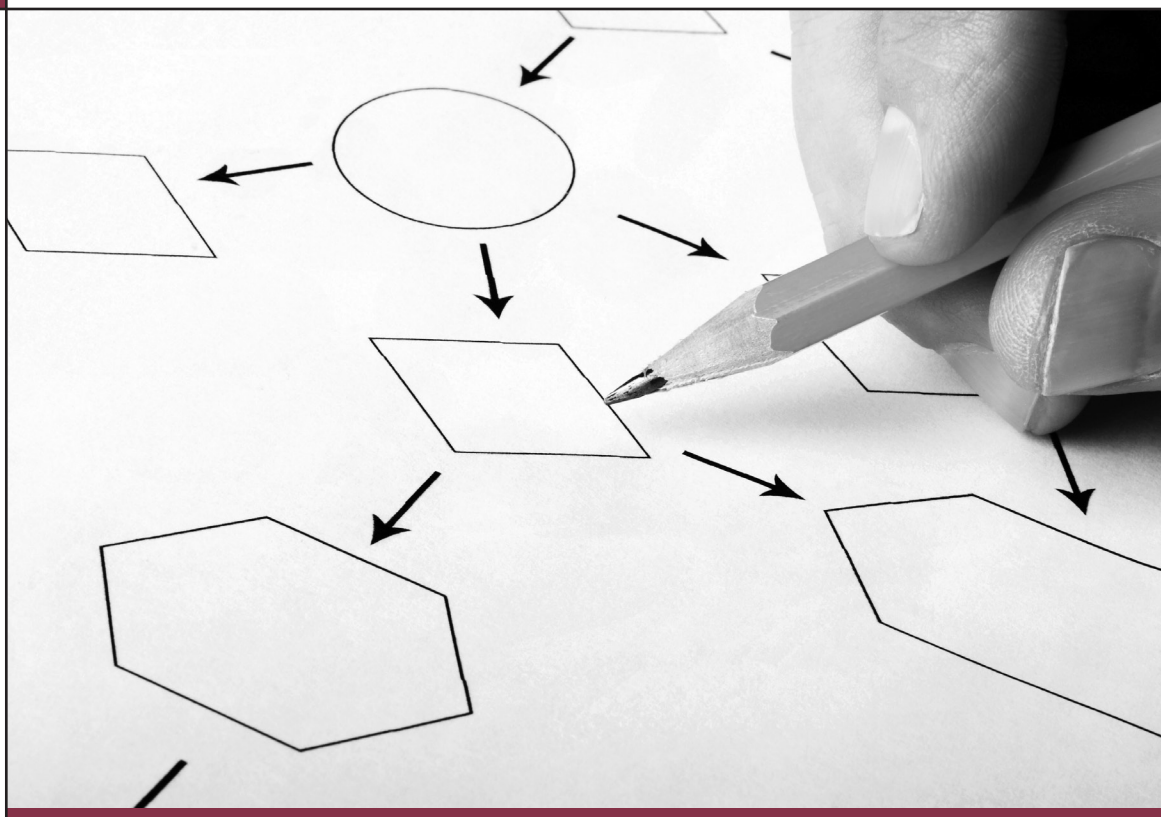
Organizational Transformation Series

Transforming State Government Services Through Process Improvement: A Case Study of Louisiana



Vicki C. Grant
Vice President for Process Improvement
Southern Institute on Children and Families

IBM Center for
The Business of Government

2010

ORGANIZATIONAL TRANSFORMATION SERIES

Transforming State Government Services Through Process Improvement: A Case Study of Louisiana

Vicki C. Grant
Vice President for Process Improvement
Southern Institute on Children and Families

IBM Center for
The Business of Government

TABLE OF CONTENTS

FOREWORD

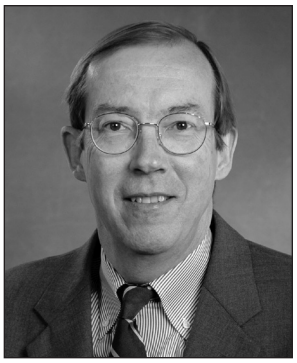
On behalf of the IBM Center for The Business of Government, we are pleased to present this report, "Transforming State Government Services Through Process Improvement: A Case Study of Louisiana," by Vicki C. Grant.

In the wake of the Katrina disaster, one Louisiana state agency leader used the "clean slate" provided as an opportunity to redesign the eligibility determination process for health care benefits provided to citizens in need.

Typically, the IBM Center for The Business of Government has chronicled stories of complex, large-scale organizational transformations, such those in the Departments of Defense and Veterans Affairs. But it is also important to tell the stories of frontline leaders who recognize that employing the basics of redesigning a process comes before any technological redesign, or complex data analysis.

This report is a firsthand story of commonsense management, using basic process management techniques to redesign a vital element of service delivery. Author Vicki Grant describes step-by-step processes used by a frontline agency leader to make a huge difference for thousands of beneficiaries of Louisiana's public health care system.

This report shows that—while technology helps—it is leadership that matters. We hope that this report serves as a useful guide and inspiration for public managers across government as they pursue ways to better deliver services to citizens.



Jonathan D. Breul

Shelley Mills-Brinkley

Jonathan D. Breul
Executive Director
IBM Center for The Business of Government
jonathan.d.breul@us.ibm.com

Shelley Mills-Brinkley
Partner, CRM Practice Area Leader
IBM Global Business Services
smillsbr@us.ibm.com

Introduction

Overview

The work of the Southern Institute on Children and Families and other organizations over the last several years has consistently demonstrated that process improvement strategies used in the private sector can be used in government benefit programs with measurable results. The application of process improvement to state programs is a new way of thinking for the states involved. One of the outstanding examples of success in implementing process improvements related to benefit eligibility determination is the Louisiana Department of Health and Hospitals (DHH) system for Medicaid and the Children's Health Insurance Program (CHIP). The experience of the Louisiana DHH in transforming its culture through continuous process improvement is described in this report.

Medicaid/CHIP Programs

Each of the 50 states and the District of Columbia administers the federal-state programs of Medicaid and CHIP. The programs provide health insurance to low-income families; children; and aged, blind, and disabled individuals who are eligible according to program rules. Because the states administer the eligibility determination process for Medicaid and CHIP in a variety of ways, it is often said that, "When you have seen one Medicaid program, you have seen one Medicaid program." Federal law requires that government employees make all Medicaid determinations. Medicaid eligibility decisions cannot be outsourced to private entities.

State Medicaid/CHIP agencies make and/or implement policy governing eligibility, health services, and health care providers. State agencies typically deliver eligibility services through their local or county offices or through a sister agency. Eligibility must be determined at the initial application for Medicaid/CHIP and must be redetermined at least annually for enrollees, with a few exceptions.

The systems for eligibility determinations across the country employ thousands of people and costs billions of dollars to operate. Technological advances have enabled states to gain tremendous momentum, as seen in the use of the Internet for submitting electronic applications in some states, and the move to paperless electronic Web-based systems in several others. While information management has gone high-tech, the system is still dependent on eligibility caseworker practices that have not been modernized.

The Louisiana Department of Health and Hospitals

The Louisiana Department of Health and Hospitals determines eligibility for Medicaid and CHIP at the state office and at its 39 parish (county) offices. Eligibility workers in parish offices determine eligibility on new applications and renewals. The state office has developed technological functionality that can automatically renew coverage when specified criteria are met. The eligibility operations statewide cost approximately $50 million.

Each month, new applications and renewals are processed. During the period July—November 2009, an average of 30,426 applications and 32,271 renewals were processed each month. Though the workload is rising, the number of staff has decreased by 25.5 percent between June 2008 and January 2010. The total division statewide—including policy, systems, support, and special services—includes 837 positions.

The fundamental shift has been from pencil and paper to keyboards and screens. However, a transformation of the underlying business model of processing applications and relationships with customers (applicants) has not changed significantly.

