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New Jersey's Manage by Data Program: Changing Culture and Capacity to Improve Outcomes

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New Jersey's *Manage By Data* Program

Changing Culture and Capacity to Improve Outcomes



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Foreword

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, *New Jersey's Manage By Data Program: Changing Culture and Capacity to Improve Outcomes*, by David Lambert and Julie Atkins, University of Southern Maine.

Over the last decade, a major trend in government management has involved the increased use of data by government executives. The “data” movement has many names. In Robert Behn's new book, *The PerformanceStat Potential*, “PerformanceStat” refers to the many “Stat” programs initiated after the New York City Police Department successfully launched CompStat in the 1990s. Others use the term “analytics” to capture the use of data.

While the trend toward increased use of data to measure performance has received much attention, the training that civil servants need to use data effectively has received less attention. In response to this lack of emphasis, the IBM Center sponsored a study to examine the New Jersey Department of Children and Families' (NJDCF) implementation of a *Manage By Data* executive education program. Following reform efforts required to improve the state's child welfare system, New Jersey implemented an automated child welfare information system, drawing on the extensive amount of system data now available. The next challenge was to develop the ability of the state's child welfare managers to effectively use data.

The challenge NJDCF faced was not just to use data more effectively; more importantly, it was to change the agency's culture to become more performance- and outcome-driven. Starting in 2009, the department began designing the *Manage By Data* training program. Ultimately, 100 agency managers were selected to compete to join the first cohort class. Fellows were trained to become knowledgeable consumers of data, to more effectively utilize data to manage change, and to work to improve their organizations' outcomes. Subsequently, two additional cohorts were launched.

Although the program's initial focus was on training employees to make better use of data, its ultimate goal was to change the department's culture. This report presents five strategies that



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organizations can follow to change their culture by moving toward data-driven decision making. These strategies include creating a common language, striving for quick wins, and aligning people and processes.

The report also includes a set of findings from the authors' assessment of the *Manage By Data* Program. Lambert and Atkins found that the program had a clear, positive impact, and changed the way NJDCF conducts its operations. Agency staffers now use data on the job more effectively and make changes in agency programs based on their analysis of data. The report concludes with three recommendations on how agency leadership can implement a culture change initiative, including ways to better align data analytics programs with agency priorities and processes.

We hope that government leaders who are interested in leveraging better use of data and in driving culture change will find this report helpful and useful. As the authors demonstrate, for government organizations to use data and analytics effectively, they must train and develop their staff to make data a key part of organizational culture.



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Executive Summary

State social service agencies, which face increasing caseloads and constrained budgets, can benefit from using data analytics to improve performance management. Many agencies have much-improved data systems that can be used to track and assess performance and outcomes. However, it is necessary for staff to become motivated and empowered to use these data. The combination of increased caseloads and reduced staff can result in staff fatigue and reluctance to embrace new initiatives and ways of doing things. New Jersey's *Manage By Data* Program is an excellent example of how data analytics may be implemented and sustained in large state social service agencies.

New Jersey, like many other states, struggled to balance the competing demands of its child welfare system. During the 2000s, New Jersey worked hard to refocus and retool its underfunded and undervalued child welfare system into one with substantially more resources, infrastructure, and data capacity. By 2009, the vision, framework, and data hardware and software were in place to change child welfare practice and outcomes. There was still, however, a significant gap in the system's ability to generate accessible, real-time data and in supervisors' ability and willingness to understand and use it to manage cases and improve outcomes. In July 2009, the New Jersey Department of Children and Families (NJDCF) was funded by the Northeast and Caribbean Child Welfare Implementation Center (NCIC) to develop a new initiative, *Manage By Data*, aimed at changing the technical capacity and agency culture to use and manage by data.

Over the next year, NJDCF developed and implemented an 18-month program that trained 100 Data Fellows from different levels within the agency. This initiative succeeded in changing the technical skills, attitudes, and practice of a diverse group of workers and has begun to shift the culture and expectations within the large, complex agency as well. The success of *Manage By Data* has led New Jersey to support additional rounds of Data Fellows as NJDCF strives toward the "tipping point" of organizational change in using data to improve management, practice, and outcomes. As news of the program's success has spread, other state child welfare agencies have expressed a strong interest in learning more about it.

This report first describes the background and implementation of the *Manage By Data* Program and then presents and discusses strategies for moving culture toward using data-driven decision making, findings from the program, and recommendations for leadership in other agencies interested in undertaking successful change management.

Strategies for Culture Change Toward Data-Driven Decision Making

Strategies

Strategy One: Create a Common Language

Strategy Two: Be Clear About Ambassador Role and Provide Tools to Succeed

Strategy Three: Make Participation an Honor

Strategy Four: Strive for Quick Wins

Strategy Five: Align People and Processes

Findings from the *Manage By Data* Program

Finding One: Executive Leadership is Crucial.

Finding Two: Data Fellows Are Now Using Data on the Job.

Finding Three: *Manage By Data* is Changing the way the Agency Conducts its Operations

Finding Four: *Manage By Data* is Having a Positive Impact

Finding Five: *Manage By Data* Provides Valuable Lessons for Other Government Organizations Seeking to Enhance Their Use of Data

Recommendations

Recommendation One: Agency Leadership Must Establish a Vision for the Program and Drive the Change

Recommendation Two: Agency Leadership Can Use Data Analytics to Support Change in Agency Performance and Outcomes

Recommendation Three: Agency Leadership Should Align Data Analytics Programs with the Agency's Priorities and Processes

Introduction

The science of data analytics is increasingly being used to improve performance management in government. Twenty years ago, New York City's Police Department used data to analyze and address a rising crime rate. The subsequent decline in the crime rate helped spur interest among government executives and leaders in using data to understand and improve performance challenges. The increased availability of accessible large data sets that can be analyzed in real or close to real time also helped to spur this interest.

In his book, *The PerformanceStat Potential*, Robert Behn of the Kennedy School at Harvard University shares what he has learned from studying many of these efforts by governmental agencies to use data to improve performance (Behn 2014). Behn finds that, while identifying the right metrics and tracking them is important, PerformanceStat, at its core, is about leadership and responsibility. An organization's leadership helps to establish the purpose of identifying and using the data to improve performance and outcomes that really matter—and to shift responsibility from the organization to individuals who accept and embrace responsibility for specific results (Kamensky 2014).

These are laudable but challenging goals and organizations' programs have had varying degrees of success in meeting them. As the PerformanceStat movement continues to grow, it is important that we understand how successful programs are able to infuse the responsibility for improving performance and outcomes throughout the organization and whether and how outcomes change. An area of government in which PerformanceStat has great potential as well as challenges is social service agencies.

Social service agencies often serve clients with multiple needs and limited personal resources. As the economy has struggled in recent years, social service caseloads have tended to increase substantially while agency budgets have decreased. Many state social service agencies now have much-improved data systems that can be used to track and assess performance and outcomes. However, the combination of increased caseloads and reduced staff can result in staff fatigue and reluctance to embrace new initiatives and ways of doing things.

