction with the overall performance evaluation process in this setting. Additional work is needed to determine the effectiveness of this strategy in other research institutions, and other organizations in general. Future iterations of this approach at our Center may likely include the employee types that were excluded from this initial pilot as their perspective and experience would likely benefit the overall process. The implementation of a “balanced scorecard” approach within the performance-based assessment tool will also likely be explored due to its potential benefit to strengthen the alignment between our organization’s strategy and mission statements with Center employees’ goals and the overall PEP (Kaplan & Norton, 1992; Inamdar et al., 2002). Assessing staff performance in a clinical research setting is complex due to a myriad of factors associated with the nature of research positions and as a result, the identification of strategies that can be employed to reduce the burden and challenges associated with the performance evaluation process are valuable to research administrators who are involved with this process at their respective organizations.

## Disclaimer

The views expressed in this article are those of the authors and do not necessarily represent the views of the Department of Veterans Affairs or the government of the United States.

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