

**Returns On Investments  
Economic Quantification  
Strategies**

**NOSORH Region B  
August 6, 2009**

---

---

---

---

---

---

---

---

- Introduction
- Evaluation
  - Measurement
  - Quantification
  - Economic Quantification
  - Returns-on-Investments From SORH Programs
  - Story-telling
  - Cautions
  - Conclusions

---

---

---

---

---

---

---

---

- Basis of Findings and Suggestions**
- **Economic Quantification Strategy Studies (ORHP, PA, VA)**
  - **Promising Practices Study (NOSORH)**
  - **Strategic/Business Planning for SORHs**

---

---

---

---

---

---

---

---

**General Assumptions**

- **Most Offices describe their performance qualitatively. Where quantitative measures are used, they are almost always process or output measures (counts) which are rarely linked to measurable outcomes**
- **The impacts of SORH actions are generally not well demonstrated to the extent that the causal relationships between the SORH actions and results are clear.**

---

---

---

---

---

---

---

---

**General Assumptions**

- **The Offices are compelled by the limitations on their resources to invest most of their time and money in the tasks of carrying out basic Office functions.**
- **Emphasis on detailed, quantitatively supported, outcome evaluation has not seen as a "basic" Office function and may not be economically achievable beyond limited evaluations.**

---

---

---

---

---

---

---

---

**General Assumptions**

- **Some Offices are doing better than others carrying out their responsibilities and in arguing for continued and expanded responsibilities and resources using their current approaches to documenting performance and value.**
- **Nonetheless, in many states, there is insufficient "proof of value" to secure any, or more than token, state resources.**

---

---

---

---

---

---

---

---

**Evaluation—Who is Expecting What?**

- **Obama Administration?**
- **Congress?**
- **HRSA?**
- **ORHP?**
- **State Government?**
  - **And at what levels?**
- **Other Funders?**
- **State Office’s own drive for excellence?**
  
- **What needs to be know by whom, in what format, where, when, and why?**

---

---

---

---

---

---

---

---

**Evaluation**

- **Does Evaluation Equal Measurement?**
  
- **Does Evaluation Require Measurement?**
  - **Quantitative?**
  - **Qualitative?**

---

---

---

---

---

---

---

---

**What Do Offices Measure or Not Measure?**

- **All program evaluation training begins with some rendition of the adage “begin with the end in mind”.**
  
- **The best forms of evaluation are planned to collect baseline measures of what conditions are prior to any program activity. They should identify data collection methodology that is achievable and meaningful. They should have a planned approach for the analysis and the use of the results of the evaluation.**
  
- **The SORHs have a long history of very few requirements for reporting evaluations that meet these criteria.**

---

---

---

---

---

---

---

---

### The Utility of Measurement

- The need for “measurements” varies considerably depending on:
  - The definition of the objective
  - The intent and timing of the presentation
  - The person or organization to which the information is being directed, and
  - The local, state, or national environments where the discussions are occurring
- The need to align the type and use of the measurement and the discussion of results with the specific target audience is a critical issue.

---

---

---

---

---

---

---

---

### A Few Key Questions

- What level of “proof” is required?
  - Academic, publishable, juried-quality?
  - Enough to Convince?
- The simple, fundamental questions that should perhaps be asked about SORH activities are:
  - “So what?”
  - “Who really cares and how do you know?”
  - “What difference did the Office’s action make?”
  - “How much did it cost to achieve the results?”
  - “Was it worth it?”

Unfortunately, most SORH cannot or do not answer these questions.

---

---

---

---

---

---

---

---

### What Do Offices Measure?

- There are minimal examples of quantitative measurement or outcome measures.
- Where quantitative measures are used, they are most often “counts” of activities, rather than measures of outcome.

---

---

---

---

---

---

---

---

### What Do Offices Measure?

- Perhaps more significantly, some of the key attributes of the SORHs that most often represent their own greatest perceived values are the most difficult to measure. For example, Offices work on:
  - building leaders' understanding of rural health issues
  - making sure that a rural voice is brought to various discussions
  - building relationships with other organizations
  - assisting other organizations to identify needs and shaping plans
- Such "business" activities do not lend themselves to traditional forms of measurement and certainly, the "profit" indicators available to traditional businesses are not applicable.