New Jersey's *Manage By Data* Program provides an excellent opportunity to better understand how PerformanceStat may work in large, state-based social service agencies. Faced with years of spotty performance in ensuring child welfare, New Jersey began in the 2000s to reform and enhance its child welfare system. By 2009, the New Jersey Department of Children and Families (NJDCF) had every reason to feel good about its performance. The agency had completed a large, three-year reform effort that made substantial improvements in the state's child welfare system. Spurred by a 2003 settlement agreement to a class-action lawsuit, New Jersey refocused and retooled an underfunded and undervalued system into one with substantially more resources, infrastructure, and data capacity. The system moved from focusing on internal procedures—day-to-day tasks—to focusing on efforts to improve the outcomes for New Jersey's most vulnerable children and families.

The state's child welfare data capacity had been substantially enhanced. Managers could now turn on their computers and see in real time the proportion of investigations completed within the target of 60 days in each of New Jersey's 10 areas and 47 local offices. Supervisors could also drill down to see the same information for individual cases.

NJDCF leadership realized that these accomplishments were only the beginning, however. Getting these data to appear on a computer screen was the easy part. The managers still needed to know how to use the data to improve performance, which would improve outcomes.

As NJDCF was considering how to address this challenge, an opportunity presented itself. The Children's Bureau within the U.S. Department of Health and Human Services' Administration for Children and Families had recently created Child Welfare Implementation Centers to work with states to design and implement programs that would improve system outcomes. NJDCF applied to and was funded by the Northeast and Caribbean Implementation Center (NCIC) to develop and implement a new initiative called *Manage By Data*, which was aimed at changing the technical capacity and agency culture to understand and use data to improve outcomes for vulnerable children and families. Over the next year, NJDCF developed and implemented an 18-month program that trained 100 Data Fellows from different levels within the agency. This initiative succeeded in changing the technical skills, attitudes, and practice of a diverse group of workers and has begun to shift the culture and expectations within the large, complex agency as well. The success of *Manage By Data* has led New Jersey to support additional

Report Methodology

Three sources of information inform this case study:

- Observation of the program over a three-year period
- Foundational material, including the initial proposal, curriculum, Data Fellow presentations, and the evaluation of the program conducted by Action Research Partners' Managing Partner Timothy Ross
- Stakeholder interviews with executive leadership, program developers, Data Fellows, and national child welfare experts familiar with the program

The authors of this report observed the *Manage By Data* Program over a three-year period, from initial discussion and exploration, to design and implementation, to efforts to enhance and sustain systems change. Julie Atkins was the state liaison on the project and David Lambert was the evaluator. Their involvement with the program allowed them to have access to NJDCF leadership and program participants from different levels of the agency. Fourteen stakeholders were interviewed for this study and were generous in giving their time, careful reflections, and candor in answering semi-structured questions.

The case study was designed to answer the following questions:

- What approaches and strategies did leadership use to promote and drive the program? Why were they chosen and how did they work?
- Has *Manage By Data* changed the culture and technical capacity of NJDCF to use data to improve outcomes? Has *Manage By Data* changed the way NJDCF does business?
- Have changes in how NJDCF does business changed outcomes?
- How can the enhancements be sustained and expanded over time? What are the challenges?
- What are the lessons for leadership and staff in other public service agencies who want to use data to improve decision making and outcomes? What are the keys to successful change management?

rounds of Data Fellows as NJDCF strives for the “tipping point” of organizational change in using data to improve management, practice, and outcomes.

As news of the program’s success spread, other state child welfare agencies have expressed a strong interest in learning more about it. *Manage By Data* also offers important lessons for other government agencies in how an organization’s leadership can:

- Establish and drive vision and change
- Use data analytics to focus on and support concrete changes in practice and outcomes
- Align these changes with the agency’s priorities, processes, and people

The New Jersey *Manage By Data* Program

Background

New Jersey, like many other states, has struggled to balance competing and often conflicting demands on its child welfare system. In 1999, a class-action lawsuit (*Nadine H. et al. v. Whitman*) identified systemic problems, including high caseloads, lack of placement of children in foster care, and insufficient accountability. New Jersey signed a settlement agreement with the plaintiffs in 2003. However, in 2005, the panel monitoring the settlement determined that the state was not making adequate progress in reforming the system. Spurred by a pending contempt motion by the plaintiffs, New Jersey created a cabinet-level agency—the New Jersey Department of Children and Families (NJDCF)—to operate the state's child welfare system. The agency had 7,000 employees and was responsible for all aspects of child abuse and neglect investigations, foster care and adoption, adolescent services, and family and community partnerships. A modified settlement agreement (MSA) was negotiated, committing NJDCF to meet increasingly stringent benchmarks over subsequent years, including 55 indicators and more than 200 specific measures. The charge to the newly formed agency was to demonstrate marked improvement in the safety, permanency, and wellbeing of New Jersey's children and families.

Lawsuits are used in the social service systems to bring public attention and legal pressure to remedy long-standing difficulties and problems in a state's system-wide performance. While these lawsuits can bring significant scrutiny to bear on an agency, they can also trigger efforts to offer access to additional resources that otherwise might not be provided because of shrinking state budgets as well as growing and competing demands on governors and state legislatures. Operating under a settlement agreement can provide a state with a window of opportunity to make substantial organizational changes and improvements, even though the opportunity may be short-lived in the face of other policy demands and budget pressures.

A state can—and many do—choose to meet the requirements of a legal settlement incrementally, showing required progress, but not aiming at full system change. There are often very compelling reasons for choosing this path. Another path that a state can take is to seize the opportunity to fundamentally revamp the way the system works in search of improved outcomes. This is the path that New Jersey's Department of Children and Families chose.

In January 2007, NJDCF rolled out an important piece of its reform effort: a child welfare case practice model. The model articulated the vision, values, and priorities of the agency in working with children at risk of abuse or neglect and their families and how the agency would go about achieving them. Firm commitments to performing specific tasks needed to do this work were spelled out, as well as the commitment to engage families and work with them. This was a significant departure from the traditional management approach that focused on compliance. This traditional approach is characterized by required caseworker tasks and family responsibilities that are monitored for completion.

Another step forward was New Jersey's considerable investment in database technology following the 1999 lawsuit, resulting in the 2007 implementation of a state-wide, automated child welfare information system, called New Jersey Spirit. The adoption of Safe Measures software allowed relevant data from New Jersey Spirit to be downloaded to workers' computers. Now, the vision, framework, and data hardware and software were in place to change and improve child welfare practice and outcomes. However, there was a significant gap in the capacity of the system to generate accessible, real-time data and the ability and willingness of supervisors to understand and use it to manage cases and improve outcomes. This is where matters stood in late spring 2009, when NJDCF applied for funding from the Northeast and Caribbean Implementation Center (NCIC) to develop and implement a project aimed at developing an agency-wide model, based on the use of data to inform management and supervision practice.

Implementation of the Program

In July 2009, NJDCF began its work with NCIC to develop the *Manage By Data* Program. The agency wanted to push the use of data from the data division, where data reports were generated and many measures were calculated, to frontline staff. The question was how to do this. What level of data skills should workers have? How should they be taught? Should all workers be trained or was it better to start with workers who were more likely to be receptive to training and, ultimately, to "get it"? What were the best ways to enhance the culture of using data within the agency, as well as technical data skills?