In the IBM Center report *Improving Service Delivery in Government with Lean Six Sigma,* Professor John Maleyeff wrote, "As we look into the future of process improvement in government, two things are clear: We know what to do and we know how to do it."[1] Even so, state and local governments are trailing behind the federal government, and certainly the private sector, in using improvement methodologies to achieve efficient, customer-centered delivery of services.

Louisiana Initiative To Reduce Delays In Eligibility Processing Time

Subsequent to the devastation caused by Hurricane Katrina in August 2005, Ruth Kennedy, deputy director for eligibility at the Louisiana DHH, recognized Louisiana's need to rebuild its eligibility system. Many staff and clients had evacuated, temporarily or permanently, or could not be located. Housing and office space had to be replaced or restored and temporary arrangements had to be made. The entire landscape had changed. In this stressful time, Kennedy stated, "I don't want to just rebuild. I want to build an improved system."

Prior to Hurricane Katrina, Kennedy and several eligibility staff from New Orleans had already participated as a team along with teams from 13 other states in the Covering Kids and Families (CKF) Eligibility Process Improvement Collaborative II led by the Southern Institute. The collaborative effort and the City of New Orleans were conducting innovative small-scale tests on income verification with employers when Katrina struck.

Kennedy took stock of the eligibility system and was aware of several factors:

- Since 1999, Louisiana had incrementally and continuously simplified eligibility policies while maintaining the integrity of the system, by not increasing errors and assuring that enrollees were truly eligible.
- Workloads were increasing in field offices and in the state office.
- The eligibility system had to be capable of producing more with stable or declining resources.
- There were thousands of uninsured but eligible Louisiana citizens who could be enrolled.
- There were issues related to enrolled clients who failed to initiate or complete the renewal process and lost coverage.

In early 2006, the Louisiana DHH, with funding from the Robert Wood Johnson Foundation, engaged the Southern Institute to develop and lead the Louisiana Eligibility Process Improvement Collaborative (LEPIC) for teams of eligibility staff from local offices.

Leadership

As the deputy director of eligibility, Ruth Kennedy is a leader with credibility and vision. She got her start in eligibility as a caseworker. She knows what it is like to work in a local office, and she knows the various interactions caseworkers have with customers. And she communicates throughout the system by providing all workers data on the degree to which targets are being met. Her broadcast e-mails are written to give information, to encourage staff, and to connect the dots on how Medicaid coverage affects health.

Kennedy envisioned that Louisiana could use Medicaid and CHIP to reduce the number of uninsured, particularly children and families, by enrolling those who are eligible. To accomplish this, she oversaw implementation of measures to streamline the eligibility process, eliminated unnecessary burdens on customers and workers, and refined policies to make the eligibility process effective while maintaining a high rate of accuracy.

Prior to implementing a process improvement program, a vision of a different future is essential. It takes leadership qualities to ask the question, "How can we do our work better?" Asking the question implies that the work is not the best that it can be. Kennedy recognized that it was not a lack of staff effort that thwarted productivity. She understood the importance process plays in productivity.

As a leader, Kennedy knew that simply setting goals was not sufficient to reach them. Resources had to be committed as well. The additional resources that were allocated were a half-time position (for the

day-to-day process improvement manager), time for field staff to test and develop improvements, staff training, and the collection of data for feedback and learning. Kennedy knew that management's job was to commit the resources and to give personal attention to the efforts of local staff. The ideas for change would come from the field, if it were given the knowledge and time to innovate and test.

Kennedy involved all levels of the eligibility system, both horizontally and vertically. These included her full executive team and their staffs, the regional managers and assistant managers, field supervisors, front-line eligibility workers, and clerical staff.

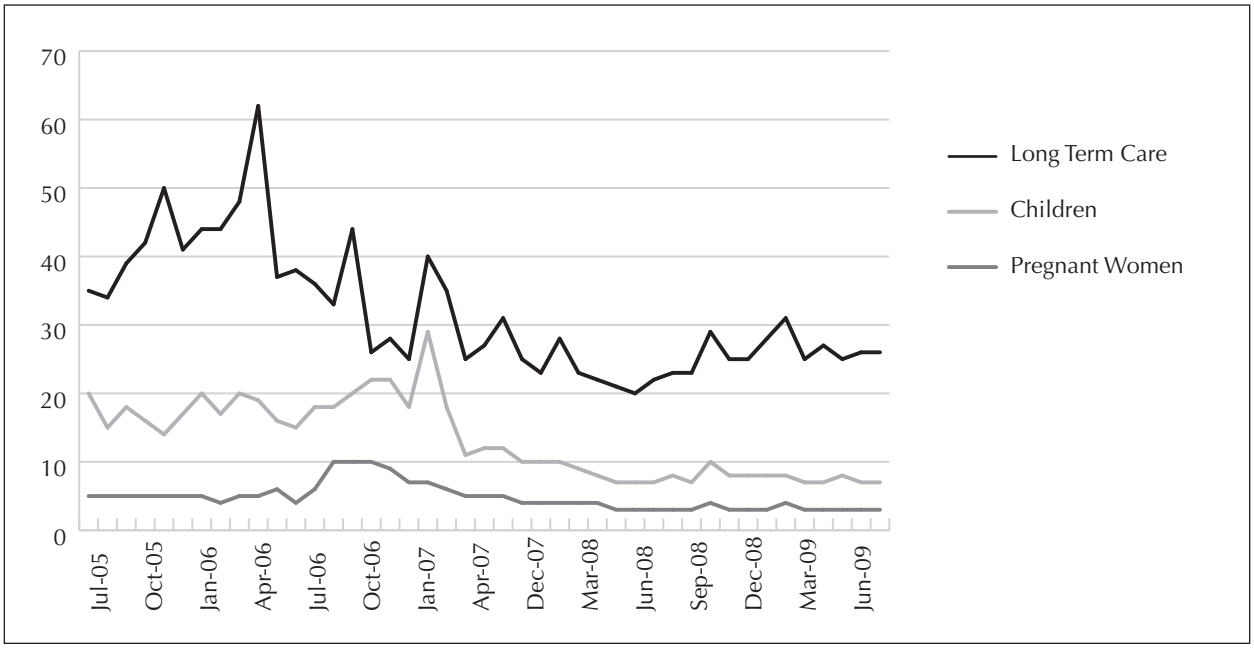
Launching Process Improvement in Louisiana

Process improvement in Louisiana was launched with the creation of the Louisiana Eligibility Process Improvement Collaborative (LEPIC) in February 2006. The customer-centered goal was to reduce the processing times for Medicaid/CHIP applications. Processing time is the number of calendar days from the date the application is received to the date of the decision to approve or deny. The federal requirement stipulates that the decision should be made within 45 days for child-related cases and within 90 days for elderly and disabled cases. The collaborative goal was to reduce processing time to five days for pregnant women, 15 days for children, and 25 days for long-term care applicants. As shown in the graph below, by June 2009, Louisiana's average processing times were three days for pregnant women, seven days for children, and 27 days for long-term care applicants. The results are now well below the federal requirement.

One of the most compelling parts of the Louisiana story, in addition to the dramatic decrease in processing time, is the cultural shift that occurred in the Medicaid/CHIP workforce. The deputy director of Medicaid/CHIP eligibility had the vision that a high-performing workforce could increase productivity substantially while becoming more customer-centered. The learning collaborative launched the effort of learning about and utilizing process improvement methods.

The following sections describe the actions that Deputy Director Ruth Kennedy took to transform the Medicaid/CHIP eligibility unit's culture to one of a

Figure 1: Louisiana Processing Time for Medicaid/CHIP Eligibility Determinations—2005–2009



high-performing system with a constant focus on customers.

Action One: View Work as a Process

A process transforms or changes an input into an output. In eligibility work, the process begins with receiving an application and ends with informing the applicant of an eligibility decision. Receiving an application is the input, analyzing the application information in relation to policy transforms a listing of facts into a decision on eligibility, and communicating the decision to the applicant is the output.

