

## ***Make AIM Statements More Robust by Describing and Accounting for Tangible and Intangible Benefits***

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### **Introduction:**

Process Improvement (PI) problem solving teams often flounder from the lack of an initial clear and concise problem statement. The authors have noticed that once teams narrow their problem statement down to a discrete issue they are able to focus on and effectively apply PI tools. When teams are unable to focus on the real issue, they lose valuable problem solving time. Team members become disenfranchised from the process since they seem to be going in circles without making any progress.

When developing the AIM of the problem solving team, think conceptually in terms of concentric circles as shown in figure 1. The concentric circles represent layers of decreasing control as you move away from the center, where the problem solving team is in complete control, to the periphery, where the team has little or no control or influence over events or resources. The outer layers of the circle represent global rather than discrete issues. The farther away from the center, the more difficult it becomes to directly influence the immediate outcomes of an issue. Starting at the inner most circle helps the problem solving team develop issues that are discrete, measurable, and time bound. It is likely that as the team gains experience and confidence it will want to tackle issues in the more distant concentric circles, because that is where the larger payoffs in terms of community health improvement lie.<sup>23</sup> Gaining experience and confidence, and demonstrating the success of other PI efforts, can result in increased control and influence over these larger issues.

This discussion proposes measuring tangible and intangible benefits as part of the initial steps of the PI problem solving process as a possible tool to focus the problem solving team on desired outcomes, help prioritize multiple projects, and quantitatively demonstrate success.

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<sup>2</sup> Ready, AIM, Problem Solve, L. Beitsch, MD, G. Duffy, and J. Moran, Quality Texas Newsletter, October 2009, [www.texas-quality.org](http://www.texas-quality.org)

<sup>3</sup> Why Don Berwick Is Almost Right: How Public Health Quality Improvement Operates Within Complex Systems, L. Beitsch, G. Duffy, and J. Moran, Journal of Public Health Management & Practice, January/February 2012, Volume 18, Number 1.

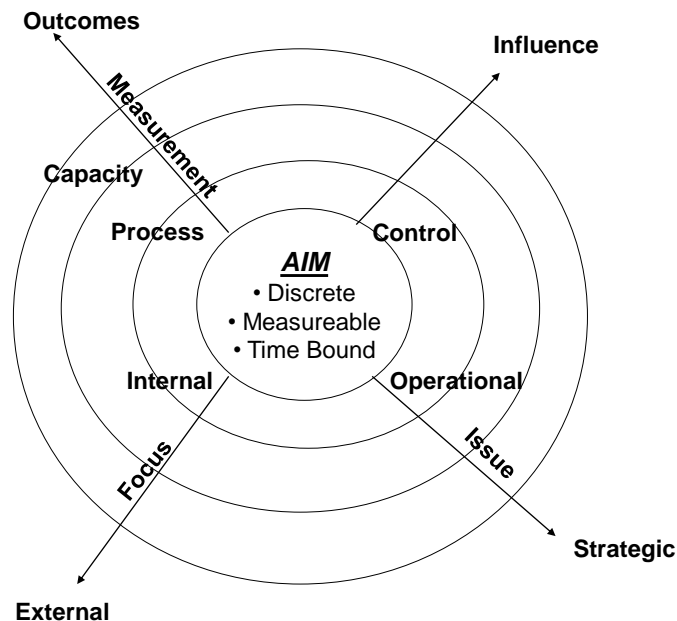


Figure 1

To make the AIM Statement more robust and to interpose a dimension of organizational economic priority the authors suggest adding in an estimate of potential gains from tangible and intangible benefits. By including tangible and intangible benefits that are expected as a result of addressing the problem and comparing them to anticipated costs of undertaking the PI project, we can quantify the value of the project, measure its potential value, and use it to prioritize projects.

### **Focusing on Benefits and Costs:**

Costs that are impacted as well as accrued by a problem solving team can fall into the following expense cost categories:

- Variable – Variable costs are those that respond directly and proportionately to changes in activity level or volume, such as supplies, the rest of total cost, the part that varies as you produce more or less.
- Semi-variable<sup>4</sup> – costs are fixed for a set level of production or consumption, becoming variable after the level is exceeded
- Fixed - Fixed Cost is the part of the budget that stays the same regardless of whether you produce a lot, a little bit, or even if you produce zero. Overhead, rent on buildings and interest on loans are examples of fixed cost.