Getting Started: Attracting Leadership at Many Levels and Designing the Program

Program design considerations were being explored when New Jersey elected Chris Christie as governor in November 2009. As typically happens with a new administration, there was turnover among senior executive staff within NJDCF. The new administration affirmed its commitment to supporting efforts to reform and improve New Jersey's child welfare system. Even so, NJDCF decided to push back the targeted launch of *Manage By Data* to allow the incoming executive leadership more time to become familiar with the program. It was felt that engaging the new leadership in the design of the new program would help maintain the political support necessary for success.

Chronology of *Manage By Data* Program

June 2009	NJDCF Proposal to NCIC for <i>Manage By Data</i> Program Funded
July 2009 – May 2010	Ongoing Planning for Program
June 2010	Public Catalyst Selected to Develop and Deliver Program
Summer – Fall 2011	Program Designed and Curriculum Developed
January 2011	First New Jersey Leadership Summit
January 2011	Data Fellows Program Seminars Begin
January 2012	Second New Jersey Leadership Summit
May 2012	Fellows Final Project Presentations
September 2012	Second Round of Data Fellows Begins; Graduate Fellows Program Begins
September 2013	Third Round of Data Fellows Begins

NJDCF used this time well, working with NCIC to review what other states had done and learned about developing programs that used data to manage toward achieving improved outcomes for children and families. After consulting with national child welfare experts, five states were selected for study: Illinois, Kentucky, Rhode Island, Texas, and Utah. NCIC and NJDCF conducted interviews with child welfare agency staff from each state and prepared a briefing report, including key lessons for NJDCF, based on the experience of other states (Atkins 2010). NJDCF considered this report carefully and identified several key takeaways:

- Executive leadership needs to be on board early and continue to support the program in meaningful ways. This support should be real and visible.
- The program needs data champions throughout the agency (designated by role, geography, and functions).
- Data should be used to tell a story that draws on both qualitative and quantitative information.

Following this period of exploration, NJDCF reached out to Public Catalyst, a New Jersey-based group that works with government and nonprofit organizations that focus on child and service-system issues, to work on the design and implementation of the new program. A team of program developers was soon formed that included the director of NJDCF Information Technology and Reporting, Public Catalyst, an expert in child welfare coaching from the national Child Welfare Policy and Practice Group, and members of NJDCF's executive team. By summer 2010, the design and structure of *Manage By Data* was taking shape as important decisions were made. One set of decisions focused on staff:

- How many to train?
- From which part of the organization should they be drawn?
- What training format was best suited to learning?

Another set of decisions involved skills:

- Which skills should be emphasized?
- How best to teach and support their use?

A final set of decisions about leadership was considered:

- How to elicit and maintain meaningful leadership support for the program throughout the agency?
- How to ensure that leaders feel involved and don't feel the initiative ever "gets out in front of them"?

Who to Train: NJDCF learned valuable lessons about changing the culture within the agency following the earlier rollout and training of its case practice model and other systems-reform efforts. Real change would not be achieved through isolated trainings or by using an off-the-shelf curriculum. At first, NJDCF considered training all frontline staff, starting in one or two of the state's 12 child welfare divisions, and then going statewide. However, this approach would be logistically difficult and might result in reaching many staff, but only superficially. Reflecting on other states' efforts and its own staff's experience, and tempered by the project's budget, NJDCF chose to train a smaller number of staff from different areas and levels of supervision and management.

The training needed to be substantial and long enough for participants to acquire technical data, technical skills, communication skills, and the confidence to use them in every-day practice, working with staff in their own offices and with colleagues and leadership throughout the

agency. Participants would need to be highly motivated and have the support of their supervisors and colleagues back in their offices. NJDCF would need to support the participants and promote the use of data throughout the agency.

Criteria for Selection: NJDCF targeted mid-level staff who had been with agency for at least 10 years. They would be young enough to be willing to learn a new way of thinking and had been employed by the agency long enough to be likely to stay. These staff were also likely to be motivated to enhance their chances for promotion and advancement. NJDCF decided to make selection for the program competitive. Participants—to be called Data Fellows—would need to apply to *the Manage By Data* Program and have the explicit support of their supervisors to be accepted. Treating participation as an honor helped boost the enthusiasm the Data Fellows brought to the program.

Support from Agency Leadership: Executive leadership championed the development of *Manage By Data* from its beginning and actively participated in its design. The initiative needed to meet the goals of the agency without becoming a burden. Buy-in and involvement from all levels of leadership would be critical. Directors and managers were kept informed and involved in different ways. Project developers met with the directors of the 12 area offices to review their data and identify their most pressing areas of concern regarding practice.

Key Program Definitions

Manage By Data: The initiative of New Jersey's Department of Children and Family services to enhance the use of data analytics to improve practice and outcomes of the children and families served by the agency. This includes the design, development, and implementation of the initial (first round) of training, subsequent rounds of training, and ongoing efforts to grow and integrate into the initiative how the agency does business.

Program Developers: The team assembled to develop the data analytics training initiative: The DCF Fellows Program. The team included the director of NJDCF Information Technology and Reporting, staff from Public Catalyst, an expert in child welfare coaching from the national Child Welfare Policy and Practice Group, and members from NJDCF's executive team.

The DCF Fellows Program: The program designed to train and coach staff from NJDCF to become knowledgeable and effective users of data and to improve practice and outcomes of efforts to ensure child welfare.

Data Fellows: Participants in the DCF Fellows Program. The initial cohort included 100 mid-career supervisors and managers from all departments and offices within the agency. Selected through a competitive process, Data Fellows attended monthly day-long classes to learn data skills, presentation skills, and leadership. The classes included intensive coaching, homework assignments, presentations to leadership, and a final project. The final project required the Data Fellows to analyze and address a pressing issue facing their home office.

Resource Fellows: Information technology staff housed within NJDCF, selected to provide ongoing support to the DCF Fellows Program. One Resource Fellow was assigned to each of five groups of Data Fellows. Resource Fellows attended the monthly classes, provided coaching and training on data analysis software and advised and assisted with accessing and using data sources.

Data Champions: Staff who embrace the concept of using data to inform decisions. Data Champions can work at any level of the agency and do not need to be proficient in data analysis; only in encouraging and demonstrating the use of data within the agency.

Identification of agency priorities directly informed the curriculum design and became the focus of the projects to be completed by participants. A Leadership Summit was held in January 2011, before the initiative's launch, that helped spur all levels of management to become invested in the initiative's success. The commissioner of the Department of Children and Families issued the invitation to apply and applicants needed the documented support of their supervisors.

Launching the Department of Children and Families (DCF) Fellows Program

The DCF Fellows Program emerged from planning discussed above. The 18-month program was designed to address three major areas of development:

- Data analysis
- Leadership
- Presentation skills

The Fellows would actively use these skills throughout the program, leading up to final presentations before agency leadership. The plan called for full-day, monthly classes to be supplemented by extensive coaching to assist participants with homework and group assignments. Fellows were to work with live data to address current challenges that leadership had identified in their counties, ensuring that results were eagerly awaited and important to the agency.

The competitive application process resulted in an initial cohort of 100 Fellows who were chosen in the fall of 2011 from a pool of 147 applications. The DCF Fellows Program was launched in January 2011.