This high-level description of the eligibility process is performed by hundreds of workers, day in and day out. On closer examination of the process, one sees many steps from start to finish, handoffs between staff from clerical to supervisor to eligibility worker, travel through the mail room, and communication with the applicant about verification or incomplete information. Overlay on this process the reality that applications continue to be submitted and have to be distributed among workers, that applicants call to ask about the status of their applications, that applications are incomplete and workers wait on verification or other documentation to be received, that appointments are scheduled, that unexpected clients walk in and have to be seen by someone, that electronic systems do not work 100 percent of the time—which stops work, that managers call staff meetings, and that co-workers take time off.

As processes become more complex and the workarounds become ingrained, the complexity becomes taken for granted as a part of the work. The documentary "Good News ... How Hospitals Heal Themselves" gives an impressive recount of how nurses and pharmacists began to see their work differently after learning about process improvement and began to redefine some work as error or waste.[2] For example, nurses began to see hunting for wheelchairs or supplies as errors, and not as a normal part of the job. This reframing allowed them to think about how to eliminate these non-value-added steps in order to spend more time adding value to the patient's experience.

Louisiana redefined steps and actions as it learned more about the processes. The federal requirement to make eligibility decisions within 45 or 90 days had been viewed as the allowable time span within which to make a decision. Kennedy set targets of five days for pregnant women, 15 days for children, and 25 days for long-term care applicants. As staff learned more about the processes, they began to understand that these shorter cycle times were a service to customers.

Kennedy also redefined backlogs to no longer mean going beyond 45 or 90 days. A backlog was redefined to begin the moment all of the information is available to make a decision on an application or renewal—and a decision is not made. No longer would a backlog be thought of as something pending beyond 45 days.

Action Two: Redesign the Flow of Work

Many variables affect how an application flows from step to step, from worker to worker. The knowledge needed by managers is how to flow work smoothly utilizing data on customer demand and capacity: What is the volume of applications received each month, or each day? How many applicants walk in, how many call, and why do they call? What are the applicants seeking? How many applicants are children—or, are nonelderly adults, or elderly, or disabled? There are a variety of questions to answer to understand customer demand. Similarly, capacity should match the type and volume of demand.

Long a feature of providing health and social services is the concept of caseload management. Organizations compare workload on the basis of cases assigned per worker. But how do new supervisors learn how to manage and distribute caseloads? Typically, they learn from other people in the office who have always done it the same way. In many offices, caseloads are distributed among workers today as they were before the use of automated systems. It is a common practice for caseloads to be assigned by a staff person on an alphanumeric system or in rotation. The system of distributing work is usually accompanied by the practice of keeping logs to track assignments manually or electronically. These logs are typically used as a master list in case someone needs to know where an application is. Try eliminating the logs, and one finds they are used as crutches to hold up a system that feels overloaded and error prone.

Service organizations can make substantial improvements by eliminating or reducing processes and steps that do not add value. A Louisiana eligibility worker stated that she did not know her office had any problems until they started to view their work differently. When "the way we do our work" is analyzed and sorted into value-add and non-value-add categories so that the latter can be eliminated, time and resources can be recovered and reallocated. Eliminating multiple handoffs of work and pushing work in batches are ripe opportunities for improving quality and speed.

Managing a process to get work done is a very different perspective than managing people to get work done. When the focus is on improving a process or investigating why a process failed, the desired environment takes on the context of solving problems in the system and not blaming people. Blaming staff for process failures is a sure way to incentivize staff to hide problems and to game the numbers. "Drive out fear, so that everyone can work effectively for the company" was one of Dr. Edwards Deming's 14 Principles for Management.[3]

Action Three: Redesign the Distribution of Work

"Lean thinking" is a growing body of knowledge that focuses on the speed of a process by reducing or eliminating waste in the process. This thinking is embodied in the culture of Toyota and is referred to as the Toyota Production System (TPS). Many hospitals are learning about and employing TPS in their improvement efforts. Several key Lean concepts include pull, visual management and elimination of waste. These concepts were emphasized during the LEPIC and are in various stages of implementation.

- **"Pull" is a concept used in designing the flow of work.** The common approach to caseload management in eligibility offices is to assign cases to workers in batches; in other words, to push work without regard to the worker's readiness to work on the next case. Fast workers or workers with simple cases finish sooner than slower workers or those with complicated cases. Some assignment approaches assign cases to workers not available for work or on leave, which often necessitates a supervisory intervention to reassign.

  Pull systems are based on available workers pulling applications to work from a queue. The mentality of caseload shifts from "my" caseload to "our" caseload. It is quite common when offices move to a pull system that the assigner can be redeployed to work that adds value to the customer. Another aspect of pull is that workers no longer store caseloads in their offices. Supervisors have observed that, as they made the transition from push to pull, the work became visible and they realized how much work had been hidden from view.

- **"Visual management" should accompany pull systems.** In its most basic form, the work to be done is available for all to see. Some offices use open shelving to place incoming applications and do not allow them to be filed in cabinets, where the work is hidden. In a paperless office, staff have shared online "in basket" queues from which to pull applications. At a glance, the office can see the status of work and determine if adjustments should be made immediately to do today's work today.

- **"Elimination of waste" is fundamental to process improvement.** "Waste" is a broad concept that can refer to anything that does not add value to making an eligibility determination quickly and accurately. Waste can be found in many forms. Common examples include asking the customer to provide a verification document when an existing document serves the same purpose, incorrect data entry, using incorrect addresses and contact information, and automated case terminations that have to be reopened. Other forms of waste include time lost because of bottlenecks, batch processing, handoffs between staff, unnecessary process steps, and equipment downtime. Another significant waste of time is having to respond to customer telephone calls because earlier communications to customers were not clear.

Action Four: Respond to Customer Needs in Redesign of Work Flow

Knowing and understanding customers is critical information to designing, improving, and managing processes. Every process has a customer, internal or external, defined by who gets the output of a process. As an example of internal customers, consider

the distribution of mail within an eligibility office. In some offices, mail received in the afternoon is not distributed until the next workday. Mail received from Monday through Thursday can be distributed within the week of receipt. Mail received on Friday is distributed three days later. The mail process is designed to distribute all incoming applications to a supervisor for assignment to eligibility workers. The supervisor's assignment process is to assign applications on a rotation basis and to enter assignments into a log. The final step is to place assigned applications into each worker's office mailbox for pickup by the worker. From the perspective of the mail distribution process, it might be an efficient process. But a systems view suggests that this process actually creates delays that are felt by and measured in the following process of eligibility determination. This series of steps has caused the customer's application to wait to be worked on by one to four days, and the eligibility worker's processing time on that application began one to four days prior to receiving it. This series of processes is not designed to support eligibility workers to make eligibility decisions as quickly as possible, and can serve as a source of frustration.

In the scenario above, the external customer is the applicant who completes and mails an application to the eligibility office. From her point of view, the eligibility process began when she started completing the application. The customer's clock begins before the eligibility office's official clock. Depending on her circumstances, she may be anxious to receive an answer so that she can take her next steps to schedule medical care for her child. After waiting what she considers a reasonable time and not having heard anything, she calls the eligibility office to find out if her application was received or if more information was needed. This one customer has made two demands on the office: The first demand was to submit an application for eligibility determination, and the second demand was to ask questions about the status of her application over the telephone.

Responding to external customer calls is a major source of lost time and is perceived as an interruption by many eligibility workers. Every call requires the worker to stop the current work, listen to the question, find the paper or electronic application, review it to determine its status, answer the question and file the application again, return to the previous work, determine where she was, and proceed from there. This example is simple because it does not account for the likelihood that the caller had to call a general number, be put on hold, transferred to another person, and leave a voice mail message asking for a return call that takes place later. This caller, already worried about her application and the need to access health care for her child, feels frustrated with the service she has received.

