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Using Integrated Data Systems to Improve Case Management and Develop Predictive Modeling Tools



How a county and a state are using IDS data and predictive modeling to help case managers identify the most-at-risk families and individuals and improve child welfare and health care outcomes

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Integrated data systems are often used to inform decision making at the top tiers of local or state government. Policymakers use analyses based on large numbers of integrated data system (IDS) records (from which personal identifying information has been removed) to understand the overlap between cases that receive services from different systems and the impact of one system's policies and programs on the outcomes in another. This information helps government officials make smarter decisions about the policies and programs they manage and improve client outcomes.¹

A few jurisdictions — notably, where the IDS is maintained by a government agency rather than a university research center — are also sharing IDS information about specific clients with program staff to improve decision making on the frontlines. A challenge in these efforts is packaging this information in a way that is readily accessible, easy to interpret and useful for caseworkers. One approach allows caseworkers and contracted service providers to view information about their clients' current services and past service histories in carefully protected electronic portals. Other efforts are using predictive analytics to develop tools that help caseworkers target scarce resources to those who need them the most and identify the individuals and families who are most at risk.

Predictive risk modeling examines large amounts of de-identified data on client characteristics, service receipt and

outcomes to determine past patterns in order to predict future outcomes. Predictive modeling is most accurate when researchers can examine outcomes for many people about whom they know a great deal. The number of data sets from multiple systems that are stored and linked in a mature IDS, the large number of case records in each of those data sets and the number of years they go back in time make an IDS a robust source for carrying out predictive risk modeling and developing related tools to improve caseworker decision making.

The human services departments in Allegheny County, Pennsylvania, and Washington state are leaders in sharing IDS data with service providers and developing predictive modeling tools for frontline case managers. This case study describes their innovative approaches, their influence on decision making on the ground and their contribution to improved outcomes for vulnerable children and families.

- In Allegheny County, Pennsylvania, Department of Human Services (DHS) staff use the IDS to generate weekly email alerts to notify child welfare caseworkers when a student on their caseload has missed several days of school, been suspended or withdrawn from school.² DHS also shares information in the IDS about clients' service histories with selected service providers and with clients themselves, with the aim of providing greater continuity of care and better coordinated care. Based

An integrated data system (IDS) periodically links individual-level administrative data from multiple public service agencies and contracted service providers, creating a rich picture of individual service needs, participation and outcomes over many years. In some systems, individual records are linked together to form comprehensive, longitudinal household and family records. An IDS can be operated at the state, county or city level within government or by nonprofit or university partners. By offering large sample sizes, longitudinal data and the ability to identify multisystem clients, integrated data systems are valuable tools for policy analysis, program planning and monitoring and evaluation. Due to the confidential and sensitive nature of the data, organizations that house an IDS carefully follow privacy laws, securely store data and maintain rigorous standards for use and access. For additional information, visit www.aecf.org/IDS, www.aisp.upenn.edu and www.neighborhoodindicators.org/resources-integrated-data-systems-ids.

on data in the IDS, the department is using a predictive modeling tool to help child welfare workers more quickly and accurately identify the most urgent reports of alleged child maltreatment.

- In Washington state, health care providers are using a predictive modeling tool known as PRISM, shorthand for Predictive Risk Intelligence System, to improve service delivery and allocate resources more efficiently among a high-risk caseload eligible for both Medicare and Medicaid. Drawing on information from multiple data sets stored and linked in the state's integrated data system, PRISM identifies a subset of high-risk clients who are most likely to benefit from intensive, coordinated care management. Early results from a demonstration program show a savings of \$21 million in Medicare expenditures among eligible individuals relative to a comparison group.

ALLEGHENY COUNTY: GETTING INTEGRATED DATA INTO THE HANDS OF CASEWORKERS

The Allegheny County DHS is adopting a number of innovative methods to get information in the county's IDS to frontline caseworkers to enable faster, better-informed decisions on behalf of their clients. Child welfare caseworkers receive email alerts about their clients' school attendance; the county's network of contracted providers and clients themselves can see clients' service history on electronic portals; and child welfare staff use a predictive modeling tool to screen calls about possible cases of child maltreatment.

"IDS has become part of our culture here," says Erin Dalton, deputy director of the Office of Data Analysis, Research and Evaluation (DARE), the DHS unit that maintains the county's IDS. "We have been using it in many different ways for a long time to improve our programs. These new practices are intended to get data where it needs to be — in the hands of caseworkers." All of the county's efforts package linked data in the IDS into forms that are easily accessible, readily interpreted and helpful to frontline decision making.

