This tool can give you suggestions for ideas for assessing the potential impacts of clinical change as a result of implementing a clinical improvement project.

These are suggestions only for selected process steps and considerations. This tool cannot and is not meant to provide all the information you need to evaluate the impacts of clinical change. Ultimately you will need to apply your own judgment and create your own approach which is individual to your own circumstances and the uniqueness of your current care processes and your intended project.

See also Delfini spreadsheet templates for ideas.

1. **Goal is to explore the possible total impacts of practice change (including making the change):**
   - Assess benefits, harms and costs of different practice strategies and from different perspectives – and give yourself a range
   - Incorporate evidence with information about current practice, making all assumptions explicit
   - Be specific to your own setting
   - Understand your capabilities – do you need to increase anything?
   - Cost it out

   **To evaluate change, you need these data –**
   1. Evidence-based Recommendations
   2. Internal data = Population + Current Care Program (care plus other considerations)
   3. What you want to change to = New Care Program

   **To compare, examine –**

<table>
<thead>
<tr>
<th>Current</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Current care elements</td>
<td>▪ New care program</td>
</tr>
<tr>
<td>▪ Current care management</td>
<td>▪ (Start-up – temporary costs)</td>
</tr>
<tr>
<td></td>
<td>▪ New care program management</td>
</tr>
</tbody>
</table>
Instructions: Worksheet for Preparing Narrative Notes on Anticipated Impacts of Practice Change

This work sheet can help you prepare your cost and change assessment, as well as prepare your measurement plan.

1. Prepare a description of current care processes for the topic of interest. Quantify as much as possible. This can be in document or spreadsheet form. Use the chart below for ideas about items to cover.

2. For each category write a narrative description of anticipated change (e.g., increase, decrease, discontinuation, improvement, key notes). Be mindful of areas where you may be decreasing utilization, but won’t truly experience a net decrease because of no change in staffing.

3. At a minimum, you will want to measure whether your intended change has happened. To do so, you must measure something you know will have changed if your implementation was successful. Seek measurement items that are easily doable. For performance measurement, you may wish to refer to Delfini performance measurement tools.

4. Prepare quantitative estimates of the total population that may be affected over what time period, considering such factors as prevalence and any exclusions.

Example – Hypothetical Project “Venous Leg Ulcers”

<table>
<thead>
<tr>
<th>Category</th>
<th>List Current State or Elements; then Anticipated Change</th>
<th>Recommend for Measurement?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utilization Considerations:</strong> Systems, utilization &amp; administrative impacts: consider → facilities, systems, roles (including staffing), methods (including procedures), equipment, supplies, other resources</td>
<td>Staffing changes – net increase since will need trainer, but won’t reduce staff despite visit reduction. Physical therapy visits – decrease. Whirlpool therapy – discontinued….etc.</td>
<td>PT visits</td>
</tr>
<tr>
<td><strong>Cost (organization, provider and patient)</strong></td>
<td>High cost area – anticipate decrease in costs to organization.</td>
<td>Vascular surgery referrals</td>
</tr>
<tr>
<td><strong>Health status (symptom relief, quality of life, survival, function)</strong></td>
<td>Currently care not evidence-based – anticipate major improvement.</td>
<td>Duration of therapy</td>
</tr>
<tr>
<td><strong>Satisfaction: patient and clinical staff</strong></td>
<td>High patient satisfaction with whirlpool therapy – expect some dissatisfaction with change.</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>List Current State or Elements; then Anticipated Change</td>
<td>Recommend for Measurement?</td>
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<td><strong>Cost</strong> (organization, provider and patient)</td>
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</tr>
<tr>
<td><strong>Health status</strong> (symptom relief, quality of life, survival, function)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Patient impacts</strong> (benefits, harms, costs, risks, uncertainties, alternatives)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Satisfaction</strong>: patient and clinical staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong> – might include such things as other triangulation issues (e.g., regulatory issues, public relations, medical community impacts, marketing issues, medical-legal issues, issues of purchasers, liability and risk management, cost, community standards, accreditors, press, overall impact on the health care organization, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Population</strong> — Prepare quantitative estimates of the total population that may be affected per what time period, considering such factors as prevalence and any exclusions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>For additional information as needed:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instructions: Worksheet for Computing “New Program Cost Assessment”

Goal is to compare costs of your current program of care to your potential new program of care, and consider the impact of start-up costs for the new program. Definitions in brief (more detailed information is below):

a) = current annual care costs
b) = start-up costs for new program
c) = new program management costs
d) = new care program costs

Step 1. Costs of what you are doing now ➔ 

\[ a = \text{Annual costs of current care} \]

\[ \text{Care costs} = $50,000 \]

\[ \text{Management/admin costs} = \text{currently not a managed program, so none unique to area} \]

Notes:

Step 2. If you implement a change or new project, costs of your start-up period ➔ 

\[ b+d = \text{Start-up + Annual costs of new care program} \]

\[ b. \text{ Start-up period costs (e.g., tool creation, program implementation and start-up period management)} = $20,000 \]

\[ d. \text{ Annual costs of new care program (care only and NOT including b) start-up or c) program management/administration} = $40,000 \]

Notes:

Step 3. If you implement this change or new project, costs of your future regular new program after start-up period ➔ 

\[ c+d = \text{New program management costs + Annual costs of new care program} \]

\[ c. \text{ Post-start-up annual costs of program management (e.g., costs to administer project, special on-going training, annual dissemination of materials, etc)} = $10,000 \]

\[ d. \text{ Annual costs new care program only – from d. above} = $40,000 \]

Notes:

Step 4. Assessment: Recommend to implement new program since care will improve and there is no change in costs following $10,000 for implementation.

