White Paper

Creating a Healthier Medicaid
Population through Collaboration

Aggregated data and analytic insight as key factors in improved outcomes and patient wellness



Dr. Wilson has many patients in his Medicaid population who have diabetes and hypertension. Some of those beneficiaries also have behavioral health diagnoses. Dr. Wilson may not even know that some of his co-morbid patients face mental health challenges, because unless those patients have presented to his practice with those issues, this information is not readily available to him. His patients may have obtained care for behavioral health issues with a social worker, psychologist, psychiatrist or even the Emergency Room of a local hospital and that clinical information is contained outside of his EMR.

Dr. Smith has many Medicaid patients with asthma and COPD. She wants to make the best decisions for their care and would also like to improve their adherence to maintenance drugs, to avoid trips to the ER or the overuse of rescue inhalers. How does she best select the beneficiaries who she can impact for better health?

Dr. Jones runs a primary practice in urban U.S. and has a large HIV population who are Medicaid beneficiaries. Many of those patients also suffer with substance abuse issues. Dr. Jones may not even be aware of the substance abuse issues, impacting her ability to provide the best treatment for those patients.

All of these situations exist today in the Medicaid populations of the United States. Increasingly, there is more awareness that co-morbidities impact the overall health of a patient, but often physicians don't know what the risk drivers are to each patient, restricting their decision making.

How best do we arm our future health care system with the right information at the right time, in order to empower the best decisions, engage the right collaboration and achieve what the government and managed care organizations (MCOs) supporting Medicaid require? Health reform will create a higher influx of Medicaid patients, as physicians and care givers will need to work within bundled payments or shared savings models, all the while reducing or avoiding costs.

As the largest health care insurer in the nation, Medicaid costs reached \$466 billion in 2011, for approximately 60 million beneficiaries. However, less than 5% (2.4 million) of Medicaid beneficiaries accounted for 50% of the total spending in 2011. (1)

As the largest health care insurer in the nation, Medicaid costs reached \$466 billion in 2011, for approximately 60 million beneficiaries.

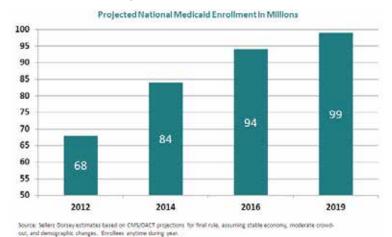




As Kathleen Sebelius said in 2011, "Just 1 percent of all Medicaid beneficiaries account for 25 percent of all expenditures, and 5 percent of the recipients account for more than half of Medicaid spending".

By the start of 2014, Medicaid eligibility will expand, due to the impact of the Patient Protection and Affordable Care Act (ACA). With changes through health reform, nearly all non elderly Americans who have income levels below 133% of the federal poverty level will be covered through their state's Medicaid program. (2)

With or without health reform, the challenge of managing growing enrollments of Medicaid beneficiaries remains a challenge for all states and their respective agents, managed care plans and state budgets. The answer to the growing challenges is not to continue to short or sever payments to Medicaid providers, but rather to develop clinical integration models that will support collaboration and result in better patient care with reductions in overall costs.



As risk bearers assess what to tackle in order to achieve better outcomes, it is increasingly apparent that new models of care, based on solid science and analytics are needed. Just how to use the science to impact outcomes is the largest question debated at conferences across the United States.

Most agree on some common areas of concern that impact Medicaid costs and care for beneficiaries:

- · Chronic Diseases
- Dual Medical/Behavioral Health
- ER Visits for Non Emergent Care
- Admissions/Readmissions
- · Dual Eligibles

With or without health reform, the challenge of managing growing enrollments of Medicaid beneficiaries remains a challenge for all states and their respective agents, managed care plans and state budgets.

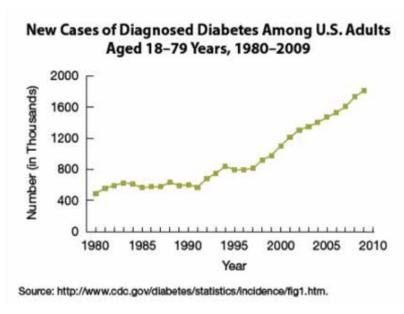


But not everyone agrees on how best to care for the Medicaid beneficiaries who are at the center of these challenges.