As described in the next section, five Resource Fellows participated in the 18-month training. Resource Fellows were Information Technology staff who were able to support and assist the Data Fellows as they acquired and began to use data analytics skills. The term *Data Champions* was used during the development and implementation of the program to refer to staff who promoted the use of data. Data champions need not be proficient or expert in the analysis and use of data.

Developing a Customized Curriculum

NJDCF knew that a specific and comprehensive curriculum was crucial to the *Manage By Data* Program's success. In June 2010, the Public Catalyst Group was chosen to develop and deliver that curriculum. The lead staff from Public Catalyst had held significant leadership positions within NJDCF and had helped lead substantial parts of the agency's reform efforts. This enabled these staff to have both an insider's and outsider's perspective of NJDCF's culture, capacity, and challenges. Public Catalyst had access to and credibility with leadership at different levels of the agency. Once Public Catalyst began to deliver the training curriculum, it soon earned and enjoyed similar credibility with the Data Fellows.

The DCF Fellows curriculum was designed to teach transferrable skills as well as specific content. Adult learning principles were emphasized, particularly applied learning. Delivering the curriculum over 18 months allowed time to teach content and to coach skills and helped the Fellows practice skills in a variety of settings: in their monthly, day-long classes, in their work, and at special events and gatherings. Coaching was built into the curriculum from the beginning and was an integral part of the program. The 100 Fellows were divided into five groups of 20 each; classes were held at different locations across the state, resulting in manageable class sizes and proximity to local offices.

The 18 day-long seminars (Appendix I) were divided into three phases of six seminars each.

- The first phase focused on helping Fellows become knowledgeable consumers of data, introducing the concept of using data to tell a story, using data as a diagnostic tool, and learning how to ask questions and challenge assumptions through data. Data Fellows were taught the importance of using both quantitative and qualitative information to diagnose and understand an issue or problem.
- The second phase of the program focused on using data to understand and manage change within the agency, in which participants dove more deeply into the business processes of the agency and case study examples.
- The third phase of the program focused on improving outcomes. Data Fellows learned to pull the diagnostic pieces together and to design strategies that would help to move their findings into actions.

The seminars provided opportunities to present, work in teams, and use live data. These skills were further honed when Fellows presented their findings to agency leaders at large public events at the midpoint and end of the seminars.

Evaluating the Program

The program developers and executive leadership wanted an evaluation of *Manage By Data* that would be able to keep up with and give timely feedback to the program as it developed while maintaining objectivity to allow for fair assessments both during and at end of the program. Action Research Partners, which conducts research, evaluation, and policy analysis to improve human services, was selected to evaluate *Manage By Data*. Led by Timothy Ross, the organization actively observed and evaluated the program as it proceeded. The evaluators attended each of the 18 monthly seminar sessions at least once (across the five groups) and observed every seminar involving one group to understand the group dynamics of the Data Fellows over time. Data collection included review of key program documents and administrative data; observation of seminars and focus groups; surveys of Fellows; interviews with NJDCF administrative staff; and a site visit to and interviews with the area office of one of the groups of Fellows. Using this approach, the evaluators were able to give timely and candid findings about the program as it developed and provide a cogent and comprehensive final evaluation.

The evaluation revealed that *Manage By Data* was a huge success and squarely met both its implementation and outcome goals. The evaluators wrote,

Manage By Data was an ambitious program with tight timelines. Major program components were developed and implemented on schedule. Particularly noteworthy was the development and refinement of a comprehensive curriculum and the coordination of the curriculum and Data Fellow training and coaching with ongoing agency activities. Data Fellow attendance at three executive leadership summits approached 100 percent and these summits attracted senior leaders from throughout the agency as well as external stakeholders. A large majority of the Data Fellows assessed the curriculum, coaches, and program very highly and expressed strong praise (Ross et al. 2013).

As described in the final evaluation report, *Manage By Data* faced common challenges and developed purposeful strategies to address them. One challenge was to sustain a high level of support from agency leaders. A second challenge was the Data Fellows' need to balance time

demands. A third challenge involved managing group dynamics. Over its 18 months, *Manage By Data* was able to achieve three important outcomes. The program:

1. Developed staff capacity
2. Developed a candidate pool for promotion
3. Established a model for data-driven management

Evaluation findings regarding challenges faced and met and outcomes achieved are described in more detail in the findings section of this report.

Examples of Fellows' Projects

Topics for Fellows' projects primarily grew from meetings with area and local office managers, during which current performance, challenges, and best practices were discussed prior to the start of the Fellows program. Topics that arose from these meetings included the agency's need for a better understanding of the pool of families that was reported or referred for abuse or neglect problems again and again, the improvement of parent-child visitation practice, the characteristics of children remaining in placement the longest, and timeliness of the agency's response to referrals. We describe two Fellows' Projects below.

Project 1: Multiple Referrals

Struggling with high-intake caseloads, this group of Data Fellows was interested in learning more about families who were referrals and re-referrals; where they came from and why. Data analysis showed that, in almost half of the cases reviewed, caseworkers did not collect information on the families' histories and needs. In addition, in almost 40 percent of the cases, taking action on prior referrals could have prevented the most recent referrals. Literature reviews identified best practices in prevention from other states. A qualitative case review revealed that almost half of cases had four or more referrals and, in more than half, fathers were never interviewed. Closer analysis identified schools as the major source of referrals. The group drew on these findings to develop recommendations to leadership that included: training staff to conduct more thorough intake interviews on family background; enhanced engagement of fathers; and improved communication strategies with area schools.

Project 2: Parent/Child Visitation

The literature shows that children in foster placement who have regular visits with their parents have better outcomes, including a greater likelihood of reunification with their parents, shorter stays in out-of-home foster care, and positive emotional wellbeing. One group of Data Fellows focused on improving parent/child visitation practice and examined the frequency of visits, where the visits occurred, and caseworker documentation of visits. They found that children placed with kin (i.e., grandparents, aunts) were much more likely to have parent visits, more than half of which occurred in agency offices rather than more welcoming locations, and far fewer visits were happening or being documented than were suggested by policy. The group recommended the:

- Development of training and coaching around visitation
- Use of contracted agencies for specific types of cases
- Initiation of a pilot Visitation Unit to supervise visits after hours

Strategies for Culture Change Toward Data-Driven Decision Making

Key to the success of the *Manage By Data* initiative was a deliberate focus on changing the culture of the agency, not only toward becoming one that used data to inform decisions, but also toward one whose staff knew how to talk about data, encourage its use, and do so in a way that brought others on board.

Strategy One: Create a Common Language

Since the literature on adult learning reveals that it is most effective in adult education to focus on three to five concepts at a time, the Fellows curriculum concentrated on several key ideas and incorporated them into every session (Armstrong et al. 2012). This created a common vocabulary and understanding among the Fellows and leadership that then infused their local offices. Many ideas were adopted from change management literature. A particularly helpful book was Dan and Chip Heath's 2010 book, *Switch: How to Change Things When Change is Hard*.