The Allegheny County Department of Human Services (DHS) **Data Warehouse** is a secure IDS created in 1999. It contains almost 2 billion records for about 1.5 million distinct clients in the county. The Data Warehouse contains and links data from 29 data sources. These include systems within DHS (behavioral health, child welfare, intellectual disability, homelessness and aging) and external sources (school districts, housing authorities and the criminal justice system). The IDS contains information about the current and past services that clients and/or their families receive and their service providers. Although it supports research, the Data Warehouse is intended to be used primarily as a management decision-making tool. Each client is assigned a unique identifying number that makes it possible to connect their service histories across systems and longitudinally over time. For more information, visit www.alleghenycountyanalytics.us/index.php/dhs-data-warehouse.

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- Erin Dalton, *Office of Data Analysis, Research and Evaluation*,
Allegheny County Department of Human Services

Sending email alerts on school attendance to child welfare caseworkers

DHS sends child welfare caseworkers a weekly email informing them when students on their caseload have missed more than two days of school, been suspended or withdrawn from school. The alerts provide summaries of clients' year-to-date status and updates for that particular week. The email alert system adheres to DHS' confidentiality rules. For some years, caseworkers have been able to access attendance information in the IDS, but the email alerts bring it quickly to their attention and save time by eliminating the need to look up the information client by client. DHS staff stress that early intervention is critical to addressing absenteeism — the sooner caseworkers know about problems, the better.³

DARE staff worked with caseworkers to design a rapid notification system that would be useful to them. DHS' Educational Liaison provides training for caseworkers about using the information to help their students and following up with school personnel. DHS began sending the alerts to selected units in October 2015 and is working to get the notification system up and running in all areas where the local school district has a data-sharing agreement with DHS.

Sharing service histories with providers and clients

To empower frontline workers and clients, Allegheny County DHS is sharing clients' service histories with its network of contracted service providers and with clients themselves. This information, which is linked in the IDS, has long been available to county workers but not in such an easily accessible form. Caseworkers, clients and authorized staff at approved providers can access an electronic portal on their computers and see the full array of services a client has received. Known as ClientView, the portal displays the start and end dates of all services, the



assessments done and the organization that provided each service. ClientView does not, however, include information on diagnoses or case notes.⁴ Due to privacy regulations, information on drug and alcohol treatment is not shared.

Caseworkers, providers and clients can access clients' service histories over time and across multiple sectors and data systems. ClientView includes records on human services, criminal justice involvement, homeless services, physical health, mental health and public benefits receipt. Most of the data are refreshed monthly; some, weekly. Many of the records go as far back as 2002; child welfare data go even further back. “This capability is unique,” says Dalton. “Other jurisdictions don't do this.”

Better coordination and continuity

Caseworkers and contracted providers use ClientView to facilitate service coordination and maintain service continuity. County caseworkers can quickly review all the services a family is receiving before making a home visit. When providers are enrolling new clients, ClientView can add details that a client might not know, remember or consider important. Providers can use this information to determine eligibility, make referrals and reconnect clients to previous service providers. DHS staff stress that ClientView helps providers better manage and coordinate client care as new services are added or client situations change.

“The portal is a great way to get a historical picture on individuals who may have a difficult time remembering information about the various services they have used,” says Christina Shaner, manager of the Blended Service Coordination Program for Family Services of Western Pennsylvania, which works primarily with mental health patients. ClientView allows her to see a client's current and past services, hospitalizations and outpatient treatments. She can then talk to that client about previous



care and its effectiveness to avoid repeating unsuccessful patterns of care. Having all this information at her fingertips streamlines her work, Shaner says.

Clients can use the information in ClientView to better manage and advocate for their own care. They can speak more accurately about services they have received and more easily identify their favorite providers. DHS staff emphasize the importance of clients knowing that information about them is collected and shared with providers.

DHS began piloting ClientView with its behavioral health providers in the spring of 2016, and the portal's rollout continues across the spectrum of contracted providers offering child welfare, homelessness and aging services in the county. DHS staff expect that more than half of their 400 contracted providers will sign up to use ClientView.

Improving child welfare screenings with a predictive risk modeling tool

DHS is making cutting-edge use of predictive analytics to identify children most at risk of child maltreatment. Each year, DHS' child welfare office receives more than 10,000 calls about possible cases of child maltreatment. Call screeners must decide quickly which calls need to be followed up with an in-person investigation.