An external customer judges service from end to end, from filling out the application to receiving a final decision. Customer-centered services should be designed from end to end so that an application can flow unimpeded, without internal waits and delays, and a correct decision is made quickly. In the example above, delays began in the mailroom, and as the application moved through the process, more delays were added. The customer calling to inquire about the status of her application did so because the system failed and caused the additional demand for service.[4] Demand failure is often responsible for customer dissatisfaction and worker stress. Demand failure also is costly. It is management's responsibility to understand customer demand to eliminate or reduce predictable demand failure.

Currently many states have implemented or are creating call centers to relieve the burden on local offices. If demand failure as described above is not addressed, these systemic problems are simply transferred to a call center. And, if the call center does not address this demand failure, it will require more resources in time.

There are many internal and external customers in large enterprises such as state agencies. Two external customer groups of utmost importance are state legislative bodies, and the current enrollees and potential applicants. State office staff serves both groups. It is not unusual for state staff to get caught up in serving legislative members, particularly during legislative sessions, and delay work that directly impacts customers.

Ruth Kennedy maintained a relentless focus on external customers—Medicaid applicants and enrollees. Her external customer focus set the stage for the improvements to be made. Kennedy viewed an external customer focus as a win-win for workers. Not only would clients be served well, but

workers would be less stressed and could feel good about their achievements.

In large government bureaucracies, it often takes courage to acknowledge problems and to allocate resources to solve problems. In many states, processing time is defined as a problem when it is out of compliance with state or federal regulations. In this view, the applicant or customer is not driving the system, and the workforce is not being supported to be customer focused.

Listening to external customers—their expressions of thanks and their complaints—provides managers with a wealth of information about process and systems. Before one can really listen and hear what is being said, one must acknowledge that there are problems that can be eliminated or ameliorated. This acknowledgement is a courageous step taken by the managers and leaders who are willing to have their departments' work examined by others, internally and externally, and who are willing to disclose that problems exist.

Action Five: Analyze Data to Improve Flow and Customer Service

Reliable, relevant, timely data are fundamental to good management and to improving work. State agencies invest a great deal of public funds in information management systems that are capable of producing hundreds of data reports. In the eligibility field, the available data for reviewing outcomes varies from state to state and within states. For example, California has four different eligibility data systems, wherein Los Angeles County has its own system and the other 57 counties use one of the other three systems. The availability and quality of data on enrollment and retention varies across the four systems.

There are three strategies that should be employed for using data:

- **Analysis of data over time.** By analyzing data over time—day-to-day, week-to-week, month-to-month, or year-to-year—the reviewer can see if patterns exist in the data. Too often, only two data points are compared. The two data points will be the same or either up or down which is not very meaningful. Studying process data over time provides information on the stability and capability of the process.
- **Review eligibility outcomes.** These data can be viewed at the unit, office, and state levels. By looking at outcomes over time, the reviewer will understand the overall performance of the system. The primary outcome data are listed below:
  - Applications received
  - Applications approved and denied
  - Reasons for denial
  - Cases closed before or at renewal
  - Reasons for closure
  - Renewals due
  - Processing time
  - Total enrollment

  Eligibility outcome data give high-level performance information. Denial and closure reasons provide information on areas to investigate further. A large proportion of denials or closures for reasons such as the client failed to provide information or failed to submit a renewal application is a sure sign of a process problem. For means-tested programs like Medicaid and CHIP, the major reason for denial or closure should be related to income or to a client characteristic qualification such as age.[5]
- **Use data to manage processes at the front line.** The front line is where customers interact with the system. It is at this level that customer demand is expressed and the ability to predict demand and type of demand is vital to satisfying customers and preparing the system to meet the actual and expected demand. Data elements include:
  - Volume of applications, renewals, backlog, and change requests
  - Volume of client phone calls, reasons for calls and rate of first call resolution
  - Processing time
  - Quality and accuracy

The specific data to be routinely collected will vary according to an office's process design and its goals.

Operational data differ from outcome data in the unit of time measured and the necessity for it to be real-time data. For example, overall volume by month is a good summary measure, but for process management, volume by day of the week and in-person applications versus online or mailed applications gives supervisors and workers the ability to predict their workload and plan capacity accordingly.

For the past decade, Louisiana has worked to improve the type and quality of its eligibility data. It is able to analyze eligibility outcome data to monitor the stability of the eligibility process and to discover where it needs to drill down deeper. It uses the data to understand the reasons customers are denied or lose coverage at renewal, so that improvements can be made continuously. Its data are now available on a state, regional, office, and applicant levels.

Action Six: Use Measurement to Communicate and to Give Feedback

Measurable goals and targets are the yardstick of performance. They point the way forward and help determine if progress is being made. Measurable goals should connect purpose and customer demand with the work. As Winston Churchill said, "However beautiful the strategy, occasionally you should look at the results."[6]

Louisiana is rich in data and uses the data to understand the eligibility system, how it is performing and how it is impacting customers seeking services. Enrollment data has been tracked and shared statewide for a number of years.

Kennedy used data to communicate with her workforce the results of their work as it related to the status of uninsured children. She routinely provided local offices with data showing caseload trends and used the data as an opportunity to help staff understand that, as they enrolled and retained eligible families, the number of uninsured children declined. She linked enrollment to health services by making staff aware that pregnant women need early prenatal care and Medicaid coverage provides financial access to those services. Early and timely prenatal care is closely linked to a reduction in infant mortality. This type of feedback to staff is always a reminder of the purpose of their work.

In the LEPIC, Kennedy set targets for eligibility workers to focus on application processing time. Kennedy believed in the adage that "what gets measured gets done." Each month, state and local offices reviewed processing times.

Targets can have a downside. When meeting the target is viewed as an accountability measure, many individuals begin to view the target as the most important objective rather than the objective the target represents numerically. Because of this tendency, it is wise to have a set of measures that is balanced. For example, if the target were to process children's applications within 15 days, the desired method is to improve the process so that the process is capable of producing within the target.

An alternative way of meeting the target is to make eligibility decisions on all applications within 15 days, even if the result is more applications are denied for procedural reasons. To strike a balance, managers should review processing time in the context of the denial rate and the distribution of denial reasons. This sends the message that processing time is important to providing high-quality service to the customer. At the same time, it is important to the purpose of the work, which is to make accurate and timely decisions on behalf of the customer. Accurate eligibility decisions should approve coverage for those who are truly eligible and deny coverage to those who are not eligible.

Louisiana Eligibility Process Improvement Collaborative

During the period from February 2006 through February 2007, the Southern Institute on Children and Families taught the Louisiana Eligibility Process Improvement Collaborative (LEPIC) how to use a series of process improvement methods. It then coached 22 local office teams and two state teams in using these methods to conduct small-scale tests of change and to learn sequentially. The coaching included skill development in data gathering, analysis of data over time, design of tests, and use of evidenced-based practice.

The interaction of the collaborative leadership and teams was a dynamic process during which teams were led through a curriculum—beginning with a pre-work period designed to help teams prepare for participation in the collaborative, three learning sessions separated by periods of intense application of new skills and knowledge, monthly conference calls to support the application of new skills through team sharing and feedback, and additional support provided on an individualized basis. Each phase of the collaborative is described in the following subsections.

Phase One: Pre-Work (February to May 2006)

The time period between a team's enrollment in a collaborative and Learning Session One is referred to as the pre-work period. Teams have important tasks to complete to be ready for active participation in the first learning session in the collaborative.

During this phase, each team was asked to complete the tasks listed below:

- Form a team of staff to participate to include frontline supervisory and eligibility workers.
- Identify the area within the office and the client population for testing changes.
- Complete a flow chart of the Medicaid eligibility process for applications and renewals in the office.