Managing Chronic Diseases

A study done by CHCS and published in 2007 showed that nearly all high cost beneficiaries have multiple chronic conditions. Most high cost beneficiaries are afflicted with multiple chronic conditions. At the highest tier of Medicaid spending for chronic care, nearly 83% were diagnosed with three or more chronic conditions, with 60% having five or more chronic conditions. (6)

One chronic disease, diabetes, is prevalent in 8.3% of the population, affecting 25.8 million lives in the United States. In 2010, approximately 1.9 million people were newly diagnosed with diabetes [Figure 2 below]. With the current trend, the CDC predicts that 1 of 3 adults in the United States will have diabetes by 2050.



Roughly 1.9 million Medicaid enrollees were diagnosed with diabetes in 2003.

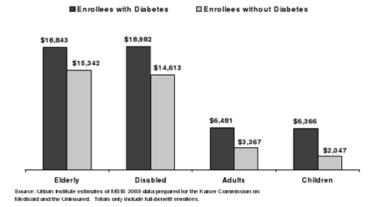
The majority of these were elderly (22%), with a total of 6% of the total Medicaid population, accounting for 16% of the spending. Across all eligibility groups, the higher spend rate was in the diabetic population.

Roughly 1.9 million Medicaid enrollees were diagnosed with diabetes in 2003.





Spending Per Medicaid Enrollee with and without Diabetes by Group, 2003



In the Elderly and Disabled Medicaid populations, the spending per capita can reach close to an average of \$19,000 per capita, annually. (23) Diabetes is a treatable and controllable disease, supported through dietary interventions, management of medications and treatments, including exercise and good diet. Most diabetic beneficiaries can avoid complications, premature death and disabilities, but only if health care providers have the appropriate information to treat their patients appropriately, and mentor them toward better health.

According to the CDC, just reducing the A1c by one percentage point can ultimately reduce risks of eye, kidney and liver diseases by 40%. Cardiac complications can be reduced up to 50% with control of LDL cholesterol. And amputations can be reduced by up to 85% with comprehensive foot care programs.

Asthma, another leading chronic disease in the U.S., is prevalent in more than 18% of adults over the age of 18. According to the CDC, there are currently 7 million children with asthma, or 9.4% of the population under age 18.

One model that identifies the importance of collaboration in the care of chronic disease patients is the "Chronic Care Model," developed by Dr. Edward Wagner and colleagues at the Group Health Cooperative in Seattle, with support from the Robert Wood Johnson Foundation. Developing better clinical procedures and supporting systems is the foundation of the Chronic Care Model.

In the Elderly and Disabled Medicaid populations, the spending per capita can reach close to an average of \$19,000 per capita, annually





The six core components of this model include Community, Health System, Self Management Support, Delivery System Design, Decision Support and Clinical Information Systems.

Enabling this model is advanced analytic information, including predictions and motivation assessments of the Medicaid beneficiaries. Knowing how motivated a patient is will enlighten the treating physician to know what level of intervention is needed for better outcomes. By sharing this information within the "Community," the beneficiary stands to receive better integrated care, resulting in fewer hospitalizations, reduced readmissions and reduced costs.

One AHRQ sponsored study by Stanford University showed that study participants who were in a self management program had fewer ER admissions and fewer visits to a physician's office, when measured after two years in the study. (10)

As an example of the collaboration between the federal government and states, the CMS Innovation Center is funding programs focused on interventions that address the behavioral or social circumstances that influence participation in preventive health services and may contribute to improving health (particularly chronic diseases) and may decrease growth in health care expenditures.

Ten states have been awarded grants, and programs will run in both urban and rural areas in California, Connecticut, Hawaii, Minnesota, Montana, Nevada, New Hampshire, New York, Texas and Wisconsin. It is hoped that improving participation in preventive activities will identify methods to encourage Medicaid consumers to engage in preventative care and maintain their health.

Impact of Dual Medical/Behavioral Health Beneficiaries

One study examining dual diagnoses populations in New York found very high prevalence of chronic diseases and comorbidities in both mental health and substance abuse Medicaid beneficiaries(11) In mental health beneficiaries, 34% also had hypertension, 31% had heart disease and 24% had asthma. In substance abuse beneficiaries, 33 % also had heart disease, 26% had asthma or COPD and 22% had HIV/AIDS, making the prevalence 30 to 300% higher

Ten states have been awarded grants, and programs will run in both urban and rural areas in California, Connecticut, Hawaii, Minnesota, Montana, Nevada, New Hampshire, New York, Texas and Wisconsin.





than beneficiaries with no behavioral health diagnosis(es). In this same study, the mean spending of dual diagnoses patients topped \$28,000 per year for mental health/medical care.