Bright spots: A key concept from this book is the importance of identifying and understanding “bright spots” (i.e., focus on what is working and build from there). While it is important to understand what is not working, focusing on bright spots may be a shorter and surer path to change. Data Fellows used bright spots to improve investigative practice and hotline performance. Searching for bright spots soon became part of the Data Fellow's lexicon and an important motivator for change. “Bright spots” show how data can be used to promote the sharing of successes and learning from one another. It was also a powerful reminder that the agency was doing many things well, highlighting how far it had come and that change was possible.

Track and adjust: The strategy to “track and adjust” was not only taught but modeled throughout the Fellows program: feedback was solicited from participants and improvements made to the new initiative in real time. As time went on, this strategy also gained strong traction throughout NJDCF, embedding the core idea of continuous quality improvement into the daily life of the agency.

Leverage metrics: Since NJDCF was under court order to track more than 200 measures, it was important to focus on a few key measures that were highly correlated with other measures. Data Fellows were taught to identify and use “leverage metrics.” In child welfare, parent-child visitation is a key metric that is measured at the federal level. NJDCF policy encourages weekly visits between children in care and their parents unless such visits would be inappropriate. The Data Fellows could see that this one indicator—child-parent visits—was closely related to improvements in other important outcomes. It's been demonstrated that, if visits occur consistently, reunification rates with parents and the stability of reunification will be higher, and behavioral issues will be reduced, all of which benefit the children, their families, and the agency.

In addition to using the rich array of data available from New Jersey's child welfare data system, the Data Fellows were encouraged to use other quantitative (e.g., census data) as well as qualitative (e.g., focus groups, testimony at hearings) data to better understand the context of the trends and outcomes they were exploring and to more accurately tell their story. The term "quant/qual" soon became part of the everyday language of the Data Fellows and their trainers and coaches. Using this language consistently and modeling these concepts throughout the Fellows program and the agency soon caused them to take hold and become a part of the way NJDCF does business.

Strategy Two: Be Clear About Ambassador Role and Provide Tools to Succeed

There was an explicit expectation that the Data Fellows would serve as "data ambassadors," responsible for sharing what they'd learned with their colleagues and managers. Extensive coaching was provided to help them hone their presentation skills and to feel comfortable and confident in sharing their findings and ideas. Fellows were taught platform public speaking skills, how to use PowerPoint effectively, and data presentation etiquette.

Data Fellows were given opportunities to exercise leadership, regardless of their role in the agency. Teams of Data Fellows presented the findings from their projects at NJDCF Leadership Summits, with audiences of more than 100 high-level staff. The Fellows were then seated at each table and charged with networking with colleagues about what they learned and how they're using it. Some Data Fellows were asked by their area offices to participate in statewide meetings that were not officially connected with the DCF Fellows Program. Program developers wanted the training and the use of Data Fellows in this way to result in a lead-from-the-middle (or middle-out) strategy for changing the cultural and technical capacity of using data within the agency.

Strategy Three: Make Participation an Honor

Asking for this level of commitment and dedication from staff to an 18-month program, in addition to their daily workload, was a tall order. It was critical that this program not be perceived as a mandatory training or a temporary initiative. By being selective about who participated in the program, being chosen to serve as a Data Fellow became a goal to strive toward rather than a burden. In return for the honor of being chosen, the Fellows completed their homework on weekends, traveled to team members' offices to develop presentations, and even planned life events around the class schedule. By making it clear that this was an agency priority, staff responded by making it their priority as well.

Strategy Four: Strive for Quick Wins

Evidence that the new way of business is working is key to increasing buy-in at all levels of the agency. Whenever possible, practical changes identified through the Fellows' projects, or even during their class discussions, were taken back to executive leadership and put into practice.

For example, early in their first classes, the Fellows used census data to analyze the demographics of the population they served in local offices. They found that the population served in several areas had changed significantly over the previous decade: there were many more Spanish-speaking families than previously and more families were being referred from towns from which there had previously been few referrals. The Fellows recommended revising contracts to make services more accessible to client families and to require more Spanish-speaking

staff at these locations. The immediate impact of these “quick wins” helped to fuel the Fellows’ enthusiasm.

Strategy Five: Align People and Processes

From the outset, it was clear that the class of 100 Data Fellows would be the beginning, not the end, of building data-driven decision making into the daily culture of the agency. Teaching one round of Fellows would not be sufficient to effect long-term system change. It was also clear that providing this intense level of training and coaching over 18 months would require substantial financial resources and time commitments that were not likely to be available. In September 2012, NJDCF funded a second cohort of Fellows, which was scaled down to 40 participants and a 9-month curriculum. Other key aspects of the program remained the same. While participants may not have had as much time to practice their skills before putting them to use in their offices as the first cohort had, leadership appreciated the reduced turnaround time involved to collect findings on practice challenges.

The Graduate Fellows program, an advanced-level class for round one Fellows, was launched in tandem with the second cohort in an effort to further enhance the skills of the most motivated Fellows from round one and to serve as a train-the-trainer pipeline for future rounds of classes. A class of 25 Graduate Fellows was selected from the original class of Fellows; they were able to revisit their round one projects and focus more deeply on their practice issues. The Graduate Fellows also served as mentors to the round two Fellows, which provided them with practice in how to coach on the basic data concepts.

During initial design and implementation, the effort to develop and sustain data-driven decision making was housed within the ranks of executive leadership. This was critical to its success, with the chief of staff of NJDCF overseeing and being actively involved in the initiative, ensuring that it remains responsive to leadership’s immediate needs and that leadership is current on the Fellows’ findings and activities. This direct, timely connection between the Fellows’ classes and leadership has helped to keep the initiative nimble, relevant, and responsive. To ensure sustainability, the Training and Continuous Quality Improvement (CQI) units have been key partners all along but their roles continue to grow, allowing executive leadership to focus more heavily on other priorities while embedding *Manage By Data* in the core infrastructure of the agency.

A benefit of the classes has been the creation and contribution of Resource Fellows from NJDCF’s internal data shop staff. At the beginning of the first round of the *Manage By Data* Program, an information technology staff person was assigned to each of the five Fellows cohorts to help pull datasets and provide technical assistance on software. By attending the Fellows classes, Resource Fellows became more attuned to practice issues and how data was being used in the field; they also made connections with agency staff. In addition, Resource Fellows honed their own presentation skills by providing mini-trainings on software and analysis techniques.

Following the second round of Fellows and Graduate Fellows, the agency considered the best way to proceed to reach the tipping point:

- How many Fellows are needed within the agency in order to see a significant difference in managing by data statewide?
- Is it better to concentrate current and future Fellows in several offices or regions to gain a critical mass or to continue to disperse them throughout the agency?

While there are no clear answers to these questions as of yet, buoyed by the success of the first two rounds of Data Fellows, NJDCF initiated a third round of Fellows in the fall of 2013, funded by the agency's resources and external foundation support. By the fall of 2014, 173 Data Fellows had graduated from the three rounds of training and were working throughout the agency. Candidates were being solicited from among these graduates to be the trainers of future rounds of Fellows. The dispersion and integration of Data Fellows throughout the agency continues because the agency has crafted a way to support *Manage By Data* in the future without substantial external funding.