Phase Two: Learning Session One (May 2006)

The first learning session was held May 1–3, 2006, with 22 teams (65 persons) and 26 state office participants in attendance. Learning Session One laid the foundation of knowledge for improving processes. At this session, participants learned about improvement methodologies, ideas for change, and effective communication. The agenda for Learning Session One was organized to provide new knowledge and to facilitate team learning by immediately applying the new knowledge in team work sessions. The areas covered are described below:

- **Model for Improvement.** The Model for Improvement with Dr. Edwards Deming's Plan-Do-Study-Act (PDSA) Cycle for learning and implementing improvements was presented as the foundational method for learning and improvement in the collaborative. (See Appendix for more detail on the model.) Teams were provided work sessions to plan PDSA cycles to begin testing immediately upon return to their offices.
- **Development of clear aims (goals) and measurement strategies.** Teams were given time to develop aim statements of what they were trying to accomplish and the measurements they would use to know if an improvement was achieved.

The Louisiana Eligibility Process Improvement Collaborative

The Louisiana Eligibility Process Improvement Collaborative (LEPIC) was modeled after the Covering Kids and Families (CKF) Eligibility Process Improvement Collaboratives I and II. LEPIC took place between February 2006 and February 2007. Leadership for the initiative was then assumed by the Louisiana Department of Health and Hospital's (DHH's) new WorkSmart! initiative.

- ***Improvement Strategies Guide.***[7] The Improvement Strategies Guide was presented to provide ideas for testing and improvement. The guide includes concepts and strategies that have been used successfully in other states and that can be adapted to achieve desired results. Strategies and ideas of change were organized by the following improvement concepts:
  - Improve customer service
  - Improve policies and procedures
  - Improve work flow
  - Change work environment
  - Improve intra-system communications
  - Use error proofing
  - Focus on variation
  - Use a producer/customer interface
  - Eliminate waste
- **Program materials.** Easy-to-read and easy-to-use, client-friendly program materials were presented to increase awareness of how low-literate readers interpret forms and other written communications.

Phase Three: First Action Period (May to August 2006)

This phase began with teams completing their first PDSA cycles. Teams reported their results on a conference call one week following the first learning session. Asking teams to complete a test of change and to discuss what they learned within one week after their return home accomplishes several objectives for the collaborative. It clearly demonstrates how much can be learned within a short period of time and how small-scale tests of change can be implemented relatively easily with minimal resources. Teams also get the chance to practice what they learned and to begin incorporating it into their daily work.

The Southern Institute facilitated ongoing learning and skill development during this period by hosting monthly conference calls for teams to share with all teams what had been learned as they planned for and implemented PDSA cycles. The conference calls acted as a vehicle to keep teams moving forward in their testing, since they would have to report on their activities performed subsequent to the last call. The calls were used to facilitate interaction among peers for asking questions of one another, exploring issues, and making suggestions.

The Southern Institute made a site visit to the local office in Baton Rouge to work with the team on process and improvement issues. Its staff led discussions on the flow of the eligibility process, issues with testing changes, and lessons learned.

Phase Four: Learning Session Two (August 2006)

The second learning session was held August 1–3, 2006, with 22 teams (67 persons), 23 state participants, and 12 regional and assistant regional administrators in attendance. During Learning Session Two, Ruth Kennedy requested teams to focus on reducing processing times to five days for pregnant women, 15 days for children and families, and 25 days for long-term care applicants. The agenda was organized to teach teams how to use various tools and data to learn more about their processes and to reduce processing time. As in Learning Session One, new knowledge was presented and teams were given time to apply the new knowledge in work sessions. A work session also was devoted to planning PDSAs to conduct upon teams' return to their offices. The areas covered are described below. Presentations were made on:

- **The value of looking at data over time to learn about and monitor a process.** It is not unusual for managers to compare two points in time to assess how a process is working, and this can give a false reading. Learning to listen to the "voice of the process" was demonstrated by using data from one local office to show how to plot data over time to understand the stability of a process and what a process is producing.

- **How to draw a flowchart of a process and the data needed to understand how much time the process takes.** A flowchart is a useful tool to identify value-added and non-value-added steps, and the time each step takes to complete.
- **How to use a fishbone diagram as a useful tool for discovering the root cause of processing times that exceeded the targets.**
- **How to use data and the *Improvement Strategies Guide* to reduce processing time.** The key concepts focused on Lean methods such as using a pull system to control the flow of work rather than the traditional method of supervisors assigning cases to caseloads. Teams were introduced to the concept of visual management to determine at a glance if work is flowing smoothly or not. Visual management allows everyone in the office to monitor work flow on a real-time basis.
- **Sharing results of successful procedures tested and used by teams to reduce processing time for pregnant women.**

Phase Five: Second Action Period (August 2006 to February 2007)

During the second action period, teams continued testing changes and implementing improvements. Monthly conference calls were held to facilitate team sharing and learning. The Southern Institute went on-site to work with five local office teams to further their progress in testing and spreading improvements.

Phase Six: Learning Session Three (February 2007)

The third learning session was held February 6–8, 2007, with 22 teams (65 persons), 18 state participants, and 13 regional and assistant regional administrators in attendance. The session was organized to include special issues that arose during Learning Session Two and the second action period. Additionally, attention was given to refining a newly developed strategy to spread improvement knowledge and skills to the 19 local offices not participating in the collaborative. The presentations included topics on:

- **Managing performance.** A presentation by the DHH's human resources director to respond to teams' concerns about how to deal with poorly performing employees.
- **Productivity.** Ideas for defining and measuring productivity were presented as a first step in determining performance levels of employees.
- **Spread.** A presentation on how to spread improvements, and the components of an organizational infrastructure that should be considered in developing plans.
- **Variation.** A presentation on the benefit of reducing complexity by standardizing work.
- **Policy change.** State office staff gave a detailed overview of the process followed when considering changes to policy. Two local office teams made presentations of the development of policy proposals using the PDSA method.
- **Strategies.** The top 10 strategies for improving the readability of Louisiana print materials were reviewed.
- **Knowledge transfer.** An interactive work session was conducted on the structure under development to spread improvement knowledge and skills to parishes that did not participate in the collaborative.

At the end of Phase Six, a contest was held to create a name for the new ongoing effort to be created. The group submitted suggestions and the majority voted on the name as the WorkSmart! initiative. At this juncture, the Southern Institute handed over the leadership reins to Jen Steele, process improvement manager for DHH's eligibility arm.

Phase Seven: Post-Collaborative Period (February 2007 to Present)

Under Jen Steele's leadership, WorkSmart! created an infrastructure of goals and targets, peer trainers, work groups, a website for posting PDSAs, and a schedule for formal communication among offices via conference calls and meetings. WorkSmart! is now heading into its fourth year. A state office middle manager told me, "You can test almost any change if you do it under the umbrella of WorkSmart!"

When WorkSmart! began in early 2007, it was tightly structured and managed closely by Steele. In

early 2008, the state transitioned to the regional managers the responsibility of improvement. The regional managers became responsible for spreading improvements within their regions and across regions. Steele maintained the responsibility of statewide coordination and served as an improvement advisor to state office and to field staff.

Where LEPIC had focused on application processing time, WorkSmart! focused initially on sustaining those gains, redesigning the work flow for processing renewals, and increasing retention by focusing on reducing procedural closures. The first order of business was to train the offices that did not participate in the collaborative. A process was devised to select four local eligibility workers who participated in LEPIC to be detailed on a half-time basis to provide the peer training. The LEPIC curriculum was revised and compressed into modules that the peer trainers used as they trained staff on-site.

A website was developed for all improvement teams to post their PDSAs to share statewide. Each team was required to complete at least one test per month and post it online. Another requirement was for each office to maintain an improvement board mounted for all to view and to post the content online. Sharing successes and failures across the state and within the office setting was strongly promoted.

Five issue-specific work groups of field staff were formed to work on applications, renewals, long-term care, training, and administrative procedures. These groups held monthly conference calls to share and review what had been learned with their peers. Their interaction led to additional ideas for testing.

