

## TEAM-HF Costing Tool: Examples and Recommendations

This document provides guidance and tips to complete the Costing Tool for various resource use categories for the scenarios described below.

<b>1. E-monitoring</b>	<p><b>Example:</b> Assume that a RN monitors 100 patients electronically. Each week, the RN contacts approximately 10 patients by phone. On average, the RN spends a total of 10 hours per week, with 5 hours spent on E-monitoring activities and the remaining 5 hours spent on the phone with patients (i.e., 30 minutes, on average, per patient contact).</p>										
<b>Personnel</b>	<p>We <b>recommend</b> that you use the “<b>Top-Down</b>” approach to estimate personnel costs.</p> <p>Using the “Personnel costs (top-down)” worksheet, in the row representing ‘Registered Nurse’:</p> <ul style="list-style-type: none"> <li>▪ Enter ‘5’ in the ‘Hours per week spent in contact with patients for each provider/personnel (by phone, face-to-face)’ column (i.e., 5 hours spent on the phone, computed as [30 minutes per patient contact x 10 patients]/60).</li> <li>▪ Enter ‘5’ in the ‘Hours per week spent on other (non-research) activities associated with the program’ column (i.e., 5 hours spent on electronic monitoring for 100 patients).</li> <li>▪ Enter ‘0’ in the ‘Hours per week spent on research activities associated with the program’ column.</li> <li>▪ Enter ‘1’ in the ‘Number of each type of personnel’ column.</li> </ul> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type of Personnel</th> <th style="width: 20%;">Hours per week spent in contact with patients for each provider/personnel (by phone, face-to-face)</th> <th style="width: 20%;">Hours per week spent on other (non-research) activities associated with the program</th> <th style="width: 20%;">Hours per week spent on research activities associated with the program</th> <th style="width: 20%;">Number of each type of personnel</th> </tr> </thead> <tbody> <tr> <td>Registered nurse</td> <td>5</td> <td>5</td> <td>0</td> <td>1</td> </tr> </tbody> </table>	Type of Personnel	Hours per week spent in contact with patients for each provider/personnel (by phone, face-to-face)	Hours per week spent on other (non-research) activities associated with the program	Hours per week spent on research activities associated with the program	Number of each type of personnel	Registered nurse	5	5	0	1
Type of Personnel	Hours per week spent in contact with patients for each provider/personnel (by phone, face-to-face)	Hours per week spent on other (non-research) activities associated with the program	Hours per week spent on research activities associated with the program	Number of each type of personnel							
Registered nurse	5	5	0	1							
<b>Equipment</b>	<p>If software is used exclusively for remote/electronic monitoring, then account for its cost in the “Equipment Costs” worksheet.</p> <ul style="list-style-type: none"> <li>▪ In a row representing ‘Other’ equipment, enter a description of the equipment: ‘<i>Software for DM Program</i>’.</li> <li>▪ Enter ‘1’ in the ‘Number needed’ column.</li> <li>▪ Enter ‘100%’ in the ‘Percentage used for the intervention’ column.</li> </ul> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Name or description of equipment</th> <th style="width: 20%;">Number needed</th> <th style="width: 30%;">Percentage used for the intervention</th> </tr> </thead> <tbody> <tr> <td>Binder</td> <td></td> <td></td> </tr> <tr> <td><b>Other: <i>Software for DM Program</i></b></td> <td>1</td> <td>100</td> </tr> </tbody> </table> <p><u>Be sure to enter the cost for the software and period of time over which the software will be used in the ‘Standardized Units’ and/or ‘Customized Units’ Worksheets.</u></p> <ul style="list-style-type: none"> <li>▪ In the corresponding row representing ‘Other’ equipment, enter a description of the equipment: ‘<i>Software for DM Program</i>’.</li> <li>▪ Enter \$10,000 (for example), representing the total cost of the software program in the ‘Cost per unit’ column.</li> <li>▪ Enter ‘5’ (for example) in the ‘Years of usable life’ column.</li> </ul>	Name or description of equipment	Number needed	Percentage used for the intervention	Binder			<b>Other: <i>Software for DM Program</i></b>	1	100	
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Binder											
<b>Other: <i>Software for DM Program</i></b>	1	100									