When developing an AIM statement we urge teams to estimate which costs will be impacted that we have control over, and which ones we do not. Some questions to consider are:

<sup>4</sup> <http://www.investopedia.com/terms/s/semivariablecost.asp#ixzz1kaMwsm1g> accessed 1/26/12

- If we implement a solution to this problem what are the potential cost categories that will be impacted and by how much? For example, a cost category might include additional resources the current process doesn't need.
- Is this cost category outside of our control and ability to influence?
- How much will it cost to develop a solution and implement it?
- What is the cost of doing nothing?
- What is the cost of sustaining the solution?
- Are there possible unintended consequences, and if so, what are the costs?
- If we plan to use existing resources, what will we have to stop doing to divert resources to this problem/solution?

### **What are the Benefits?**

During the development of the AIM statement we need to make an estimate of the tangible and intangible benefits that solving the problem will add to the organization and the community it serves.

#### **Tangible Benefits**

Tangible benefits are defined as "a benefit produced by an investment that is immediately obvious and measurable."<sup>5</sup> A tangible benefit can usually be expressed in terms of a monetary savings. An Intangible Benefit: "is an indirect benefit which cannot be felt or touched - such as saving time"<sup>6</sup>.

If we have a quantification of the tangible and intangible benefits, plus an estimate of the costs to achieve the savings we could calculate a Return on Investment. The classic business definition of Return on Investment is a performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. To calculate ROI, the benefit (return) of an investment is divided by the cost of the investment; the result is expressed as a percentage or a ratio. The return on investment formula:

$$ROI = \frac{(\text{Gain from Investment} - \text{Cost of Investment})}{\text{Cost of Investment}}$$

In the above formula "gains from investment", refers to the proceeds obtained from selling the investment of interest. Return on investment is a very popular metric because of its versatility and simplicity. That is, if an investment does not have a positive ROI, or if there are other opportunities with a higher ROI, then the investment should be not be undertaken<sup>7</sup>.

<sup>5</sup> [http://zantrio.com/dictionary/tangible\\_benefit.php](http://zantrio.com/dictionary/tangible_benefit.php), accessed 1/26/12

<sup>6</sup> [http://wiki.answers.com/Q/What\\_is\\_Tangible\\_Vs\\_Intangible\\_benefit](http://wiki.answers.com/Q/What_is_Tangible_Vs_Intangible_benefit), accessed 1/26/12

<sup>7</sup> <http://www.investopedia.com/terms/r/returnoninvestment.asp#axzz1iUynchr1>, accessed 1/4/2012

However, in public health, where returns are often measured by improved health outcomes, intangible benefits become an increasingly significant measure.

### **Intangible Benefits**

Accounting for intangible benefits will help improve the business case for undertaking a PI project but many managers have reservations when measuring intangible benefits. Managers may feel that the soft intangible benefits cannot be easily measured in dollar terms or, if they are, the benefits will not be viewed as valid. One reason that intangibles deserve more respect is that they are now a significant part of an organization's and community's worth. More than 25 percent of the value of enterprises is now based on intangible assets, such as brand image and market share, according to economists. But decision-makers have not yet accepted this financial reality<sup>8</sup>.

We need to give intangible benefits more respect in any ROI calculation since they are becoming a larger share of a business worth.

The problem we encounter is that most intangible benefits are not easily quantifiable. This problem is not unique. Ford Motor Company used a 4:1 ratio to help account for indirect benefits when they are identified to tangible benefits<sup>9</sup>. This is a ratio that could be used in estimating the benefits of intangible benefits in any organization. But is 4:1 a sufficient scale or should we consider a more flexible and an increasing ratio scale to account for intangible benefits that may have more impact to our customers or community?