---

---

---

---

---

---

---

---

---

---

### What Do Offices Measure?

- This leads to numerous "soft" performance measures in the "process" category including:
  - "Leaders will better understand relationships, data issues, and available resources."
  - "Planning will be enhanced."
  - "Residents will be better informed."
  - "Stakeholders will have better access to data."
  - "There will be heightened awareness of rural issues among stakeholders."
  - "We work with...We meet with...We talk with...We collaborate with..."
  - "We provide technical assistance to..."
  - "We participate in meetings of..."
  - "We are members of the following task forces/study groups/councils/coalitions."
  - "We work with our partners to..."

---

---

---

---

---

---

---

---

---

---

### But Having Said all this...

- Do these measures define Office performance ?
- It depends.
- But, this leaves very big "So What?" and "What difference did it make?" questions.

---

---

---

---

---

---

---

---

---

---

## Return-On-Investment Modeling

- Defining Outcome/Return
- Defining Cost/Investment
- Economic ROI Modeling
- Utility of Return on Investment or Economic Impact Analysis Information

---

---

---

---

---

---

---

---

## Return On Investment 101



---

---

---

---

---

---

---

---

## Beginning With An End In Mind

- **The Model has several applications. SORHs can use it to:**
  - Measure and demonstrate the direct and indirect economic impacts of major programs and other initiatives on community, regional, or state economies
  - 2) Calculate and demonstrate the economic ROI on SORH funds
  - 3) Add quantitative economic value factors to other measures of an Office's performance
  - 4) Demonstrate that
    - a) the economic returns to a state from investing in a SORH are almost always a significant multiple of state tax revenue investments, and
    - b) that SORHs can be small economic engines for both rural communities and states.

---

---

---

---

---

---

---

---

The Basic Model

- **Basic Model/Equation**
- **Seven associated templates with 100 examples**

---

---

---

---

---

---

---

---

**The Basic Model**

**Economic Gain (\$) x Results Attributed to SORH (%) x Economic Multiplier**  
**State Office Cost**  
  
**=Return On Investment (ROI)**  
**Measured in \$'s of Economic Impact/\$ of SORH Cost**  
  
**You can substitute "jobs" for \$\$\$!**

---

---

---

---

---

---

---

---

Example

- A SORH works very actively with an administrator and the board of a small hospital to help the hospital achieve Critical Access Hospital status.
- This in turn results in \$1,000,000 in estimated gains in Medicare and Medicaid reimbursement.
- The Office and the hospital believe that conversion would not have been obtained without SORH assistance, and the SORH feels that it can take 80% of the credit for the results achieved.
- This translates to a dollar value attributable to the SORH's action of \$800,000 (\$1,000,000 x 80%).

---

---

---

---

---

---

---

---

### Example

- The full, community economic value attributable to the SORH is estimated by applying a multiplier of 1.5, for a overall economic gain of \$1.2 million (\$800,000 x 1.5)
- The SORH estimates its cost of working with the hospital (staff, overhead, travel) to be \$15,000.
- The ROI is \$1.2 million/\$15,000 or \$80/\$1 of the SORH's "investment" in achieving the results.

---

---

---

---

---

---

---

---

### Estimating Economic Impacts

- **Primary Economic Impacts**
- **Bringing "New" Dollars Into a State and Facilitating the Distribution of State Funds**
- **Longitudinal, Periodically Repeating, Interdependent, Reinforcing Gains**

---

---

---

---

---

---

---

---

### Estimating Economic Impacts

- **Gains Usually Much Higher Than the Amount Attributable to a SORH (Share the gain)**
- **Initial Templates Were Geared to One-year Results and Positive Economic Gains**
- **Thin Line Between Marginal Success and Marginal Failure.....Sometimes the Gain Is Survival**

---

---

---

---

---

---

---

---

### Economic Multipliers

- Economic multipliers are factors, that when applied to primary economic effects, demonstrate the ripple effects, or reverberations, of linked, sequential expenditures starting with healthcare and expanding through the community or State.

