

# **MEMORANDUM**

Date: July 2019

To: QUERI Researchers

From: HERC

Subject: Guidelines to Creating an Activity Tracking File

#### **OBJECTIVE**

The objective of this document is to provide guidelines on creating an activity tracking file using a standardized methodology across QUERI programs.

#### **PERSPECTIVE**

The guidelines in this document are provided from the perspective of a facility.

#### **METHODOLOGY**

## STEP 1: Identify all elements of the intervention

Cost categories may contain:

- personnel costs
- supplies/durable medical equipment (DME) costs, and/or
- other information technology costs

## **STEP 2: Observe or track activities**

## A. Type of Activities

- I. <u>Personnel costs</u> may include activities listed below.
  - The pre-implementation phase may include the following activity types:
    - Stakeholder identification and engagement time (leadership, clinicians, support personnel)
    - o Site Needs Assessment
    - Program Design and Adaptation
    - Staff Training (clinician, support training, admin staff training)
    - Coaching
  - The implementation phase may include the following activity types:
    - o Interface with clinical supervisors
    - Managing stakeholders
    - Monitoring and feedback
    - Technical assistance
    - Ongoing support and maintenance
  - Estimating personnel cost
    - Record time of staff involved in the project implementation
      - If a staff works part time for this project, the macro method is to record the FTE
        designated to this person, and the micro method is to record the time of this staff
        spent for each activity. When using micro-costing, the indirect labor cost should be

considered, such as the time for general training, administrative activity, vacation and sick leave, etc.

- Record job title of staff involved in the project implementation
  - Since staff salary varies within each employment category, an average salary will be used to estimate staff cost.
- Record meeting times and attendees
  - Implementation often include meetings to engage stakeholders or train clinicians or support staff. For each meeting, record:
    - Meeting duration
    - Number of participants
    - Participants' title of employment that matches VA employment pay category (average salary in each employment category will be used for cost estimation)

## II. Supplies/durable medical equipment (DME) costs may include:

- Equipment
  - Record the equipment needed to implement an intervention
  - o If the equipment is shared by other services, estimate shared time (%) of use by the study project.
- Material
  - o Manual, handbook, instruction, newsletter etc.
  - Usually this type of service is contracted, and expenses can be recorded
- Telephone/email
  - The telephone/email cost in this category contains only equipment and utilization cost.
  - Consider actual marginal cost of using the services related to implementation because it can be quite different from the cost of setting up a new line
- Estimating supplies/DME
  - National Prosthetics Patient Database (NPPD) records purchase price of all items ordered through the VISTA Prosthetics and Sensory Aids package.
  - o Contact local VA Acquisition & Materiel Management Service (A&MMS) purchasing officer

#### III. Information Technology costs may include:

- Hardware
- Software
- Services, support and maintenance

#### **B.** Data Collection Tools

The QUERI program can choose which data collection tool to use from the following options:

- Diaries or spreadsheets (i.e., Excel) (see example 1 in Appendix)
- Recall surveys (i.e. Qualtrics) (see examples 2 and 3 in Appendix)
- CPRS (see example 4 in Appendix)
- Observations

## C. Frequency of Data Collection

The QUERI program can choose the frequency of the data collection:

- I. Weekly or bi-weekly
  - Data collected on a weekly or bi-weekly basis may produce more accurate results but may require extra effort from team members who are recording their activities and time.
- II. Monthly

• Data collected on a monthly basis may be more practical for team members, but it may produce less accurate data due to recall bias.

## STEP 3: Summarize time, materials and supplies

#### A. Structure of Data

When tracking activities, structure the data so the data can be easily summarized, checked, and reported.

#### B. Data Management

- Common Reports & Data Checks
  - Summarize a person's time in a given period (day, week, month) and compare it to their time paid on the project.
  - Data checks should be implemented to prevent errors. Sites should be prompted for resolution if errors are found.
- III. Interim Quality Assurance checks are helpful for data management.

## C. Cost Summary

Use labor costs to estimate the value of the time (time x \$). One option is to use VA labor costs. https://www.herc.research.va.gov/include/page.asp?id=cost-stf-labor

Another option is to use labor costs from the Bureau of Labor Statistics (https://www.bls.gov/bls/blswage.htm).

A final option is to use market labor data from private sources.

Be cautious in interpreting the labor costs. Some sources list just the direct cost while others include direct costs and benefits. It is generally appropriate to include benefits. If benefits are not included, they are generally an additional 30% of direct costs.

## **Step 4: Consider other potential costs**

Labor, materials, and supplies make up the majority of the variable costs. There may be other costs that may be necessary to track. This includes staff training or other staff meeting times. Also, sometimes studies purchase support through contracts, and it may be necessary to include those contractual costs.

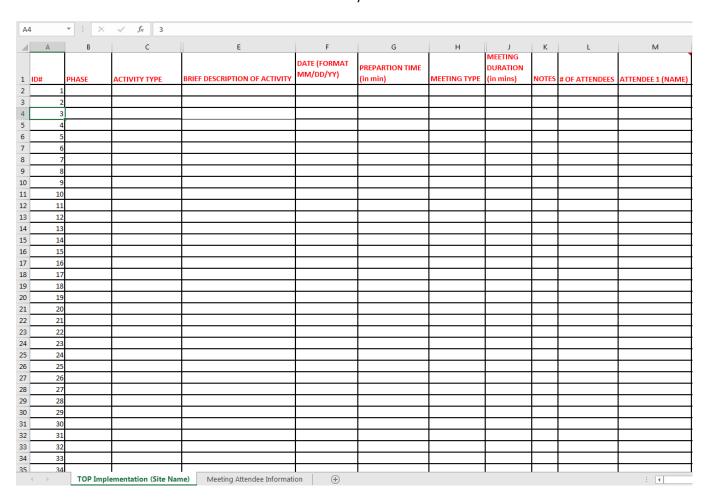
Not included in these costs are the fixed costs: space and overhead. Space costs are particularly challenging estimate. One option is to use rental rates, if you believe the rental real estate market is equivalent to the space that is used for the study. However, no sources that list "rental" costs have information on hospitals or ambulatory clinics—there is no rental market for health care facilities and these facilities are more expensive than office or retail space. HERC has produced two technical reports that show methods for using the VA Managerial Cost Accounting data to estimate overhead. Those reports are

https://www.herc.research.va.gov/files/RPRT 120.pdf and https://www.herc.research.va.gov/files/RPRT 119.pdf