What is unique to many businesses is the need for a way to account for intangible benefits to the community being served. For example in public health a tangible benefits may be a decrease in the smoking rate, an increase in the immunization rate, reduced infant mortality, etc. An intangible benefit may be a program that contributes to increased self-esteem resulting in greater use of preventive services and adherence to an asthma management plan. There also are "intermediate" tangible benefits (benefits that are quantifiable, but do not necessarily directly impact a community's health) such as increased access to preventive services, health education, and other types of community-wide programs.

Figure 2 proposes an Intangible Benefit Multiplier Pyramid for calculating the value of the internal and external intangible benefits from a PI project.

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<sup>8</sup> [http://www.cio.com/article/29660/Intangible\\_Benefits\\_Can\\_Play\\_Key\\_Role\\_in\\_Business\\_Case](http://www.cio.com/article/29660/Intangible_Benefits_Can_Play_Key_Role_in_Business_Case) –accessed 3/2/2012

<sup>9</sup> Expert Answers, Quality Progress, September 2010, PP. 8 and 9.

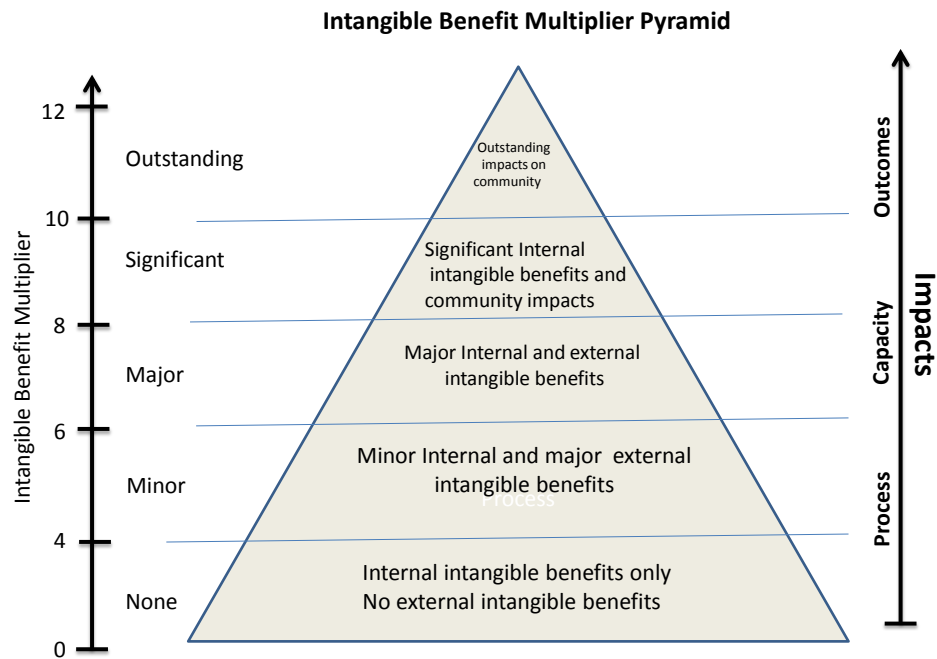


Figure 2

This approach builds in a multiplier for intangible benefits that each PI project can justify. The multiplier can vary from PI project to project since the impacts may be different. Each project's multiplier must be justified through a process of identifying tangible and intangible benefits. A scenario analysis, a process that considers possible alternative outcomes, may be the best way to develop the case for intangible benefits since it examines the likelihood of achieving multiple potential intangible benefit outcomes. The ROI formula could be modified to be a Benefit Effective Ratio taking into account the impact of intangible project benefits.

The Benefit Effective Ratio formula is as follows:

$$\text{Benefit Effectiveness Ratio} = \frac{\left[ \text{Tangible Benefits} + \text{Intangible Benefits (multiplier times tangible benefits)} \right] - \text{Cost of the project}}{\text{Cost of the project}}$$

Not all projects will have a positive Benefit Effectiveness Ratio but that does not mean they should not be undertaken. Many intangible benefits cannot be easily quantified or may be under estimated but the impact of the project may be substantial to the community served. The Benefit Effectiveness ratio is a guide and not a definitive decision making tool. It should be part of any prioritization process of project selection but just one of the criteria to quantify which projects may have a high return to an organization.