– Built on the collaborative efforts of the ORHP, the **Rural Health Works (RHW)** program and a substantial number of individual contributors.

---

---

---

---

---

---

---

---

### Economic Multipliers

- Rural Health Works Experience and the IMPLAN model (IMPact analysis for PLANning)

- RHW has found that the most common multipliers, for many expenditures, can be estimated at 1.3-1.7 at a county level and approximately 2.0-2.5 at a State.

- Initial templates use average/estimated multipliers of 1.5-1.7 as the county multiplier and 2.2 as the State multiplier.

- Precision can be increased (if needed)

---

---

---

---

---

---

---

---

### Determining Causality and Claiming Credit

- The Reluctance to Claim Credit

SORH have historically been careful in claiming credit for accomplishments in an operating environment that values cooperation and collaboration.

- But...the model requires that the SORH identify economic gains that can reasonably be attributed to SORH action.

- Thinking in terms of “abundance” and what your partners would find to be “credible”

---

---

---

---

---

---

---

---

### Some Questions That Might Be Asked

- Might the same results have happened without the SORH actions?
- Is the SORH playing a passive or minimal, enabling role?
- Did the SORH action actually produce a change in behavior or create an environment for success?
- Would the grantee or other party have gotten their funding or seen the economic gain without SORH action? Would there have even been a grantee to apply for funding without SORH action?

---

---

---

---

---

---

---

---

### Estimating SORH Costs

- The SORH costs attributable to a specific action or result may not be easy to identify.
- All examples require measurement or estimation.
- Reasonably defensible estimates from salary, overhead, and time records or specific budget allocations or percentage of available resources applied to the specific activity.
- The model considers only the costs related to SORH actions, as related to the "credit" given to the Office. Dollars invested are not the same as attributed causality.

---

---

---

---

---

---

---

---

### Some Qualifiers

- This approach is not an example of precision economics.
- They require the estimation of several variables and some subjective judgments.
- The model and the templates provide credible logic trails, with plausible, defensible, economic results that will also meet a common sense test.

---

---

---

---

---

---

---

---

Some Qualifiers

- It is highly likely that the ROI model will always be more effective when used in conjunction with non-economic discussions. (We will come back to this.)
- Discussing improvements in access to care, quality of services, and community collaboration make critical points about benefits and values that cannot be fully addressed solely "by the numbers."

---

---

---

---

---

---

---

---

State Office of Rural Health Functions

- Technical Assistance
- Information Clearinghouse
- Coordination of Rural Health Activities Statewide
- Support for Rural Recruitment and Retention Initiatives
- Participation in Collaborative Relationships That Foster State-Federal Partnerships

---

---

---

---

---

---

---

---

Templates/Examples

- **Technical Assistance (Grants) Template I**
  - Helping others to obtain funds
  - Grants/Contracts obtained by SORH
- **Technical Assistance (Other) Template II**
  - Consulting Type Services

---

---

---

---

---

---

---

---

**Templates/Examples**

➤ **Technical Assistance--FLEX Program/Critical Access Hospital Initiatives, Template III**

- Projections or Post-Conversion Assessments.
- Incremental Gains Versus Hospital Failures Prevented
- One Year or Multiple Year Results
- "Eligibility Determination"
- Local and State-wide Impacts

---

---

---

---

---

---

---

---

**Templates/Examples**

➤ **Education Programs, Template IV**

➤ **Support for Rural Recruitment and Retention-- Workforce Development, Template V**

---

---

---

---

---

---

---

---

**Support for Rural Recruitment and Retention**

- **New Physician Recruitment**
  - **Multiple factors to consider**
    - Inpatient and outpatient impacts
    - Recruitment costs
- **Replacing a Physician**
- **Provider Retention**
- **Designation Status Impacts**
  - Federally Qualified Health Centers , Community Health Centers, Rural Health Clinics, MUAs, HPSAs