Understanding the impact of dual diagnoses and knowing what is driving the risks is key to effectively treating these patients. Many of these beneficiaries are not able to self manage their chronic conditions. Whether they are compliant with their behavioral health medications, or are abusing substances all impact the quality with which they can manage their chronic diseases. Because of the confusion experienced by patients due to behavioral health issues, the motivation of these patients may be lower, and they likely will need more in depth, targeted and "high touch" programs to help them manage their care, and keep costs to a manageable level.

Because inpatient care prevalence and costs spiral with behavioral health comorbidities, it is imperative to provide the risk insights to providers who are treating these beneficiaries. Knowing the risks and managing the patients before they are admitted will result in fewer admissions. With earlier intervention on beneficiaries post discharge, a dent can be made in the typical 50% to 150% higher readmission rates seen in dual diagnoses patients.

Frequent Flyers in the ER

According to a 2009 report, approximately 32% of Medicaid beneficiaries were admitted to the emergency room at least once during a 12 month period in 2007. Patients with private health coverage were only about half as likely (17%) to visit an ER. Medicaid beneficiaries were three times as likely (15% vs. 5%) as the privately insured to have visited an ER twice in the previous year. (14)

In one example last year, one state (Illinois), spent more than \$72 million on Medicaid emergency room visits for care that could have been delivered in physician offices or clinics. About half the Illinois Medicaid ER visits last year – 980,000 visits, in all – were for low level problems that weren't deemed true emergencies, according to data prepared for The Associated Press by the Illinois Department of Health care and Family Services. (5)

Understanding the impact of dual diagnoses and knowing what is driving the risks is key to effectively treating these patients.





Being able to predict which beneficiaries are likely to have ER visits is a first step to establishing the patients who can benefit from interventions. Once that group is defined, prevention and maintenance programs can be implemented to target the chronic conditions, and improve the outcomes while lowering costs.

Frequenting the ER for non emergent care can have multiple causes, and only through collaboration across the providers and health care team, patients and managed care plans will the drivers of the behavior be understood. The causes can be simple as an access problem (i.e., Is the ER closer to home than the primary care provider?; Are the hours for the primary care provider not liberal enough to accommodate appointments for maintenance and minor acute issues?, etc.) to complex issues surrounding the patient's ability to manage their care (e.g., Do they have behavioral issues that are impacting their ability to self manage their chronic conditions?). Collaboration across the team will result in providing customized care for each beneficiary, enhancing the overall care and resulting in improved outcomes and reduced costs.

Controlling Admissions/Readmissions

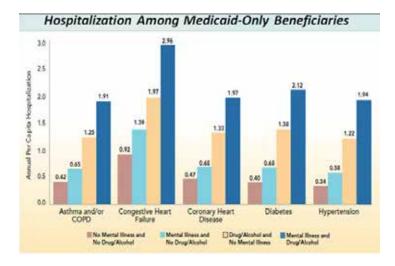
Similar to the challenges of ER admissions, there is a higher incidence of admissions and readmissions in the Medicaid populations than privately insured patients. According to the AHRQ in January 2011, hospital admissions of Medicaid beneficiaries rose by 30% between 1997 and 2008, compared to a mere 5% growth in the privately insured population. AHRQ identified that the number of Medicaid covered hospitalizations rose to 7.4 million (up from 5.6 million). (15)

A recently published analysis shows that 16% of people with disabilities covered by Medicaid (excluding the dual eligibles) were readmitted to the hospital within 30 days of discharge. Half of those who were readmitted had not seen a doctor since discharge. (17)

According to the AHRQ in January 2011, hospital admissions of Medicaid beneficiaries rose by 30% between 1997 and 2008, compared to a mere 5% growth in the privately insured population.







There is consistent evidence showing that improving care transitions as patients move across different health care settings can greatly reduce readmission rates. Interventions using a nurse discharge advocate to arrange follow-up appointments, conduct patient education or a clinical pharmacist to make follow-up calls has yielded dramatic reductions in readmission rates.

One Colorado project, for example, reduced its 30-day readmission rate by 30 percent. (18) These practices can continue to be expanded in Medicaid, where the average cost of just one hospital admission for an individual with disabilities (excluding dual eligibles) is more than \$5,700. (19)

In a four year targeted program in Illinois, using analytics to stratify Medicaid patients for intervention and care management programs resulted in an overall net savings of \$262 million. (24)

Dual Eligibles

Effectively managing the 9 million beneficiaries who have both Medicaid and Medicare has always been challenging, largely due to the lack of integration of information for this population. Of the 9 million beneficiaries with dual eligibility, 7 million are enrolled in both programs with full benefits, and another 2 million are in cost sharing programs which are paid by Medicaid. Annually, the costs of caring for this population top \$350 billion, with an annual per capita cost of \$39,000, and costs growing at a rate of approximately 6% per year.