**Summary:**

We have proposed a way to account for intangible benefits to improve the business case for undertaking a PI project by accounting for intangible benefits. We would like your feedback on the applicability of this approach, suggested modifications to the multipliers, or changes to formula to make it more robust and improve the way to account for intangible benefits.

Appendix A details an AIM Statement Template that incorporates the use of tangible and intangible benefits.

Appendix B shows a filled in AIM Statement.

## Appendix A: AIM Statement Template

*This template serves as a guide to assist in formulating the AIM, or goal, of the process improvement. It is a working document designed to evolve over several discussions while the project team works through the problem.*

### **Section1: Problem Description, Boundary, and Team Composition**

- Describe the problem or opportunity to be addressed:

\_\_\_\_\_

*(name process, issue, or area to work on)*

- This process is important to work on now because of:

\_\_\_\_\_

*(describe the impact this problem is having on the agency, program, customers, employees, or the community)*

- Team Sponsor: \_\_\_\_\_

- Team Leader: \_\_\_\_\_

- Team Members & Area of Expertise:

- 
- 
- 

- The problem or opportunity starts with \_\_\_\_\_
- (starting point)*

- and ends with \_\_\_\_\_
- (ending point)*

### **Section 2: Internal and External Benefit and Cost Description:**

- This opportunity has the following estimated potential benefits internally and to the external community:

1. **Internal:**      Tangible Benefits                      Intangible Benefits

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2. **External:**      Tangible Benefits                      Intangible Benefits

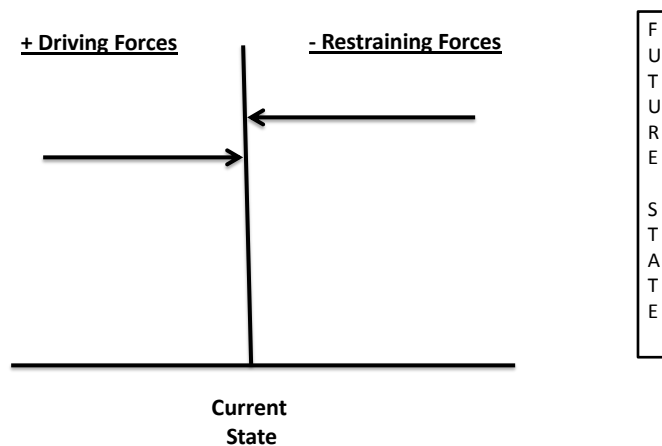
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- The cost of this project is estimated to be: \$\_\_\_\_\_ and is composed of the following categories:

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- 
- 
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### **Section 3: Current State Performance and Desired Future State**

- Describe the current state of the problem or opportunity and its current performance (baseline data):
- Describe the ideal future state:
- What are the key driving and restraining forces impacting the current state and the ideal future state?



### **Section 4: Improvement Description:**

- This effort should improve the current state
  1. Describe the improvement goals to be achieved,
  2. The timing of these improvements,
  3. And how the improvement will be measured.

### **Section 5: Internal and External Customer Identification:**

- For the following customers/clients (*customers, staff or those affected by the process under improvement*)
  - 1.
  - 2.
  - 3.
  - 4.



## Appendix B: AIM Statement Template

*This template serves as a guide to assist in formulating the AIM, or goal, of the process improvement. It is a working document designed to evolve over several discussions while the project team works through the problem.*

## Section1: Problem Description, Boundary, and Team Composition

- Describe the problem or opportunity to be addressed: *The state requires an annual review of eligibility for state residents (members) covered under the treatment act to ensure that they are still eligible.*
- This process is important to work on now because of: *(describe the impact this problem or opportunity is having on the agency, program, customers, employees, or the community)* *This process is manual and labor intensive which must be worked into the daily workload of staff who have competing priorities and full schedules.*
- Team Sponsor: *Debra Smith, Director of Population Health*
- Team Leader: *Susan White, Manager of Maternal and Child Health*
- Team Members:  

1. Trish	Area of Expertise:
2. Eric	Enrollment Coordinator
3. Debbie	Health Planner
4. John	Program Management Analyst
	Quality Improvement Coordinator
- The problem or opportunity starts with a member list is generated of reviews due and ends with a completed review, documented and correspondence sent to the member.