Almost six months after WorkSmart! began, a WorkSmart! Eligibility Process Improvement Collaborative meeting was held with more than 150 local, regional, and state staff. Since that time, this type of large-scale, multiday meeting has been held every six to nine months. The meetings are an opportunity to train new field staff as turnover occurs, and for local improvement teams to share advanced practices that have been adopted. For the last two years, giving awards to teams based on goals and performance has recognized local office achievements. In the spring 2009 meeting, advanced training on value stream mapping and standardized work, as well as other Lean tools, was provided.

Over time, field staff have grown highly knowledgeable about improving processes and recognizing the value of seeing differently. This workforce has developed analytical skills and become critical thinkers about how they do business. They are aware of variation within and between offices and are testing ways to standardize their work. There has been a tremendous cultural shift, with eligibility workers becoming problem solvers.

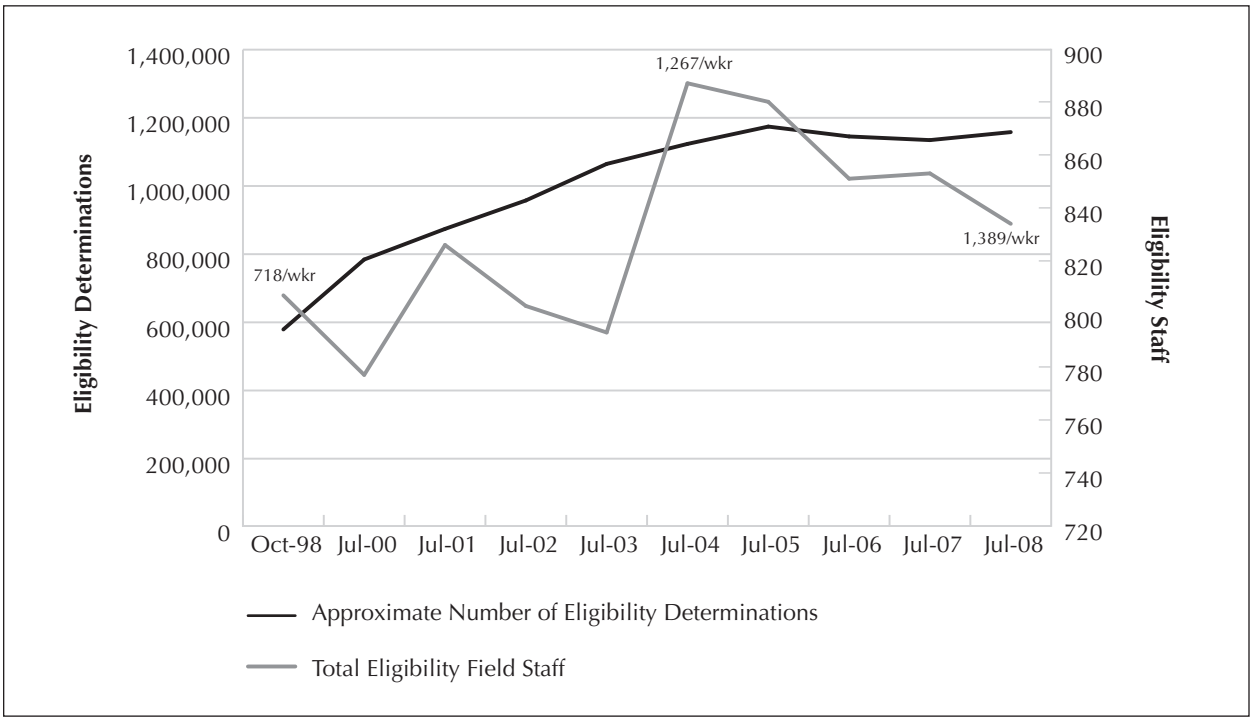
Louisiana shifted its eligibility culture from one of the field staff saying to the state, "tell us what to do" to the state saying to the field staff, "test your ideas, learn from results, share with others, show us and others the data, and we will change policy to incorporate what we know works." Much of the problem solving has shifted from the state to the workers doing the work. The state serves as a resource for the workers.

An unintended but positive consequence of the journey toward quality has been a dramatic shift in staff promotions. Many of the original LEPIC participants have been promoted into management at the regional or state level. Initiative was encouraged—and workers rose to the call.

Figure 2 illustrates the enormous gains made by Louisiana. During the last 10 years, the number of eligibility decisions has risen dramatically while the number of eligibility field staff, including managers and clerical staff, has gone up and down. Since mid-2005, a gap has been created, where the number of eligibility decisions has increased while the number of staff has declined. In this situation, Louisiana has dramatically improved its service to customers by reducing the number of days it takes to reach a decision so that low-income children and families can have timely access to appropriate health care.

In addition, Louisiana has an extremely high client retention rate in comparison to that of other states. Its success in retaining eligible enrollees at renewal is a significant contributor to the growth in the caseload. This has come about in large part to its improvement efforts to retain eligible enrollees and not to lose them at renewal for procedural reasons. Currently, only 1 percent of customers lose health coverage at renewal for procedural reasons, down from 22 percent in 2001.

Figure 2: Comparison of Number of Eligibility Determinations and Staff By Year in Louisiana—1998–2008



Recommendations

The transformation of the eligibility system experienced by the Louisiana Medicaid program could occur in every state that chooses to commit to continuous process improvement. It is not easy to change culture, and it requires the willingness to stand up to those who doubt or resist the change. But the results dramatically changed the workforce, moving them to proactively deliver the best customer service. The workers' new knowledge and skills give processes and systems tremendous flexibility and adaptability to new situations and changing economic conditions. Clearly, Louisiana's transformation has produced the capacity to buffer itself against declining revenues and staff.

Recommendation One: Get Started

State and local governments should start now to transform their systems and improve their processes. Continuous process improvement is not a project. Rather it is a commitment to provide excellent service to customers consistently and to transform the workplace into an environment where highly performing people want to work.

There are two common misperceptions about timing and organizational structure that are obstacles to starting now.

Misperception One: This Is Not the Right Time ...

A common belief is that "this is not the right time" to focus on improvement, and the timing will be better in the future. There are a variety of reasons given to justify the belief, such as that it is not the right time to improve because the administration will change soon or there is a key vacancy. And recently, a common reason heard is that it is not the right time because staff are so busy making and adjusting to budget cuts that there is no time or resource to spare for improvement, e.g., "We have to hold on until the economy improves (with the hope we might get more staff)." This belief perpetuates a downward spiral of focusing on current events and not on developing a better tomorrow.

In an article about companies' preparedness to weather an economic downturn, Peter Grossi said, "The difference between [a] boom and recession is not simply a matter of prosperity; it has more to do with adaptability and being better than the competition. In other words, it is an internal matter more than it is an external one."[8]

There is no better time to start than now. The reasons above recur every few years, and this thinking can hinder lasting improvement in client services.

Misperception Two: Eligibility Staff Work for Another Agency ...

Many states have fragmented eligibility systems, wherein the Medicaid state agency sets policy and contracts with a sister agency for eligibility. Usually this sister agency maintains the eligibility data system. In these arrangements, it is quite common for eligibility workers to be responsible for Medicaid, Supplemental Nutrition Assistance Program (formerly called Food Stamps), and other benefit programs. These arrangements are quite complex and are more difficult to navigate than in states like Louisiana, where Medicaid policy and eligibility are under a single authority.

Governors can be very instrumental in aligning the goals of cabinet agencies that are serving the same populations. Sister agencies should take the initiative

to agree to work together to improve processes on behalf of the clients they jointly serve.

Recommendation Two: Focus On A Single Problem

Choose a process, such as making application determinations in a single office, and ask a team of eligibility workers and clerical staff to map it out to understand the detail of the process step by step.

Add to the map details on numbers and type of customers. Add the time it takes to complete a step uninterrupted and the amount of time it takes with interruptions. Focus on the delay in the work flow to eliminate or reduce it. Other barriers to smooth work flow are handoffs between staff and bottlenecks in the process that add delays in processing time.