Child and family information stored and linked in the IDS can help make that decision. Until recently, efforts by call screeners to access and make sense of all the relevant data were "time consuming and unsystematic," according to DARE staff. Since August 2016, however, all call screeners are using a predictive risk modeling tool: the Allegheny Family Screening Tool (AFST), which reviews the information in the IDS and calculates a Family Risk Score.⁵ This risk calculation helps call screeners make faster, more consistent, more evidence-based decisions about prioritizing

child maltreatment referrals. The tool is not intended to replace clinical decision making but to augment it.

How it works

When a call (also known as a referral) about possible abuse or neglect comes in, call screeners enter identifying information about the child, family and household into the IDS, where the data are matched with existing information about these individuals.⁶ Within a few hours, the AFST software reviews more than 100 pieces of information about family and household members' current situations and past service histories and calculates a Family Risk Score between 1 and 20. The higher the risk score, the greater the likelihood of another call about maltreatment (if the call is screened out for investigation) or an eventual removal from the home (if the call is screened in for investigation).

A very high risk score triggers a mandatory investigation, but at lower risk levels, the call screening team (made up of a call screener and a supervisor) decides whether an investigation is needed. The team uses the AFST to enhance its clinical judgment and experience not replace them. The AFST is only used at the call screening stage. An investigation triggers a separate set of decisions about the appropriate intervention. The investigator is not told the risk score, and a child will not be removed from the home because of the calculated risk score.

IDS data are key to predicting risk

To develop the predictive risk model, the team of external researchers hired by DARE drew on tens of thousands of de-identified records matched in the IDS. The team's sample was the 76,964 calls of alleged child maltreatment received between April 2010 and April 2014.⁷ The researchers analyzed 287 different variables in administrative data sets collected by child welfare, the county jail, juvenile probation, public welfare (Temporary

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Department of Human Services

Assistance for Needy Families, General Assistance, Supplemental Security Income) and behavioral health services (treatment for substance use or a mental health disorder). Without the IDS, it would be very difficult, if not impossible, for researchers to assemble, match and analyze the large number of cross-sector and longitudinal records needed to ensure the accuracy of the predictive tool.

After identifying and ranking multiple risk factors, the research team developed a predictive risk algorithm that calculates two outcomes: 1) the probability that, if a call is screened out, there would be another referral within two years; and 2) the probability that, if the call is screened in and an investigation is ordered, the child would be placed in foster care within two years.

The aim of the tool is to help call screeners make decisions that are more reliable and consistent than decisions they make on their own. As noted, call screeners already had access to these data, but the information was not applied in a consistent, systematic way. Moreover, call screeners did not have a way of measuring future risk.

When the research team applied the predictive model to historical records in the IDS, it found that more than a quarter (27 percent) of the cases identified as highest risk by the AFST had been screened out. One-third of the children who had initially been screened out were re-referred and placed in foster care within two years. At the other end of the scale, almost half (48 percent) of the children identified as the lowest risk were screened in and investigated. Only 1 percent of these children were placed in foster care within two years. These data convinced DHS officials that there was room for improvement in decision making and that the predictive modeling tool should be utilized.

Addressing concerns and cautions

Allegheny County is a pathbreaker in using predictive analytics to improve child welfare outcomes, although

organizations in several other locations are working to develop such tools. Interest in using predictive analytics in human services programs is growing, but the possibilities also raise concerns and cautions. Some critics worry that since the child welfare caseload is disproportionately composed of people of color, racial bias is built into the data and the risk models. Others fear that the information could be used to stigmatize families and individuals. And some skeptics raise concerns about privacy protections.

Allegheny County staff have proceeded cautiously and taken steps to address such concerns. Before launching the AFST in August 2016, DHS staff held numerous meetings with community members to discuss the tool and how they planned to use it. DHS commissioned an external ethics review, which was conducted by two university professors familiar with predictive modeling methodology and uses. The review concluded that use of the tool is ethical and that it is preferable to other less accurate, less transparent screening tools. The ethics review also urged DHS to train staff to use the tool, monitor its implementation and study its effect on racial disparities.

Following this advice, DHS staff have hired two external research teams to conduct evaluations of AFST. Both evaluations were underway as this case study was being written in 2017. A process evaluation is looking at how the tool is being used, what caseworkers think about it and how it affects the work of call screeners. The impact evaluation is exploring the effect of AFST on decision-making accuracy, overall referral and investigation rates and racial disparities.