**Section 2: Internal and External Benefit and Cost Description:**

- This opportunity has the following estimated potential benefits internally and to the external community:

<u>Tangible Benefits</u>	<u>Intangible Benefits</u>
<ul style="list-style-type: none"> <li>• <i>Reduction of the number of annual reviews</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Reduction in staff time devoted to annual review process</i></li> </ul>
<ul style="list-style-type: none"> <li>• <i>Savings from certified mailings</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Reduction in staff time answering customer calls</i></li> </ul>

**External:**

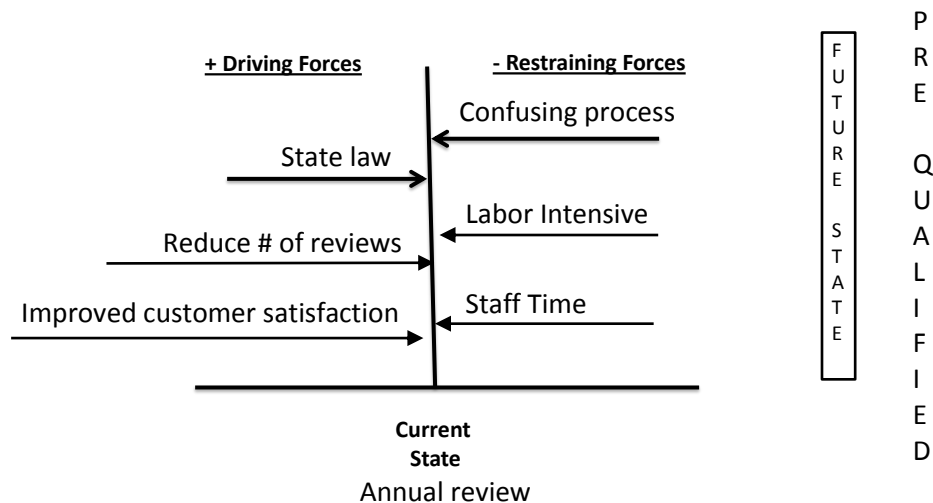
<u>Tangible Benefits</u>	<u>Intangible Benefits</u>
<ul style="list-style-type: none"> <li>Reduction in the number of phone calls by applicants with questions</li> </ul>	<ul style="list-style-type: none"> <li>Improved customer service</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction in time spent by providers who submit documentation submitted on behalf of the applicant</li> </ul>

The cost of this project is estimated to be: \$720 and is composed of the following cost categories:

- Staff time
- Meeting room space
- Supplies
- Travel reimbursement

### Section 3: Current State Performance and Desired Future State

- Describe the current state of the problem or opportunity and its current performance (baseline data): *The member list for review is generated. A letter to the member and their physician is sent for completion. The process of receiving the letters from the patient and physician averages 8 weeks. Staff follow-up calls to physicians and members as well as the certified mail correspondence averages 1.1 hours per member.*
- Describe the ideal future state: *Ideal state includes pre-qualification of members. This would reduce per member time spent on follow up and correspondence as well as the cost of certified mail.*
- What are the key driving and restraining forces impacting the current state and the ideal future state?



### Section 4: Improvement Description:

- This effort should improve the current state by:
  - Describe the improvement goals to be achieved:
    - *Cost of mail will be reduced by 10% which is equal to \$2,000 from the current level of \$20,000*
    - *Time savings of staff. Should be 10%*
    - *Provider time saves and improved customer service overall.- see a 15% increase in customer satisfaction scores from the current level of 3.9*
  - The timing of these improvements
    - *The improvement will start at the next membership review period. This process occurs on the 15<sup>th</sup> of every month.*
  - We will measure improvements by:
    - *Measure time spent on follow up calls and creating letters.*
    - *Track cost of certified letters going to members*

### Section 5: Internal and External Customer Identification:

For the following customers/clients: *members, physicians, physician's staff, internal health department staff* \_\_\_\_\_  
(customers, staff or those affected by the process under improvement)