

Developing and Implementing Performance Measures

3rd Annual Pediatric Telehealth Colloquium

Developing and Implementing Performance Measures to Better Manage Your Program Tampa, Florida

September 15, 2008

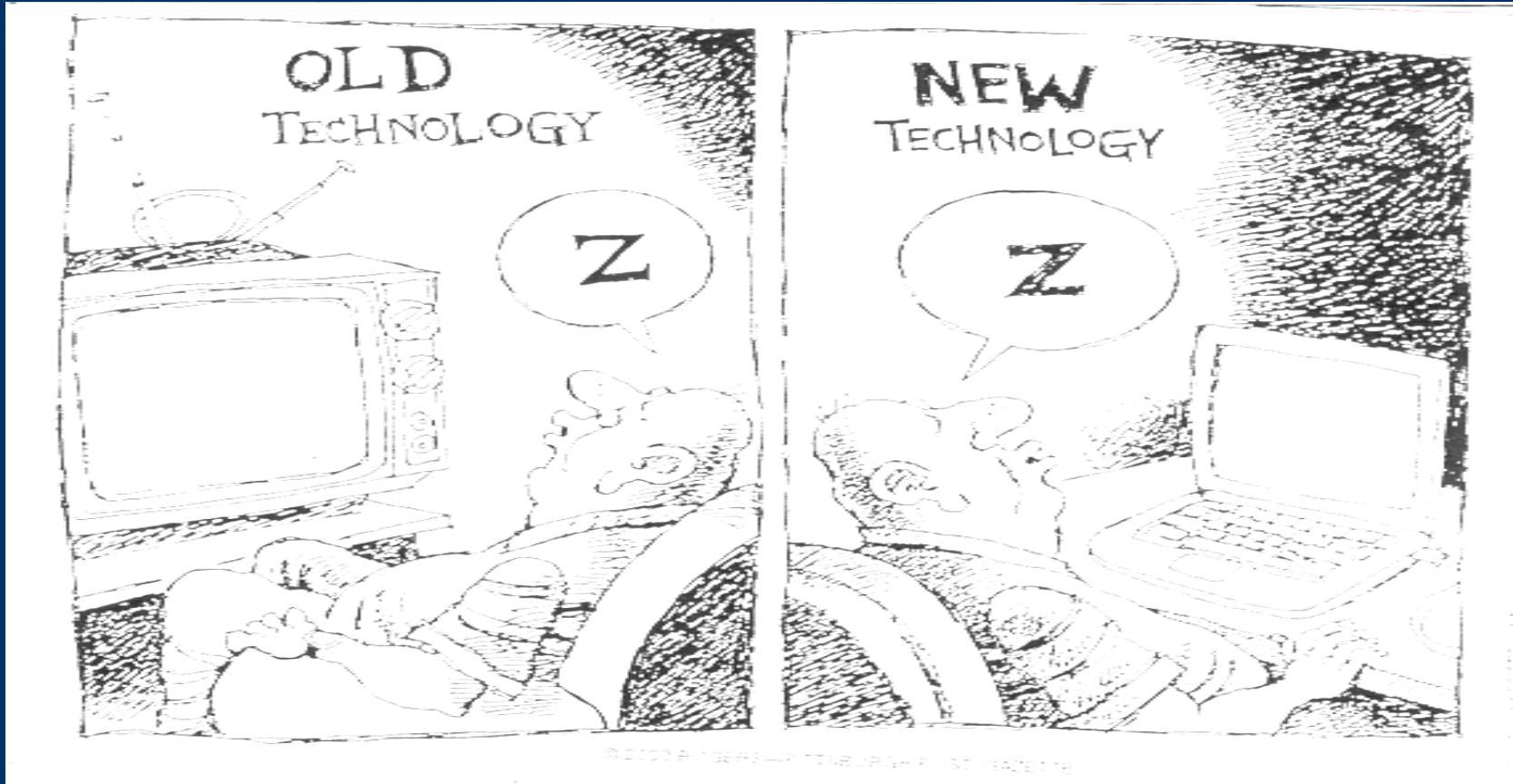
Dena S. Puskin, Sc.D.