Empower the team to change the process in order to reduce or eliminate delays in process time. The team will have learned a lot about the way they do business and how to solve problems affecting their work. This knowledge is important, and a way should be facilitated for the team to share what they have learned with others.

Recommendation Three: Learn About Process Improvement

State and local leaders and managers should be encouraged to learn about process improvement and explore the application in their states.

Most senior and middle managers and frontline workers have not been exposed to process improvement methods and the large body of knowledge on improvement. One valuable lesson about process improvement is the need to challenge the myths and thinking about current management practices in eligibility systems. In 2008, Ruth Kennedy, who is often asked to speak in national forums, described to her audience the lessons learned in the past 10 years. Demonstrating her leadership qualities, she made this admission:

> …the experience with LEPIC over the past year has exposed a fundamental flaw in my style of management. We have allowed—even prided ourselves in the wide variability in local practices—between caseworkers, between supervisors, between local offices, between regions ... In retrospect, our *laissez faire* style has kept promising—even proven business practices—from being spread.[9]

There is an existing body of knowledge supported by ample evidence that process improvement can make dramatic and sustained improvements in government and in services. In eligibility systems, we have evidence that shows certain processes produce better results.

Recommendation Four: Develop Data on Eligibility Process and Outcomes

Good data on the eligibility process and outcomes are necessary for continuous improvement.

The types of data to have available for each local office include approval rates, denial reasons, closure reasons, processing time and data on on-again/off-again cycles. These data help improvement teams discover problems and allow "drilling down" into the causes.

The data should be developed to allow its plotting over time. Depending on the purpose of the measure, data can be captured to retrieve monthly, weekly, and daily time periods. Shorter time periods allow teams to learn more quickly. For instance, 15 days of data plotted over time provides information within three weeks—in contrast to monthly data, which would require 15 months to gather the same number of data points.

Recommendation Five: Do Not Assume Large-Scale Information Technology Systems Are the Beginning Point

Investing in technology is not a panacea. Only when the basic eligibility process is redesigned so that work flows smoothly and in less time does worker morale improve, worker stress decline, and clients receive excellent service.

Almost without fail, eligibility modernization has come to take on the meaning of large-scale change to computer systems, often accompanied by centralization

of some aspect of the eligibility system, such as a call center. Millions of dollars are spent on developing the change, system conversion, and training the workforce. It is typical practice in these large-scale changes for little investment to be made in basic process redesign and testing before computer system changes.

Recommendation Six: Adopt a Process Management Perspective

To change from managing people to managing processes requires significant shifts in philosophy and approaches.

There is tremendous variation in how local offices follow policy and in the design of how the eligibility system operates. This variation creates different styles of customer service and different levels of service from office to office.

Most government employees in eligibility services are dedicated individuals who want to do a good job and who want to make a difference in the lives of the recipients. Most work very hard and many work overtime, some without pay. Too often, their efforts are undermined by the belief that if "other" people would just do their job or if "other" people would work harder, we could do better and avoid some of the daily problems. This underlying belief is based on a lack of understanding of the power of a process focus and the lack of a culture that values learning in the quest of excellence or perfection. Deming estimated that problems were caused by process approximately 94 percent of the time and by people 6 percent of the time.[10]

Conclusion

This report was written with a twofold purpose. The first purpose is to give recognition to and share the story of how Louisiana transformed its eligibility system. The Louisiana Department of Health and Hospitals recognized that it could no longer use the same kind of thinking to fix problems that was used when it created the problems. A courageous and bold path was carved and followed. The improvements were not developed solely by the state office with input from local offices and then mandated for implementation statewide. Teams of local workers created the improvements by testing and adapting their ideas and learning from their data whether the idea was an improvement. Problem solving shifted to the local level, where the work is done, where the customer touches the system.

The second purpose of this report is to provide a simple road map so other states and leaders can quickly begin or accelerate their journey into transformation through process improvement. The transformation will give them a capacity to buffer against hard times, a less stressed workforce, satisfied customers, and fewer fires to fight.

Appendix: A Model for Improvement—Tools and Strategies

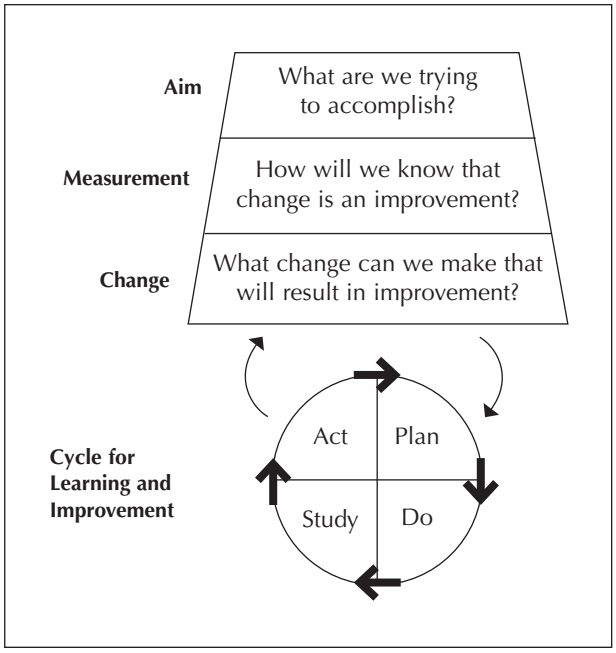
Model for Improvement

There are many strategies and resources for change and change management. Two well-known methods are Lean and Six Sigma. Recently, the two have been integrated into Lean Six Sigma to achieve both speed and quality. Before adopting a particular change management strategy, heed the wisdom of Associates in Process Improvement when it advises, "All improvement requires change, but not all change will result in improvement."[11] Many of us who have worked in or with government (or any sector) have observed the tendency to make changes in response to problems and implement those changes before testing to learn if the change will be an improvement. Subsequent to implementation of untested changes, much effort and cost can go into redoing and reworking to try to attain the desired effects.

The Model for Improvement[12] was taught during the Louisiana collaborative. We also have used it successfully with other state and county governments. It incorporates the Plan-Do-Study-Act (PDSA) cycle of learning which is an integral part of how Toyota, known for quality and customer satisfaction, does its work. Below is a graphical representation of the model.

The model is user-friendly. Its logic requires discipline in thinking through the aim to be accomplished, the measurements, and the specific change or countermeasure to be tested. The cycle of testing requires planning who will test, what will be tested, and the data to be collected; carrying out the test; studying the results, and comparing the predicted results to the actual results; and determining the action to take as a result of the learning.

Figure A.1: Model for Improvement



A cycle can be completed in a single morning using one or two staff or one or two clients. Additional cycles can be run, each time expanding the scope, until the improvement team has confidence that the change is an improvement.

Small-scale tests of change, using PDSA cycles, give the office the control to minimize risk to clients and staff, and the test can be easily halted if needed. Much can be learned rapidly with minimal investment of resources.

The model can be used at all levels of an organization, from frontline workers to executive leadership. Subsequent to participating in an Eligibility Process

Improvement Collaborative, led by the Southern Institute on Children and Families for the Covering Kids & Families program, Iowa adopted the use of PDSAs for making changes to Medicaid and CHIP policy.

Improvement Tools

An array of tools is available to assist improvement teams in discovering problems, finding root causes, and developing improvement strategies for testing. The most common tools used by Louisiana teams were:

- Project charters to focus teams on issues agreed to by management
- Flow charting, process mapping, and value stream mapping
- Five whys to get to the root cause
- Fishbone diagram
- Run charts and control charts
- PDSA cycles
- Walking through the work area and observing work

Specific Improvement Strategies

The Associates in Process Improvement developed a list of 72 change concepts to consider in developing ideas for improvement.[13] The concepts were developed by drawing on Dr. Edwards Deming's System of Profound Knowledge, from the authors' experiences, and incorporating concepts from improvement approaches such as Total Quality Management, Six Sigma, and Lean.