Equipment	Cost per unit	Source/Assumptions	Years of usable life
Binder			
Other: <i>Software for DM Program</i>	\$10,000	Price paid to DM Software.	5

**2. DM programs with different types of encounters of varying lengths of time**

**Example:** Assume that a RN has 30 face-to-face encounters with patients each week, with each encounter lasting an average of 30 minutes. The RN spends an additional 10 minutes for each encounter on related activities (e.g. documentation, refilling prescriptions, etc.). In addition, the RN has 10 encounters per week with patients over the phone, with each encounter lasting 10 minutes, on average. Assume that the RN does not spend additional time on related activities associated with the phone encounters.

**Personnel**

We **recommend** that you use the “**Bottom-up**” approach to estimate personnel costs. To account for costs associated with face-to-face encounters and phone encounters, use two separate rows to represent time for the RN.

Using the “Personnel costs (bottom-up)” worksheet, in the row representing ‘Registered Nurse’:

- Enter ‘30’ in the ‘Number of encounters with patients per week for each provider/personnel’ column.
- Enter ‘30’ in the ‘Average duration per encounter’ column.
- Enter ‘10’ in the ‘Average duration spent on non-face-to-face activities per encounter’ column.
- Enter ‘0’ in the ‘Hours per week spent on research-related activities for each type of personnel’ column.
- Enter ‘1’ in the ‘Number of each type of personnel’ column.

In the same worksheet, in a row representing ‘Other’ personnel, enter ‘*Registered nurse*’. Then,

- Enter ‘10’ in the ‘Number of encounters with patients per week for each provider/personnel’ column.
- Enter ‘10’ in the ‘Average duration with patient per encounter’ column.
- Enter ‘0’ in the ‘Average duration without patient per encounter’ column.
- Enter ‘0’ in the ‘Hours per week spent on research-related activities for each type of personnel’ column.
- Enter ‘1’ in the ‘Number of each type of personnel’ column.

Type of Personnel	Number of encounters with patients per week for each provider/personnel	Average duration with patient per encounter (in minutes)	Average duration without patient per encounter (in minutes)	Hours per week spent on research-related activities for each type of personnel	Number of each type of personnel
Registered Nurse	30	30	10	0	1
Other: <i>Registered Nurse</i>	10	10	0	0	1

Be sure to enter the annual salary and associated data for the RN in the ‘Standardized Units’ and/or ‘Customized Units’ Worksheets.

- In the corresponding row representing ‘Other’ personnel, enter ‘*Registered nurse*’.

- Enter '\$70,000' (for example) in the 'Annual Salary' column.
- Enter '30%' (for example) in the 'Benefit and Fringe' column.
- Enter '48' (for example) in the 'Number of working weeks per year' column.
- Enter '40' (for example) in the 'Number of hours per week' column.

Personnel	Annual Salary	Source/ Assumptions	Benefit and Fringe (% of salary)	Number of working weeks per year	Number of hours per week
Other: <i>Registered Nurse</i>	\$70,000	Assumption	30%	48	40

**3. Administration of medications or other treatments**

**Example:** Assume that a RN has 30 face-to-face encounters with patients each week, and 20% of patients, on average, require intravenous furosemide.

**Supplies and Incentives**

We **recommend** that you enter costs associated with medication or other treatments in the Supplies and Incentives Worksheet.

Because medications are not provided as an option in the pre-populated rows, in a row representing 'Other' supplies, enter 'IV furosemide'. Then,

- Enter 0.2 (for 20%) in the 'Quantity per encounter' column for the set of rows representing supplies provided at each encounter.

Be sure to enter total costs associated with the administration of furosemide (e.g. drug costs, IV tubing, etc.) in the corresponding cells in the 'Standardized Units' and/or 'Customized Units' Worksheets (Cell C66, C67, or C68).

Inputs	
Name or description of supplies	Quantity per encounter
Other 1: Intravenous furosemide	0.2

Note that the computed cost in the 'Cost per encounter' columns will represent the total cost of treatment multiplied by the proportion receiving the treatment.