Dept. of Health and Human Services
Health Resources and Services Administration
Office of Health Information Technology
Office for the Advancement of Telehealth



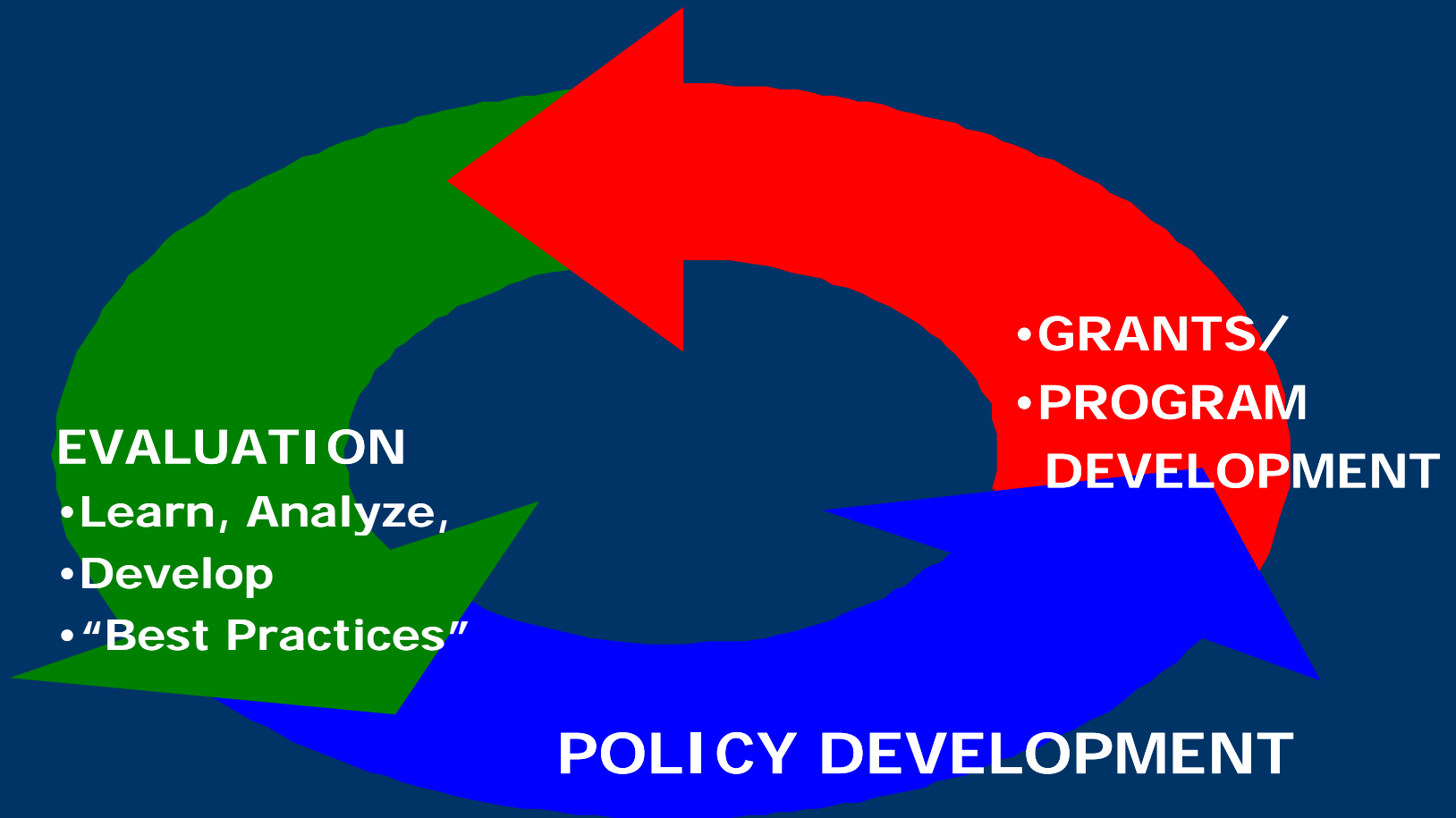
WHAT WE WILL COVER

- **The practical importance for determining value added**
- **Two examples of measuring value-added:**
 - **HRSA Telehealth Performance Measurement System**
 - **The Home Monitoring Evaluation Project**



2000- Rogers: Pittsburgh-Post Gazette

Cycle of Excellence



Why Develop a Performance Measurement System for your Program

- Document Value-Added for Internal Customers
- Marketing/Service Planning
- Reimbursement
- Early Warning System/Mid-Course Corrections