Compare results
Goal is to compare costs of your current program of care to your potential new program of care, and consider the impact of start-up costs for the new program. Definitions in brief (more detailed information is below):

a) = current annual care costs
b) = start-up costs for new program
c) = new program management costs
d) = new care program costs

Step 1. Costs of what you are doing now ➔

\( a = \) Annual costs of current care

- Care costs = 
- Management/admin costs = 

Notes:

Step 2. If you implement a change or new project, costs of your start-up period ➔

\( b + d = \) Start-up + Annual costs of new care program

b. Start-up period costs (e.g., tool creation, program implementation and start-up period management)
d. Annual costs of new care program (care only and NOT including b) start-up or c) program management/administration

Notes:

Step 3. If you implement this change or new project, costs of your future regular new program after start-up period ➔

\( c + d = \) New program management costs + Annual costs of new care program

c. Post-start-up annual costs of program management (e.g., costs to administer project, special on-going training, annual dissemination of materials, etc)
d. Annual costs new care program only – from d. above

Notes:

Step 4. Assessment:

Compare results
Instructions: Worksheet for Computing Incremental Cost Effectiveness

Goal is to be able to compare the *marginal or incremental* benefit costs of your current program of care (current state) compared to your potential new program of care (new state).

Before you start, determine if you should do a cost effectiveness analysis (CEA) or not by seeing which quadrant applies to your project:

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased Effectiveness &amp; Increased Cost</td>
<td>Decreased Effectiveness &amp; Decreased Cost</td>
</tr>
<tr>
<td>Do not do CEA (this IS NOT cost effective)</td>
<td>Consider doing CEA</td>
</tr>
<tr>
<td>Increased Effectiveness &amp; Increased Cost</td>
<td>Consider doing CEA</td>
</tr>
<tr>
<td>Decreased Effectiveness &amp; Decreased Cost</td>
<td>Increased Effectiveness &amp; Decreased Cost</td>
</tr>
<tr>
<td>New program (this IS cost effective)</td>
<td>Pass project to next steps!!!</td>
</tr>
<tr>
<td>Fail the project!!!</td>
<td></td>
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**Simplified Method for Incremental CEA**

**Step 1. Cost Effectiveness Quadrant: Decreased Effectiveness & Decreased Cost**

**Step 2. Identify outcome of benefit to compare, and quantify by time period (e.g., number of lives saved, avoided hip fractures, increased new cases of disease, etc. in what time period)**

Outcome of comparison: Hip fractures avoided

Time period: Annually

Quantification of outcome for current care processes: 9.58 avoided fractures

Quantification of outcome for new program: 5.56 avoided fractures

**Differential outcome** from which program (new or current) ➔ 4.02 more avoided fractures with current program

**Step 3. Costs of current care processes ➔** $2,500,000

**Step 4. Costs of new program ➔** $2,250,000

**Step 5. Difference in program costs ➔** $250,000

**Step 6. Divide program cost difference by differential outcome ➔** Differential program costs $250,000 / Differential outcome 4.02 = Your cost is $62,198 per incremental outcome

**Step 7. Other potential cost consequences of change:** If we go with the new program, we can anticipate roughly four more hip fractures a year, which does not take into account the care for those additional hip fractures.

**Step 8. Assessment:** Stay with current program.
**Goal** is to be able to compare the *marginal or incremental* benefit costs of your current program of care (current state) compared to your potential new program of care (new state).

Before you start, determine if you should do a cost effectiveness analysis (CEA) or not by seeing which quadrant applies to your project:

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**Simplified Method for Incremental CEA**

**Step 1. Cost Effectiveness Quadrant:**

- Decreased Effectiveness & Increased Cost
- Increased Effectiveness & Increased Cost
- Decreased Effectiveness & Decreased Cost
- Increased Effectiveness & Decreased Cost

**Step 2.** Identify outcome of benefit to compare, and quantify by time period (e.g., number of lives saved, avoided hip fractures, increased new cases of disease, etc. in what time period)

**Outcome of comparison:**

**Time period:**

**Quantification of outcome for current care processes:**

**Quantification of outcome for new program:**

**Differential outcome** from which program (new or current)

<table>
<thead>
<tr>
<th>Step 3. Costs of current care processes</th>
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<td>Step 4. Costs of new program</td>
<td>$</td>
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<td>Step 5. Difference in program costs</td>
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</tr>
<tr>
<td>Step 6. Divide program cost difference by differential outcome</td>
<td>Differential program costs $ / Differential outcome = Your cost is $ per incremental outcome</td>
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<tr>
<td>Step 7. Other potential cost consequences of change:</td>
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<td>Step 8. Assessment:</td>
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