Findings from the *Manage By Data* Program

With all its success and accomplishments, *Manage by Data* is still a work in progress. The initial round of 100 Data Fellows received intensive training and coaching to enhance their understanding and use of data. However, from its inception, the program was about something much bigger: changing the culture and capacity of an agency of more than 7,000 staffers and improving outcomes for the thousands of families and children it serves. NJDCF has gone on to provide subsequent rounds of training, learning, and adjusting as it proceeds in pursuit of changing practice and outcomes. The agency is aware that it must get to the “tipping point” in implementing data-driven decision making sooner rather than later. As a top executive in the agency noted, “As important and as good as this program is, we also have other priorities and needs. We need to get as far as we can in establishing this program and changing practice and outcome. That way, the change will last.”

Finding One: Executive Leadership is Crucial

Support from executive leadership for a program that would enhance the technical capacity and culture of the agency to use data was there from the very beginning. The impetus for such a program came from executive leadership who wanted to continue New Jersey’s successful reform of its child welfare system by moving beyond substantial improvements in resources, organization, focus, and process to changing actual outcomes for children and families. Executive leadership “owned” the change but also shared it with other levels of leadership throughout the agency.

The director of the agency’s Office of Information Technology and Analysis was part of the core leadership team that designed and moved the project forward. As the program was being designed, area offices were visited and consulted to find out what problems and issues were most pressing and important to them. This helped program developers to focus on outcomes that would be relevant to the agency and to broaden support throughout the agency. Executive and midlevel leadership remained actively engaged as the program progressed by participating in the two New Jersey Leadership Summits (in January 2011 and January 2012), attending many of the 18 DCF Fellows Program seminars, and attending the Data Fellows’ Final Project Presentations in May and June 2012. The Data Fellows’ supervisors were connected to the project by being kept informed of, and often directly involved with, Data Fellows’ class projects, including their final projects.

Executive leadership understood that *Manage By Data* was not a one-time effort. To work in the long run, the program would need to continue to increase the number of supervisors and managers who were comfortable with and confident in using data and to have these staff influence their colleagues in understanding, appreciating, and using data to manage and improve outcomes. This approach was very intentional. As the commissioner of NJDCF explained to representatives from 16 other state child welfare agencies who attended a meeting in New

Brunswick, New Jersey in December 2012 to learn more about the program, “*Manage By Data* is our succession plan. This is how our agency needs to be doing its business.”

Finding Two: Data Fellows are Now Using Data on the Job

Manage By Data was developed and informed by leadership at all levels of the agency. The Fellows were a diverse group, selected from all geographic areas of the state, serving in a wide variety of roles. This broad reach allowed for a greater impact upon the agency culture, despite the limited number of people involved. The success of this approach is evident in the many ways data are being used to inform decisions at many levels throughout the agency:

- After finishing the classes, a contract administrator and former Fellow returned to her position reenergized. Plagued by a particular external provider who rejected families for services, she examined a year’s worth of data to determine that a single worker was rejecting the majority of families. By digging deeply into the data, the contractor administrator was able to focus her energies on educating the external provider to improve services rather than returning to her previous assumption that this challenge was an intractable issue.
- Area directors hold quarterly presentations on data with their staff. The team closely monitors their status on measures compared with those of other area offices.
- ChildStat meetings are now held monthly statewide, modeled after the New York City Police Department’s CompStat, a data-driven performance management approach. During these meetings, selected area offices present on the status of their outcomes and proposed strategies for improvement. Offices report seeking out their Fellows for assistance with data analysis and presentation. The culture of learning, asking questions, and not pointing fingers is reinforced and mirrors that infused within *Manage By Data*.
- Where feasible, some Fellows’ pilot projects have been expanded statewide. For children in out-of-home care, permanency is an important goal; there are federally mandated timelines associated with family reunification, adoptions, or permanent placement with relatives. Delayed permanency is particularly associated with special populations, including older youth, children from minority populations, and those with disabilities. A Fellows project focused on addressing this issue by requiring one local office manager to approve and justify any goal selected for a child that does not promote permanency. This manager was promoted and then expanded this practice change statewide, resulting in a 2 percent decrease in delayed permanency across the state.
- The Fellows’ skills are put to use more formally through the Office of Performance Management and Accountability. The office employs several Fellows who attended the classes and supports agency messages, such as those about prevention, by providing numbers and concrete examples furnished by the Fellows through their projects. The director of the office stated, “It’s not just training—it’s training, culture change, succession planning, using data, leadership, presentations...”
- Fellows report using the skills they learned on a daily basis, pausing to look at the whole picture before reacting. They are also producing more effective data reports that are useful tools for staff. A Fellow said she knew that the reports she was producing prior to *Manage By Data* were not useful but didn’t know how to address this and make them better.
- Executive leadership is also using data on a daily basis, which are more consistently informing their decisions. The chief of staff, who oversees the Fellows classes and attends them monthly, says she leaves class to make calls to convey changes based on what she’s learned. For example, if presented with data informing child welfare staff of a high number of infants in a particular county, staff will examine the services they have available for this population in that area.

- Executive Leadership has launched an intranet site called “Bright Spots,” highlighting the work of the Fellows and collecting their projects and presentations into a single location that is accessible by all in the agency. The idea for the site was proposed by a cohort of Fellows.
- An external partner told of returning to the agency six months after a Fellows graduation to conduct a Quality Service Review (QSR). The QSR process is used by many child welfare agencies to examine practice and involves an in-depth file review to appraise the current state of the child, the caregiver or parent, and the performance of the system on behalf of that child. The partner stated that several of the reviewers conducting this lengthy, detailed process were Fellows and that he saw clarity in the presentations he had not seen in other states.

Finding Three: *Manage By Data* is Changing the Way the Agency Conducts its Operations

It is still too early to tell how much *Manage By Data* is changing actual outcomes across the agency. However, the following examples of how the program has changed practice and improved outcomes are very encouraging. From the beginning, the program focused on changing actual child welfare practice and outcomes. This would take time, of course, and, by the end of the 18-month Data Fellows Program, such changes would be in process, but not completed. One would expect that only *after* the Data Fellows completed their training would changes in day-to-day practice occur, grow and, ultimately, change outcomes. However, having the Data Fellows identify and work on real problems with real data resulted in changing practice and improving outcomes in a number of instances, even during the *Manage By Data* Program. Two examples are described below:

- **Improved investigations practice:** The Data Fellows analyzed investigation completion timeliness in several local offices. To their surprise, they found that the data did not support the common assumption that offices taking more time have better results. By analyzing offices that were both faster and produced better results, the Fellows found that, while counter-intuitive to some, offices taking the time to have supervisors conference investigations with staff saved time and produced better outcomes. Using this information, the Fellows helped to change practice in a struggling office and doubled the rate of investigation timeliness.
- **Improved hotline performance:** The Data Fellows learned that hotline screeners can improve field investigations if they can reduce the rate of anonymous referrals. The data showed that some screeners had very low rates (3 percent to 8 percent) of anonymous referrals while others had very high rates (almost 50 percent). The Data Fellows listened to the screeners' recorded calls in both the low- and high-rate groups and found that, by using strong engagement skills, low-rate screeners persuaded more callers to give their names. The Fellows incorporated those skills in a revised script for screeners. Anonymous referrals went down significantly—by more than 2,000 over an 18-month period.