GPRA and PART

- **OMB Requirements and Data Uses**

- **Government Performance and Review Act – GPRA**

- **Program Assessment Rating Tool**

- **Data Collection Tool**

OBJECTIVES OF TELEHEALTH NETWORK GRANT PROGRAM (TNGP) PERFORMANCE MEASUREMENT SYSTEM

- **Fulfill GPRA requirements**
- **Justify budget requests**
- **Create a performance measurement tool that allows reporting on common quantifiable objectives across all Telehealth Network Program grantees**

Additional Objectives for Measurement System

- **Collect uniform, consistent data to allow OAT to measure program performance using web-based tool**
- **Provide assistance to grantees on data collection to measure the performance**
- **Overcome “small numbers” problem in telehealth evaluations**
- **Initially limited to TNGP grantees but will be expanded to other telehealth grantees, as appropriate**

NOTE

- This is **NOT** an evaluation, or research study.
- This **IS** development of an ongoing reporting mechanism to generate progress indicators for Congress.
- Data will be reported in aggregate and will not be used to compare grantee programs.

Evaluation Framework for Measurement System

- **Establish a priori questions or hypotheses**
- **Determine Indicators**
- **Establish data elements**

The Process

- Selection of indicators
- Development of instrument to be incorporated in grantee progress reports
- Pilot study
- Technical Assistance to grantees
- Automation for web-based Progress Reports

Current GPRA Performance Measures / Indicators (Developed with Abt Associates and Grantees)

Performance Measurement System includes goals and accompanying indicators in four areas:

I) Improving access to needed services

II) Reducing rural practitioner isolation

III) Improving health system productivity and efficiency

IV) Improving patient outcomes

I. Improving Access To Care Indicators

Goal:

Fill gaps in service availability



Indicator:

Services unavailable in local communities now made available via TM.

Goal:

Reduce patient travel



Indicator:

Distance patient would have traveled to see the same consultant in-person.

II. Reduce rural practitioner isolation

Goal:

Expand rural practitioners' reliance on TM



Indicator:

Number of patients rural clinicians refer for TM, and range of specialties they refer in.

Goal:

Expand use of TM to supervise clinician extenders/trainees



Indicator:

Number of sessions for supervision of clinician extenders/trainees, by type of clinician extender/trainee.

III. Improve health system productivity and efficiency

Home Health Nurse Travel Time Savings Estimate

Data Period	Hours Saved	Salary Saved	Miles Saved	Travel \$ Saved	Total \$ Saved
Period 1	1,217	\$30,047	51,080	\$18,389	\$48,436
Period 2	924	\$21,874	27,378	\$9,856	\$31,730

III. Improve health system productivity and efficiency

Patient Travel Time Savings Estimate

Data Period	Total Patient Sessions	Total Patient Travel Miles Saved	Av. Miles Saved per Session	Total Travel \$ Saved	Av. Travel \$ Saved Per Session
Period 1	9,261	2.75 mil	297	\$990,003	\$107
Period 2	8,573	2.76 mil	322	\$993,110	\$116

Performance Measurement Data Collection Tool

OAT Data Collection Tool

www.oatdata.org

Monica M. Cowan

Data Collection Period

**Every Six Months as Part of
Grantee Progress Reports**



PROGRAM

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RATING

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**IMPROVEMENT
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PROGRAM ASSESSMENT

Telehealth Network Grant Program

The Telehealth Network Grant Program (TNGP) awards demonstration grants to networks that show how telehealth technologies can expand access to quality healthcare; improve and expand training of health care providers; and expand and improve the quality of health information available to providers and patients.

PERFORMING

Moderately Effective

- **The TNGP addresses the lack of access to quality health care services in rural and other under-served communities.** The Program funds networks of health care providers that typically can include clinics, local health departments, universities, home health care providers, long-term care providers, and hospitals to develop and implement telehealth systems in resource-poor communities.
- **The program has succeeded in expanding access to services in underserved rural communities.** As of 2005, TNGP grantees used telehealth technologies to provide 39 different types of clinical services, representing a total number of 150 clinical services, across 339 sites in underserved rural communities.
- **The impact of the program on patient clinical outcomes is unknown.** Because the primary focus of the program has been to fund grantees to build and demonstrate the usefulness and financial viability of telehealth systems in providing health care, further work is needed to measure the program's impact on clinical outcomes.

We are taking the following actions to improve the performance of the program:

- Collecting data on a new long-term measure to assess the impact of the program's activities on clinical outcomes in diabetic patients served by grantees of the program.
- Tracking performance against benchmarks and refining performance goals for the other program measures.
- [View Similar Programs.](#)
- [How all Federal programs are assessed.](#)

Access to Mental Health Services **(Long-term/Annual – Output)**

Increase the number of communities that have access to pediatric and adolescent, and adult mental health services where access did not exist in the community prior to the Telehealth Network Grant Program award (TNGP).