Endnotes

1. John Maleyeff, *Improving Service Delivery in Government with Lean Six Sigma,* IBM Center for The Business of Government (Washington, DC), 2007, p. 32.
2. Also see the companion book, *The Nun and the Bureaucrat: How They Found an Unlikely Cure for America's Sick Hospitals* by Louis M. Savary and Clare Crawford-Mason, CC-M Productions (Washington, DC), 2006.
3. W. Edwards Deming, *Out of the Crisis,* The MIT Press (Cambridge, Massachusetts), 1982, p. 23.
4. For an excellent read on systems thinking, including demand failure, see John Seddon, *Freedom from Command and Control: Rethinking Management for Lean Service*, Productivity Press (New York, NY), 2005.
5. For further reading on eligibility outcome data, see Grant, Vicki C., and Nicole Ravenell, *Guidelines for Collecting, Analyzing and Displaying Health Coverage Eligibility Outcomes Data*, 2d ed., Southern Institute on Children and Families (Lexington, SC), October 2003; Grant, Vicki C., Nancy Gantt, Laura Heller, and Ken Miller, *The Supporting Families Story: The Movement Toward Quality Improvement*, Southern Institute on Children and Families (Lexington, SC), November 2003; and Tricia Brooks, *Data Reporting to Assess Enrollment and Retention in Medicaid and SCHIP*, Center for Children and Families (Washington, DC), January 2009.
6. BrainyQuote, www.brainyquote.com/quotes/authors/w/winston_churchill_2.html
7. The Southern Institute on Children and Families developed the *Improvement Strategies Guide* to assist teams in developing ideas and strategies for improvement in policy and operations. http://www.thesoutherninstitute.org/docs/publications/MEPICImprovementStrategiesGuide.pdf
8. Peter Grossi, "Prepared for Battle," *Quality Progress*, June 2009, *42*(6), p.20.
9. Ruth Kennedy, "Lessons Learned from a Decade of Health Coverage Outreach and Simplification in Louisiana," presented at the Center on Budget and Policy Priorities Modernization Workshop, Washington, DC, September 24, 2008.
10. Deming, p. 315.
11. Langley, Gerald J., Ronald D. Moen, Kevin M. Nolan, Thomas W. Nolan, Clifford L. Norman, and Lloyd P. Provost, *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance,* 2d ed., Jossey-Bass (San Francisco, CA), 2009, p. 2.
12. Langley, et al., p. 24.
13. Langley, et al., pp. 357-408.

ABOUT THE AUTHOR

Vicki C. Grant, Ph.D., M.S.W., is Vice President of the Southern Institute on Children and Families, a nonprofit organization dedicated to improving services for low-income children and their families throughout the United States. She also is a founding partner in the newly established firm, Grant & Ravenell Process Management Group.

During her 30-year career, Dr. Grant has worked for state government, a private consulting firm, and a nonprofit policy organization. Serving under Governor Richard W. Riley in South Carolina in the 1980s, she was instrumental in moving South Carolina to the forefront nationally for using Medicaid to provide coverage to low-income children and pregnant women and for "outstationing" Medicaid eligibility workers in hospitals and community health centers.

As Vice President of the Southern Institute, Dr. Grant served as the operating manager for the Covering Kids and Covering Kids and Families national programs, and as Director of the Supporting Families After Welfare Reform national program. These programs, funded by the Robert Wood Johnson Foundation, were the nation's single largest effort to enroll and retain children and families in public health coverage programs.

During the last decade, Dr. Grant has specialized in quality and process improvement of operations in the service industry. She pioneered the application of process improvement to Medicaid and the Children's Health Insurance Program (CHIP) eligibility operations. Dr. Grant has led learning collaboratives in process improvement in California and Louisiana; three national collaboratives of state and county offices; and one collaborative of children's hospitals. She has worked with more than 80 counties across 30 states to improve Medicaid, CHIP, and Food Stamp eligibility operations.

Dr. Grant leads and consults on systemic transformations for establishing continual improvement in the delivery of services and on the use of data for decision making and improvements in the flow of work.

Dr. Grant earned her Ph.D. in health and social policy from the Heller School at Brandeis University in 1992 and a masters in social work from the University of South Carolina in 1979. She earned her Black Belt certification in Lean Six Sigma by transforming a year long organizational planning and budgeting process and reducing it to one month.

KEY CONTACT INFORMATION

To contact the author:

Vicki C. Grant
P.O. Box 184
Georgetown, SC 29440
(843) 527-0071 (Work)
(843) 325-3091 (Cell)

e-mail: vcgrant@sc.rr.com

REPORTS from The IBM Center for The Business of Government

**For a full listing of IBM Center publications,
visit the Center's website at *www.businessofgovernment.org*.**

Recent reports available on the website include:

Analytics

Strategic Use of Analytics in Government by Thomas H. Davenport

Collaboration: Networks and Partnerships

*Designing and Managing Cross-Sector Collaboration: A Case Study in Reducing Traffic Congestion*s by John M. Bryson, Barbara C. Crosby, Melissa M. Stone, and Emily O. Saunoi-Sandgren

Integrating Service Delivery Across Levels of Government: Case Studies of Canada and Other Countries by Jeffrey Roy and John Langford

Contracting

The Challenge of Contracting for Large Complex Projects by Trevor L. Brown, Matthew Potoski, and David M. Van Slyke

Defense

Transformation of the Department of Defense's Business Systems by Jacques S. Gansler and William Lucyshyn

E-Government/Technology

Moving to the Cloud: An Introduction to Cloud Computing in Government by David C. Wyld

Financial Management

Strengthening Control and Integrity: *A Checklist for Government Managers* by James A. Bailey

Managing a $700 Billion Bailout: Lessons from the Home Owners' Loan Corporation and the Resolution Trust Corporation by Mark K. Cassell and Susan M. Hoffmann

Healthcare

The Role and Use of Wireless Technology in the Management and Monitoring of Chronic Diseases by Elie Geisler and Nilmini Wickramasinghe

Creating Telemedicine-Based Medical Networks for Rural and Frontier Areas by Leonard R. Graziplene

Human Capital Management

Federated Human Resource Management in the Federal Government by James R. Thompson and Rob Seidner

Managing for Performance and Results

Performance Reporting: Insights from International Practice by Richard Boyle

Strategic Risk Management in Government: A Look at Homeland Security by David H. Schanzer, Joe Eyerman and Veronique de Rugy

Organizational Transformation

Launching a New Mission: Michael Griffin and NASA's Return to the Moon by W. Henry Lambright

Social Services

US and UK Routes to Employment: Strategies to Improve Integrated Service Delivery to People with Disabilities by Heike Boeltzig, Doria Pilling, Jaimie C. Timmons, and Robyn Johnson

About the IBM Center for The Business of Government

The IBM Center for The Business of Government connects public management research with practice. Since 1998, we have helped public sector executives improve the effectiveness of government with practical ideas and original thinking. We sponsor independent research by top minds in academe and the nonprofit sector, and we create opportunities for dialogue on a broad range of public management topics.

The Center is one of the ways that IBM seeks to advance knowledge on how to improve public sector effectiveness. The IBM Center focuses on the future of the operation and management of the public sector.

About IBM Global Business Services

With consultants and professional staff in more than 160 countries globally, IBM Global Business Services is the world's largest consulting services organization. IBM Global Business Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues, and the ability to design, build and run those solutions in a way that delivers bottom-line business value. For more information visit www.ibm.com.

For additional information, contact:
Jonathan D. Breul
Executive Director
IBM Center for The Business of Government
1301 K Street, NW
Fourth Floor, West Tower
Washington, DC 20005
(202) 515-4504, fax: (202) 515-4375

e-mail: businessofgovernment@us.ibm.com
website: www.businessofgovernment.org