Better modeling, better decision making with IDS

DARE staff recognize that child welfare investigations are intrusive and stress that they don't want DHS to do unnecessary investigations. But they also want children to be safe. They believe that predictive analytics gives call screeners a better tool to help them make critical

decisions about which allegations of child maltreatment to investigate. The AFST software can process a greater amount of information than the human brain and can do so more quickly and systematically. Having so much IDS information about the family and its service history across a wide spectrum of county systems gives a much more rounded picture of the family and strengthens the predictive accuracy of the AFST. “The modeling is better because it can draw on a rich array of many years of linked data in the IDS,” says Dalton. The evaluations underway will help to determine that. In the meantime, DHS staff are exploring potential applications of predictive risk modeling to other county services. And they remain committed to using data to improve case management.

“DHS’ integrated data system has opened up unlimited opportunities to improve services and support effective decision making, internally and for our data-sharing partners,” says Marc Cherna, director of DHS. “We believe that a key driver in our efforts to integrate and share data is providing access to those who can use it to improve outcomes for the people we serve.”

WASHINGTON STATE: USING IDS AND PREDICTIVE ANALYTICS TO TARGET AND SERVE HIGH-RISK CLIENTS

Health care providers in Washington state are using the predictive modeling tool PRISM to identify a subset of high-risk Medicare and Medicaid clients who are most in need of and most likely to benefit from better coordination and management of care. By targeting these clients for high-touch service interventions in the Health Homes demonstration program — which aligns care across multiple health care systems — state officials aim to overcome service fragmentation, improve health outcomes and save taxpayers money. Early results from the program’s first phase are promising: Medicare spending was 6 percent lower — \$21 million less — for eligible participants than for a comparison group of similar beneficiaries.⁸ About \$10 million of that savings comes back to the state. Based on

this result, the state has extended the demonstration period through 2018 and will operate the program throughout Washington starting in 2017.

This example illustrates several ways that an IDS can contribute to better-informed decision making, improved service delivery and more efficient allocation of resources. Washington’s IDS, the Integrated Client Database, is maintained by the Research and Data Analysis Division (RDA) in the Department of Social and Health Services (DSHS). PRISM, shorthand for Predictive Risk Intelligence System, gives frontline managers information about individual clients and their service histories from the IDS to make more informed decisions about targeting resources and coordinating care. By assessing early outcomes for the thousands of clients enrolled in the Health Homes demonstration, RDA researchers can estimate the resulting Medicare savings. When state funding for the program was in jeopardy, the IDS-based analysis of projected savings helped keep the demonstration in place.

Integrating care for the Medicare-Medicaid caseload

Washington is one of several states testing integrated care models for the dually eligible Medicare-Medicaid population under the Centers for Medicare and Medicaid Services (CMS) Managed Fee-for-Service (MFFS) demonstration. Washington’s project, which began in July 2013, provides Health Home services to high-risk dually eligible Medicare-Medicaid clients and uses PRISM as a targeting tool to identify the most at-risk subset of this caseload.

Data in the IDS show that Washington’s dually eligible caseload is made up of about 65,000 low-income individuals aged 65 and older and another 50,000 low-income individuals who are younger than 65 but disabled. Many of these individuals have multiple health problems, including chronic illnesses, disability, mental illness and chemical dependence. As a result, their health care accounts for a disproportionate share of the costs of Medicaid and Medicare. And because these clients require services and payments from many different health care systems, their care is often highly fragmented.

A Health Home provides intensive care management services from multidisciplinary teams of medical specialists, mental and behavioral health providers and, in some cases, community-support organizations. By

providing better care management and coordination, the state hopes to improve health outcomes for this highly vulnerable population and reduce costs by avoiding or reducing unnecessary and expensive hospitalizations and nursing home stays. To improve health outcomes and reduce health care costs, several prior pilot programs have demonstrated the importance of targeting intensive care management and coordination services to the most at-risk segment of the Medicaid and Medicare caseloads.⁹

Improving frontline decision making with PRISM

PRISM serves two critical functions in the Health Homes demonstration: 1) it is a screening tool that allows care managers to target their most at-risk clients; and 2) it is a web-based support tool that helps Health Home managers coordinate care more effectively by providing a broad spectrum of information about an individual client's risk factors and health care.