Telehealth Chronic Disease Management **(Annual – Outcome)**

Increase the proportion of diabetic patients enrolled in a telehealth diabetes case management program with ideal glycemic control (defined as hemoglobin A1C at or below 7%) in each year of the three-year grant cycle.

Telehealth Chronic Disease Management cont'd **(Long-term – Outcome)**

Increase the proportion of diabetic patients enrolled in a telehealth diabetes case management program with ideal glycemic control (defined as hemoglobin A1C at or below 7%).

A “NEW” form has been added to the www.oatdata.org website that will collect three numbers from the Telehealth Network Grant Program Grantees, in order to meet these “Chronic Disease Mgmt.” measures:

- (1) Number of individuals served (unique, unduplicated patients) in the 6 month period.**
- (2) The number of diabetics served in the past 6 months who were getting care through your program for at least 3 months - your chronic disease management diabetic patients**
- (3) The number of these diabetic patients whose HgA1c is <7% (i.e. whose blood glucose is under control). If you don't serve diabetic patients, you will not need to provide these last two numbers.**

Expand the Number of Telehealth Sites & Services **(Annual - Outcome)**

Expand the number of telehealth services (e.g., dermatology, cardiology) and the number of sites where services are available as a result of the TNGP program. This is calculated as the cumulative number of services and sites across all grantees in each year of a three-year grant.

Efficiency of Telehealth Sites & Service **(Annual)**

Expand the number of services and/or sites that provide access to health care as a result of the TNGP program per federal program dollar expended. This will be expressed as the number of services + sites per \$1 million program dollars," which is calculated as follows:

Numerator = The number of sites+services provided in each year divided by the Denominator = Annual federal appropriation for the TNGP grants.

Health Outcome Example

	FY05	FY06	FY07	FY08	FY09
Outcome	Actual	Actual	Target	Target	Target
Increase the % of diabetic patients enrolled in a Telehealth diabetes case management program with ideal glycemic control (defined as hemoglobin A1c at or below 7%). (Est. Baseline for 2006 = 10%)	NA	34%	21%	30%	14.5%

Access Outcome Example

	FY05	FY06	FY07	FY08	FY09
Outcome	Actual	Actual	Target	Target	Target
Increase the # of communities with access to pediatric and adolescent mental health services as a result of the Telehealth program that did not have previous access	101 peds/ 72 adults	190 peds/ 125 adults	160 peds/ 34 adults	160 peds/ 134 adults	207 peds/ 175 adults

Sustainability of Telehealth Programs **(Long-term – Output)**

The percent of TNGP grantees that continue to offer services after the TNGP funding has ended.

Home Telemonitoring Study

Home Health Agencies Participating

- St. Patrick's: Montana (7 agencies)
- Citizens: Missouri
- Home Nursing Agency and VNA: Pennsylvania

Time-Frame for Study

October 1, 2007- December 31 2009

Nine Study Questions

Do telehealth home monitoring patients have:

1. More discharges to the community?
2. Less emergent care visits?
3. Less acute care hospitalizations?

Study Questions

Do telehealth home monitoring patients have greater improvement in:

4. Management of oral medications?

5. Pain interfering with activity?

6. Transferring?

Study Questions

Do telehealth home monitoring patients have greater improvement in:

7. Ambulation?

8. Dyspnea?

9. Bathing?

Quasi-Experimental Design

2 Study Groups:

Treatment Group: Telehealth home monitoring

→ prospective cohort.

Control Group: Traditional home care

→ historical cohort.

Summarizing Challenges

- **Design**

- Nonrandomized
- Unit of analysis: patient vs. episode
- Handling "Frequent Flyer" patients
- Inter-rater bias
- Controlling for demographic, payer-mix differences between agencies

- **Data Collection**

- Small, multi-site community-based research with providers not familiar with research protocols
 - *Combining data from three agencies*
 - *Staffing/Lack of redundancy*
 - *Technological support*
 - *Provider acceptance*
 - *Protocols for data collection*
 - *Education/Training of data collectors & providers*



CONTACT US

Dena Puskin, Sc.D.

5600 Fishers Lane

Room 7C-26

Rockville, MD 20857

Phone: (301) 443-3682

Fax: (301) 443-1330 Fax

E-Mail: dpuskin@hrsa.gov