Finding Four: *Manage By Data* is Having a Positive Impact

The *Manage By Data* Program was designed with an eye toward sustainability. Evaluation findings reveal several system-level outcomes that indicate the program has been effectively infused within many levels of the agency (Ross et al. 2013).

Developing staff capacity. NJDCF wanted to develop teams at the regional and local offices that would use data to identify trends, establish priorities, and solve problems. A baseline survey indicated a fair amount of skepticism on the part of the Fellows regarding both how much data could be used as a managerial tool and in their ability to use data effectively. This

skepticism largely vanished as the program proceeded. The evaluation found that 81 percent of Fellows reported “tremendous” or “substantial” improvement in their data analysis skills. Sixty-four percent reported the same levels of improvement in public speaking and presentation skills. A follow-up survey of Fellows was conducted six months after they completed the program. The vast majority of those who responded reported that the skills taught in the *Manage By Data* Program are useful in their day-to-day work; 80 percent or more reported the usefulness of foundational competencies such as data analysis, problem solving, decision making, presentation preparation, and public speaking.

Developing a candidate pool for promotion. NJDCF wanted the Data Fellows to help boost data analysis use and skills throughout the agency. An important path for implementation would be the advancement and promotion of the Data Fellows. *Manage By Data* played no explicit role in promotion—Data Fellows were not promised or guaranteed promotion if they participated in the program. Nevertheless, by the end of the program, 40 Fellows had been promoted within NJDCF (Ross et al. 2013). *Manage By Data* was able to enrich the promotion pool with ambitious, energetic staff who were knowledgeable and committed to using data to manage.

Establishing a model for data-driven management. NJDCF wanted the program to help establish a common understanding of how to manage by data among the Data Fellows as well as the staff with whom they worked. The Data Fellows used the *Manage By Data* approach in their small group (final) projects, several of which were implemented and associated with measurable changes in outcomes. Six months after the program ended, a majority of Data Fellows reported starting *Manage By Data* projects in their everyday work (Ross et al. 2013). In addition, a majority of these Data Fellows were confident that they could complete these projects without additional outside help. The training and skill enhancements of the Data Fellows appear to have stuck with them. However, Data Fellows report less success in passing along the values and skills of *Manage By Data* to their managers, colleagues, and, especially, junior staff. Workload pressures and isolation were cited as reasons for this difficulty.

Finding Five: *Manage By Data* Provides Valuable Lessons for Other Government Organizations Seeking to Enhance Their Use of Data

New Jersey's *Manage By Data* Program offers important lessons, but is not a recipe or formula for infusing data-driven decision making into public service agencies to improve their work and the outcomes for the clients they serve. There must be a clear commitment, a vision, and a plan for moving forward. There also must be a willingness to monitor how things are going and to make adjustments along the way. The commitment, vision, and plan must make sense within the organizational context and align with the resources of the public service agency and the state that it serves. With this important caveat, we offer the following lessons for other public service agencies that are interested in infusing data-driven decision making to improve decision making and outcomes.

Lesson One: Be clear about your goals and why you are doing this. Agencies are complex and have multiple pressures and priorities. It is important that both leadership and staff understand what you are trying to accomplish and why you want to do this. There is a tendency for performance improvement initiatives to focus on the *how* rather than the *why*. They usually don't work.

Lesson Two: To transform a complex agency or organization, start small, aim high, and learn and adjust as you go along toward your ultimate goal. The initiative should not be too small or too big. New Jersey considered rolling out its program statewide but decided that a smaller,

more intensive program was more feasible and allowed the agency to “track and adjust.” This approach also helped to grow support for the initiative throughout the agency and to change the culture of the agency. Culture change and leadership support take some time, but cannot take too much. Other priorities and needs are also there. Every initiative has a window and shelf life.

Lesson Three: You need clear and strong support from leadership throughout the agency. This support can and will grow over time, but you should not start without it. This support cannot only be “top-down.” Workers in large public agencies have heavy workloads and competing demands on their time. Other initiatives to improve agency performance have come and gone. To change the technical skill and culture toward using data, staff need to know that leadership wants this change. For leadership to want this change, it has to understand what the change is and believe in its value. The more that leadership at different levels is actively involved with the initiative, the more visible the support will be to staff. The more that leadership is involved, the better they will understand the initiative and support it.

Lesson Four: Incentivizing participation is critical. Public agency staff are already working hard, making it challenging to take on new work and learn new skills. Making participation, not only voluntary, but offering the benefits of leadership recognition and skill enhancements necessary for advancement, will make dedicated and competitive staff eager to join.

Lesson Five: Enhancing methodological skills to interpret data and changing the culture toward using data to improve practice go hand-in-hand. Many workers do not understand how to interpret and use data to do their jobs better. Even more workers may be afraid that the data will be used to grade them and monitor compliance. Teaching and coaching staff to interpret, understand, and use data will not take hold if staff are fearful and the agency culture does not truly promote using it to improve practice and outcomes. This is why designing the curriculum to include reinforcement by relevant coaching and assignments is so important.

Lesson Six: The curriculum and coaching should not be “off the shelf.” It should be developed and adapted to the agency’s structure, culture, and needs. Topics and issues should be relevant and understandable to staff and to leadership. Data should be used to tell a story that is relevant and of interest to other staff and to leadership. In describing how to decide where to begin (which story to tell), several NJDCF staff recommended: “Start where you are strong; where your best data is.”

Lesson Seven: The data used to train staff should be from their own agencies. It is also helpful, but not essential, that live data be used in real time. If staff are to learn how to understand and use data to achieve better outcomes, they should be trained and coached using real data from their agency and state. It is tempting to use data that may be readily available nationally or from another state. While this may be adequate for teaching basic statistical techniques, it is not adequate for teaching how to use the data to identify and understand issues and challenges that your agency faces and what may be done to improve practice and outcomes. Articles and other data sets can be used to supplement the training and coaching, but it should not be substituted for the agency’s data. If an agency does not have or is unwilling to use its own data, it is not ready to undertake a program to teach its staff to manage by using data. If supervisors don’t have real data to manage with, what’s the point of training them? It is not necessary for recent data to be as readily available as New Jersey’s data. However, it is important that data are recent enough to be relevant to the issues and problems to be explored and addressed. Data a decade old are probably not adequate.

Lesson Eight: Coaching is an essential part of the training. Without coaching, it is very difficult for staff to learn how to apply their understanding of data to real situations. When the program developers were designing *Manage By Data*, they anticipated that active coaching would be important in turning Data Fellows into active day-to-day users. They found that coaching was critical. Early in the program, coaching helped Data Fellows to overcome their shyness and reluctance to use data. As Fellows' knowledge increased and their confidence grew, coaching helped them to refine their presentation skills, culminating in sophisticated presentations in the Fellows' round one and graduation presentations. *Manage By Data* Program developers, coaches, and Fellows attested to the importance of coaching. The interplay between data interpretation and application allowed for "diagnostics to be baked in" throughout the seminars. As New Jersey has proceeded with additional rounds of Fellows, it has had to decide how much coaching could be scaled back, both in terms of time and resources. While it is best for individuals to discover that "AHA!" moment themselves, shorter programs necessarily provide less time for this to happen. Nevertheless, coaching remained an important component of integrating data analytics with addressing real-world practice challenges.