Developing PRISM with IDS data

PRISM identifies the Medicare-Medicaid clients who are most at risk for high use of services and high costs in the future, based on their past usage patterns. The PRISM software calculates a risk profile for the dually eligible caseload by analyzing information on clients' use of medical care, behavioral health care and social service supports, as well as information from various health assessments. The calculation draws on linked data from multiple data sets in the state IDS, including records from the Aging and Long-Term Supports Administration and the Behavioral Health Administration in the Department of Social and Health Services; the state Health Care Authority, which oversees Medicaid; and Medicare data from the CMS. RDA staff stress that the linked data provide a stronger evidence base

and a more accurate and comprehensive picture of past usage and future risk than assessments based on only a single medical condition or one chronic disease.¹⁰

Improved targeting

Care managers use the PRISM risk score to determine clients' eligibility for the Health Homes demonstration program. Clients with a risk score of 1.5 or higher — which means they are expected to have health care costs at least 50 percent higher than the average person enrolled in disability-related Medicaid coverage — are enrolled in a Health Home and in the demonstration program. A large percentage of the targeted caseload is enrolled, but due to capacity limits, a much smaller percentage of the enrolled clients actually “engage” in a Health Home. Engagement in a Health Home is voluntary. Although eligible clients are automatically enrolled in a Health Home, they can choose a different Health Home provider or opt out altogether. As of June 30, 2015, more than 16,000 individuals were enrolled in a Health Home and in the demonstration. As of September 2016, about 4,300 dually eligible clients had actually engaged in Health Home services.

Better care coordination

In the Health Homes demonstration, care coordinators identify and fill gaps in client care; maintain communication across the various providers and case managers who work with individual clients; and help enrollees develop their own health care goals in a health action plan. The information care managers learn from PRISM about the services and providers the client has used over the previous 15 months strengthens these efforts. “PRISM is all about getting to individual-level data to inform care planning and coordination for the person,” says RDA Director David Mancuso. All the

Washington's Integrated Client Database (ICDB), a secure system developed and maintained by the Research and Data Analysis Division in the state's Department of Social and Health Services (DSHS), collects and stores information from over 30 administrative data systems within DSHS and other state agencies, including the Department of Corrections, the Employment Security Department, the Department of Commerce and the Health Care Authority. A longitudinal data system, ICDB contains individual-level records that go back over a decade, providing detailed information about service histories, risks, costs and outcomes in the programs and services administered by DSHS. The ICDB also contains administrative data collected by other state agencies, providing information on DSHS client outcomes such as employment and wages, incarcerations, housing supports and health services utilization. For more information, visit www.dshs.wa.gov/sesa/rda/research-reports/dshs-integrated-client-database-0.

information in PRISM comes from the linked data in the IDS. Client information is refreshed on a weekly basis for the Medicaid population, enabling care managers to work with timely information.

Care coordinators have reported that the service information they access through PRISM helps them build a more complete picture of each client's health needs. They find the web application easy to use. And given the fragmentation in the health care delivery system and the difficulties clients can have in recalling all the services they have received, care coordinators say that PRISM provides information they might not otherwise know about the client. Being able to see whether a client is getting prescriptions filled regularly is also helpful.

In 2016, there were approximately 1,000 authorized users of PRISM throughout the state, including service providers and frontline care managers. Clients and community groups have not expressed concerns about privacy or client stigmatization, although PRISM and the Health Homes approach have been discussed at many public meetings, according to Mancuso.

IDS-based estimates of cost savings helped keep Washington state in the demonstration

During a critical period when the external evaluator's assessment of cost savings was not yet available, the IDS played a major role in providing state officials with data to inform the decision about whether to remain in the demonstration. Using data in the IDS, a team of RDA researchers estimated the projected savings months before the external evaluator's analysis was completed.

Under the terms of the MFFS demonstration, Washington state is eligible to receive a share of the Medicare savings that result from the Health Homes project.¹¹ The state also pays some of the costs of the program. Due to budget constraints, Medicare savings are critical to the state's support for the demonstration project. By the time the state legislative session ended in June 2015, the external evaluator's analysis of the savings had not been completed. Lacking that information and concerned whether there would be savings, the legislature voted to end the program at the end of December 2015, ahead of schedule.

In the meantime, RDA researchers used the IDS to conduct their own internal evaluation. The analysis

concluded that there likely would be substantial savings during the initial program period. The RDA analysis helped agency leadership and the governor's office conclude that the state should remain in the demonstration, and state officials began to plan for an extension. This decision was validated in October 2015, when the CMS evaluator released its preliminary finding that the Health Homes project had generated \$21 million in Medicare savings during the initial program period. In the spring of 2016, the state legislature and the governor agreed to extend the demonstration for an additional two years, until the end of 2018, and work began to expand it to the remainder of the state in 2017.