## **APPENDIX**

## **Example 1: Excel Spreadsheet**

- Each activity is entered in each row.
- Time consuming to track staff activities
- This spreadsheet requires entry of detailed information, which may lead to missing data; may want to consider if it's better to limit the number of fields/columns in order to obtain more complete data.
- There may be a high risk of data entry errors with manual entry of free text. This spreadsheet minimizes some of that risk by having drop down menus but some fields are still free text. A non-clean dataset would take some effort to transform into an analytical dataset.



## **Example 2: CSP Case Report Form**

- Takes effort to set up
- Time consuming to track staff activities
- Pilot test drafts with relevant staff
- Revise and reformat prior to initiation of study
- Timing of data collection is set in advance
- The forms are typically designed for automated data entry. The forms below were designed for Datafax; it may be necessary to develop forms that work with the automated data entry process.

Staff Activity Log Form 1 (Page 1 of 2)  Visit 0 0 1
Hospital Study ID Study ID Id (Examiner) (Veteran)  Exam Date Month Day Year
1. Did another staff member perform any portion of this examination including the extraction of information from the veteran's records?
Yes No If "No", skip to question 2.
1.1 What are the credentials of the staff member? (please select one)  Licensed provider  Staff assistant (without a professional license)  Other (specify):
1.2 What is the total amount of time that the staff member spent on this examination?
Minutes
For questions 1.2 and 2-7, please record your time in 5-minute increments. Please round up your time increments to the nearest 5- minute increment. For example, if you spent 41 minutes doing an activity, please record it as 0045 minutes.
How much time did you spend in this C&P examination?  Minutes
3. During this time, did you perform the following activities?
Chart review and reviewing self-report information or other preparatory activities, before you met face-to-face with the veteran?  Yes No
Meeting face-to-face with the veteran?
In chart review or other research activities following the face-to-face meeting with the veteran but prior to the report writing?
Writing a report or summarizing your findings

Staff Activity Log Form 1 (Page 2 of 2)  Visit 0 0 1						
Hospital Study ID Study ID Month Day Year Id (Examiner) (Veteran)						
If you will spend additional time beyond the examination time writing or completing the report, please estimate the time you will need to complete the report for this veteran.  Minutes						
<ol><li>If you spent additional time on this C&amp;P examination for PTSD that has not been captured in the questions above (questions 2-4), please describe below the activity and the time you spent on this activity.</li></ol>						
Activity 1 Minutes						
Activity 2 Minutes						
Activity 3 Minutes						
6. Did you have adequate time scheduled to complete this examination including report writing?						
Yes If "Yes" skip to question 7.						
No						
6.1 If "No", how much time would have been adequate to complete this examination?  Minutes						
7. Did you have adequate trauma exposure information for this veteran?  Yes No						

## **Example 3: Client Contact Form**

- Time consuming to track staff activities
- Form was created with input from outreach workers
- Manager reviewed them for accuracy each week

# **Client Contact Form**

Your Name:	Today	's Date:	Time:			
Client's Name:   ID#:  Type of Contact: Phone						
Total Time with Client: Trav Hours Minutes	el Time: Ex Hours Minutes		Mileage Parking County vehicle Own vehicle			
Reason for call/visit Outcome						
☐ Administer pre-survey		□ Next appt date:				
□ Administer survey						
			Date to give reiminder call:			
			Date to check if appointment kept:			
			ent kept?			
Remind her of appointment		□ <sub>Yes</sub>	☐ Cancelled			
		□ No, why				
☐ Check if she kept appointment ☐ Other:			ed - New appt date/time			
Consultation			Referrals  B. Transportation			
<ul><li>□ A. Consumer skills (blue/green/pink/yellow)</li><li>□ D. Calendar</li></ul>			☐ AC Transit Voucher			
Coping:			□ C. Child care			
☐ E. Distancing			☐ I. Mental Health			
☐ F. Seeking Social Support			☐ J. Alcohol abuse			
☐ G. Escape Avoidance			□ K. Substance abuse			
☐ H. Planful Problem Solving			□ L. Domestic violence			
□ Education about abnormal Paps			☐ M. Sexual abuse			
☐ Other (specify):			UV. HIV/AIDS			
Attempts to contact:						
1 Date and time of day:		10 [	□ Date and time of day:			
2 Date and time of day:		1,000,000,000	□ Date and time of day:			
3 □ Date and time of day:			☐ Date and time of day:			
4 Date and time of day:			□ Date and time of day:			
5 ☐ Date and time of day:			□ Date and time of day:			
6 Date and time of day:			□ Date and time of day:			
7 Date and time of day:			□ Date and time of day:			
8 Date and time of day:			□ Date and time of day:			
9 Date and time of day:			Date and time of day:	- 6		

## **Example 4: CPRS**

- CPRS template
- Designed for a specific study
- Implemented at all study sites
- Already built in to clinical workflow
- Takes time to set up and get approval, which is a locally and nationally governed process. This is also changing with the Cerner implementation.