Recommendations

NJDCF's *Manage By Data Program* continues to grow and change the way the agency does its business and improves its outcomes. There are many important players and staff throughout NJDCF who have contributed to this success and are continuing to do so. Many of the lessons learned discussed in the previous section focused on the middle level of the agency, where the program is grounded and grew. It is important to remember, however, that the vision for and ongoing support of *Manage By Data* came from executive leadership. Without this vision and support, the program would not have happened in the first place or been as successful. New Jersey was spurred to action by a 2003 court settlement agreement to a class action suit that followed years of spotty performance. Many large state public social service agencies labor under similar demands and challenges to those New Jersey's child welfare agency faces: increasing caseloads of clients with multiple needs, freezes or reduction in staff, stagnant or declining economies, and decreasing state budgets. The PerformanceStat approach offers the opportunity to improve performance and outcomes, even in the face of these challenges. However, most states and their social service agencies have not realized this potential. What lessons does *Manage By Data* offer for successful change management?

Recommendation One: Agency Leadership Must Establish a Vision for the Program and Drive the Change

New Jersey's child welfare executive leadership did three things exceptionally well in initiating and managing this major change initiative. Leadership established the vision and drove the change. Having improved the agency's infrastructure (including the data system) and practice, it turned to improving performance and outcomes. To do this, the agency sought to train and support its staff to use the newly enhanced data system. This involved changing data analytics skills and the culture (agency level) and climate (staff level) to enable actual use of the data. Executive leadership not only created this vision but owned it by being involved with the initiative every step of the way. Sometimes, when executive leadership creates a new initiative, it attempts to drive or manage the change top-down. New Jersey's executive leadership shared the change throughout the agency. As the evaluators of *Manage By Data* concluded, a hallmark of the program was the successful development of a "middle-out management" model. This model emerged somewhat organically from the program. As Data Fellows became competent and comfortable with their new skills, they brought them to and shared them with their supervisors and colleagues. While there are still limits, noted by the evaluators, to how much this is occurring in some regions, this model is likely to help the agency reach its tipping point in changing the technical capacity and culture of the overall agency.

Recommendation Two: Agency Leadership Can Use Data Analytics to Support Change in Agency Performance and Outcomes

Leadership used data analytics to focus on and support concrete changes in performance and outcomes. This emphasis was there from day one and stayed there. In deciding what to include and focus on in the curriculum, leadership at all levels of the agency were asked what their most pressing challenges and concerns were with regard to performance and outcomes. From the first day of the seminar, Data Fellows were asked to think of data, not as numbers, but as a story to be understood and told. What did a low or moderate score on a key indicator mean? What was behind that score? What could be done to improve it? The emphasis and ongoing focus on actual outcomes is what distinguishes *Manage By Data* from many other data analytics programs in child welfare.

Recommendation Three: Agency Leadership Should Align Data Analytics Programs with the Agency's Priorities and Processes

Leadership aligned this initiative with the agency's priorities, processes, and people. Too often, a new initiative is added to the pile of earlier or ongoing initiatives. Not only can this dampen staff enthusiasm ("just another flavor of the month"), but it may hinder an initiative from gaining traction and sap its energy going forward. The outcomes examined and targeted in the curriculum and examined by the Data Fellows were major or emerging concerns within the agency. The state-wide presentations (first and second New Jersey Leadership Summits, the Data Fellows' Final Project Presentations) provided important venues to help understand and adjust this alignment. The process of understanding and adjusting this alignment also occurred at seminar classes (which leadership attended and actively participated); at meetings among Data Fellows, their supervisors, and colleagues in their home offices; and at other trainings and events. Of course, it is easier to achieve alignment on paper than in the rush and jumble of everyday work. This is why leadership's focus on alignment was so important.

Appendix I: New Jersey DCF Fellows Program Seminar Topics

Initiation	DCF Leadership Summit: Introduction to NJ DCF Fellows Program
Seminar One	The DCF Fellow as Storyteller
Seminar Two	Data as a Diagnostic Tool
Seminar Three	Asking Questions and Challenging Assumptions
Seminar Four	Understanding Quantitative Data Etiquette & Presenting Qualitative Data
Seminar Five	Finding Bright Spots & Building a Diagnostic Plan
Seminar Six	Moving Data into Action (<i>Round One Presentations</i>)
Seminar Seven	From One to Many – Learning to Analyze Flow & Process
Seminar Eight	Analyzing Business Process & Permanency Metrics in Context: The Challenge of Improving Parent-Child Visitation
Seminar Nine	Using Leverage Metrics to Meet Goals
Seminar Ten	Accessing, Evaluating, & Applying Promising & Best Practices (<i>Round Two Presentations</i>)
Seminar Eleven	Measuring Wellbeing
Seminar Twelve	Thinking Systemically: the 2012 DCF Leadership Summit
Seminar Thirteen	Putting the Pieces of the Puzzle Together
Seminar Fourteen	Turning Findings into Action
Seminar Fifteen	Reflections on Leading & Managing by Data
Seminars Sixteen & Seventeen	Striving for Case Practice at Its Best: Utilizing Data to Manage Change/ The Fellows' Graduation Projects
Seminar Eighteen	Graduation

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About the Authors

David Lambert, PhD, retired in fall 2014 as an associate professor in the Public Health Program, Muskie School, University of Southern Maine where he taught courses in health economics, mental health policy, and public health policy for children and families. Dr. Lambert directed the evaluation of the Northeast and Caribbean Child Welfare Implementation Center, which is funded by the U.S. Department of Health and Human Services (DHHS) Children's Bureau. In this capacity he helped design and monitor evaluations of participating state and tribal projects. A member of the Maine Rural Health Research Center, Dr. Lambert has more than 25 years of experience conducting mental health services research at the local, state, and national levels. This work includes studies on integrating primary care and mental health, rural mental health outreach, dual diagnosis, recovery models, best practices of mental health managed care in rural areas, implementation of evidence-based services, the prevalence and consequence of substance abuse across rural areas, and rural tele-mental health. He served on SAMHSA's National Advisory Work Group to Reduce Stigma in Mental Health and is past-president of the National Association for Rural Mental Health. Dr. Lambert received his PhD in social policy from the Heller School at Brandeis University.



Julie Atkins, M.A. is a research associate at the Muskie School of Public Service at the University of Southern Maine. She brings 15 years of experience in research, evaluation, and the provision of technical assistance on issues affecting children, youth, and families. Ms. Atkins has worked closely with executive leadership in state and tribal child welfare agencies, helping to enhance management, training, and data systems. Building organizational capacity through effective implementation and the use of data to improve outcomes is one of her focus areas. Ms. Atkins worked with states and tribes across the country through the Northeast and Caribbean Child Welfare Implementation Center and the National Resource Center for Organizational Improvement, which are services of the Children's Bureau, helping to enhance the capacity of their child welfare programs. She is currently a partner on the *Capacity Building Center for Tribes*, also a service of the Children's Bureau, providing distance education to tribal child welfare agencies on how to improve outcomes through systems change.



Ms. Atkins received her MA in American and New England Studies from the University of Southern Maine.

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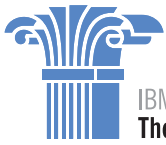
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