IDS improves program design, implementation and evaluation

Using the state IDS to develop risk modeling tools and to test innovative programs for medically complex Medicaid and Medicare/Medicaid clients has been an iterative process. Early pilots laid the foundation for later improvements and expansions. In 2017, the Health Homes approach will be taken to full scale and operated throughout the state.

Mancuso emphasizes that the data stored and linked in the IDS have been critical to designing, implementing and evaluating the integrated care model. They are used to define and target the subset of the caseload that is most at risk. They help frontline care managers coordinate services on the ground and engage clients in their own health care. The IDS data made it possible for the state to assess the results before the external evaluator finished its analysis. Because RDA had a mature IDS in place, and 20 years of experience conducting program evaluations using agency administrative data, the division was able to complete its analysis months before the outside evaluator. RDA's long history of working with agency leadership on many projects has also established its credibility and created trust. As a result, its findings helped inform the state budget debate over the program's survival.

"There is a perception that working with state social and health service program data is messy and difficult," says Mancuso. "That's true. But in the hands of a team with the right skills and enough resources, these data can be powerful in supporting the design, implementation and operation of cost-effective care management programs for our most vulnerable clients. In Washington state, our experience has been that the return from IDS has been well worth the investment."

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Endnotes

- I This case study is one of a series that shows how state and local policymakers and practitioners use IDS data to improve policies, programs and practice. Case studies 1 and 2 discuss examples of states (one of which is Washington) and counties using IDS data to develop policies and programs to speed family reunifications among children in child welfare placements. For more information, visit www.aecf.org/IDS
- 2 Where legally allowable, and in accordance with DHS's confidentiality rules.
- 3 The email alerts are the latest in a series of DHS interventions to improve school attendance among its clients and, in particular, to increase school stability for its child welfare caseload. Efforts to pinpoint and resolve attendance problems have relied on analyses that matched public school records with DHS caseload records in the IDS. See Allegheny County Department of Human Services, *Data Brief: Addressing School Absenteeism* (October 2014) and *Data Brief: The Impact of Child Welfare System Involvement on School Stability: an Evaluation of Pittsburgh Public School Students* (November 2015) at www.alleghenycounty.us/dhs.
- 4 DARE carefully stipulates conditions for data use with the providers, based on standards in its data-sharing agreements. In each facility, an administrator controls which staff members have access to ClientView and what information they can see. Anyone who uses it must have a reason to access it and log in; administrators can monitor how the portal is used. DARE staff train providers on how to access and use the information in ClientView.
- 5 The predictive model and tool was developed by a team of researchers from the Auckland University of Technology, the University of Auckland, the University of California-Irvine and the University of Southern California.
- 6 Calls typically identify an alleged victim, other children in the household, the parents, the alleged perpetrator and other adults in the household.
- 7 Researchers studied children and adults for a year and a half before the referral and for two years after. The analysis included all children in the household not just the identified victim.
- 8 As determined by RTI International, the evaluator hired by the Centers for Medicare and Medicaid Services. RTI constructed a comparison group from the dually eligible Medicaid-Medicare caseload in three other demonstration states. RTI's analysis was an intent-to-treat analysis based on all eligible enrollees in Washington state, not just those who actively engaged in a Health Home.
- 9 Washington's Chronic Care Management Program, which began operating in 2007, provided enhanced nurse care management to high-risk Medicaid clients and screened for risk factors using a standard similar to PRISM. An evaluation carried out by RDA researchers with 22 months of follow-up — using data in the state IDS — found improvements in enrollees' health outcomes and modest cost savings from reductions in hospital and nursing home stays, which more than offset the higher cost of the care enrollees received. The evaluation compared a group of 233 clients who were offered enrollment, with a similar group of 527 clients who were randomly assigned (using the IDS) to a waiting list. A subsequent federally supported pilot, the Medicare Coordinated Care Demonstration (not operated in Washington state), did not show overall health improvements and savings. External evaluators, however, found that the demonstration had promising results among a subset of high-needs users.
- 10 PRISM was developed by an internal team within RDA. The team used three years of IDS data on Medicaid clients who qualified for Medicaid through disability-related coverage to develop the initial risk weights for the tool. The risk weights were recalibrated for the population dually eligible for Medicare and Medicaid.
- 11 Medicare savings is the first of several benchmarks used as the basis for performance payments from CMS to the state.



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