---

---

---

---

---

---

---

---

### Rural Recruitment and Retention

- Private practicing Family Physician
  - Office practice \$342,744
  - Hospital associated revenues \$1,780,000
  - Savings on Recruitment costs \$10,000
  - Direct Returns = \$2,132,744

Multiplier 1.7 = \$3,625,665  
Attributable to Office 25% = \$906,416  
Office Cost = \$3,294  
ROI = \$275.2/\$1 invested

---

---

---

---

---

---

---

---

### Templates/Examples

- Participation in Collaborative Relationships
  - Leveraging Funding

---

---

---

---

---

---

---

---

### Example

- A SORH develops a project to evaluate collaboration options among CAH's. SORH Cost \$14,000 with hospitals contributing \$22,500.
- As one result of the project, a Foundation give \$850,000 to hospitals for pharmacy safety project
- Return attributable to the SORH's action \$425,000 (\$850,000 x 50%).

---

---

---

---

---

---

---

---

**Example**

- Project return attributable to the SORH (and this only one outcome) = \$425,000 x multiplier of 2.2 = \$935,000
- SORH Cost = \$14,000 initially plus \$10,000 time, staff, etc. later for total of \$24,000.
- The SORH ROI is \$935,000/\$24,000 or \$39/\$1 of the SORH's "investment" in achieving the results.

---

---

---

---

---

---

---

---

- **Leadership and Impacts on State and Federal Policy Initiatives** (The Unstated Mandate)
  - **Influencing Rural Payment Policies, Template VI**
    - For Example, Enhanced Medicaid
  - **Other State Office Programs, Template VII**
    - For Example, State Government Sponsored Funding Initiatives Such As Capital Expenditure Support Funds

---

---

---

---

---

---

---

---

**Utility of Return on Investment or Economic Impact Analysis Information**

**A wide diversity of opinion and many examples**

**The utility of economic analysis will vary along with the variations in State offices, with the intent and timing of the presentation, and with the person or organization to whom the information is being directed.**

---

---

---

---

---

---

---

---

**Dilemmas, Cautions, and Observations**

- Disaster lurks in not understanding and then poorly applying the methodology
- Many of the significant attributes or values of the Offices are not easily quantified, let alone State measurable in economic terms.
- Thinking in “business” terms about ROI is new to most SORH. Moving to this type of evaluation is a bit like learning a new language.

---

---

---

---

---

---

---

---

**Dilemmas, Cautions, and Observations**  
(continued)

- Actions taken and economic gains cannot be directly equated with the most appropriate scope of services, quality, or cost.
- There may be a shift of resources/expenditures from one geographic area or program to another, but no overall increase in resources or economic gain in total.
- When identifying economic multipliers, the impacts will depend on whether and how the grants, operational gains, or reimbursement gains are spent.

---

---

---

---

---

---

---

---

**Dilemmas, Cautions, and Observations**  
(continued)

- Some actions will increase Medicare, Medicaid, and other governmental costs.
- It is very difficult to identify costs avoided, or the value of preventing situations from deteriorating.
- Some of the templates may not be applicable to all SORH, but they may be helpful to sister agencies.
- Many States do not have an adequate database to provide the inputs.

---

---

---

---

---

---

---

---

**Conclusions**

**Utilization of the proposed approaches can be a powerful tool in the right settings.**

**Regardless of the options chosen for applying the model and templates, the process should not be taken beyond the point where sufficient additional value continues to be derived from incremental efforts.**

---

---

---

---

---

---

---

---

**Conclusions**

**It is highly likely that the ROI model will always be most effective when used in conjunction with non-economic discussions.**

**Discussion of improvements in access to care, quality of services, and community collaboration make critical points about benefits and values that cannot be fully addressed solely "by the numbers."**

---

---

---

---

---

---

---

---

**Contact Information**

**Jonathan Sprague  
Rocky Coast Consulting  
PO Box 1131  
Bangor, Maine 04402-1131**

**Phone: 207-990-0880  
Email:  
JonathanSprague@RockyCoastConsulting.com**

---

---

---

---

---

---

---

---