Effectively managing the 9 million beneficiaries who have both Medicaid and Medicare has always been challenging, largely due to the lack of integration of information for this population.





Dual Eligible Beneficiaries as a Share of Total Medicaid Enrollment, by State, 2008 15-17% (12 states) U.S. Overall = 15%

Because dual eligible beneficiaries (Medicaid/Medicare) today receive care largely through two disconnected fee for service (FFS) or combination FFS and Managed Care Organization (MCO) systems, care is also disconnected and not coordinated.

Collaboration is nearly impossible, because different fiduciaries are processing medical and pharmacy claims, and those systems are not connected to any clinical systems used to record data for this population. That is going to change in the next few years, with dramatic differences in information sharing, which will enable those treating the beneficiaries to benefit from integrated data.

More than a dozen states are moving to enroll Medicaid-Medicare dual eligibles into integrated plans from 2013 to 2015. Fifteen states have entered into state demonstrations to integrate care for Medicare/Medicaid enrollees. Assistance is being provided by CMS to engage stakeholders in redesigning care for dual eligible beneficiaries. California projects \$2 billion annual savings once integrated plans are in place statewide.

Additionally, 38 states and Washington DC have submitted letters of intent to participate in demonstrations to align the financial model for dual eligibles. The new financial models will mean new care and payment models that will promote better coordination of care for the dual eligible population. (20)

By next year, there will be a \$30 billion potential opportunity for new health plan business to manage the Dual Eligible populations, and by 2014, this could double. (21)

By next year, there will be a \$30 billion potential opportunity for new health plan business to manage the **Dual Eligible** populations, and by 2014, this could double.





Summary

Since 2008, in spite of rising enrollment due to the economic recession, nationwide State spending on the Medicaid program dropped by 13.2 percent (equivalent to a 10.3 percentage point decline in the State share of the total costs of the program) as a result of the added Federal support provided to State Medicaid programs through the American Recovery and Reinvestment Act of 2009 (the Recovery Act). (16)

High-Cost Medicaid Beneficiaries

Percent of Eligibles	Eligibles 2011	Spending 2011	Percent of Spending	Per Capita Cost
100%	60 million	\$466 billion	100%	\$7,767
15%	9 million	\$350 billion	75%	\$38,889
8%	4.8 million	\$308 billion	66%	\$64,167
4%	2.4 million	\$233 billion	50%	\$97,083

Note: Estimates for FY 2011, all funds (federal and state share), rounding. Excluding partial-year enrollees.
Source: Sellers Dorsey analysis of figures from Center for Health Care Strategies, Kaiser Family Foundation, and CMS Office of the Actuary (CMS/OACT)

With fewer funds to pay for Medicaid health care, greater collaboration will be needed to effectively manage the Medicaid lives. Collaboration will begin with the sharing of records – through health system clinical integration to HIEs, health exchanges and networks (including ACOs). As our health system migrates to more patient centered medical homes, the success of those programs will depend on increased collaboration.

Focusing on the percent of Medicaid eligibles who have the greatest risk of (and impact to) costs means zeroing in on the 4% (approximately 2.4 million in 2011), with a spending rate of \$233 billion, roughly \$97,083 per capita costs annually. (22)

As records are shared and collaboration is encouraged, the following key steps will lead to overall success in creating healthier Medicaid populations.

As records are shared and collaboration is encouraged, the following key steps will lead to overall success in creating healthier Medicaid populations.





Identify the most impactable beneficiaries - Using a combination of medical and pharmacy claims, lab results, clinical biometric and HRA survey information, the beneficiaries who can be impacted through earlier intervention, as well as care/case management or wellness/prevention programs can be identified through advanced analytics. Through this precision, focus (and the dollars spent on patients) will produce the most effective cost and health control.

Create individual health goals and plans –With analytic insight, the providers will know not only the predicted and underlying risks for each patient, but also how motivated the beneficiaries are who are in programs with goals. That motivation insight can enable tailoring of the amount of intervention, reminders and follow-up, in order to ensure the most success. Customized plans can be created based on the analytic insight.

Commit to Care coordination: It will be critical that the entire health care team — including the care manager, primary care provider, (behavioral health provider, where applicable), patient and family/caregiver, all agree on the goals of the plans. As the patient's care plan is implemented, communicating and coordinating across providers and delivery settings will become more possible through clinical and administrative integration. Integration of dual eligibles will lead to more effective care for the 9 million dual eligibles that cost \$350 billion per year.

Analytics will add a layer of insight not possible with raw data. As care manager interventions are identified and documented, they need to be shared through exchanges or secured access to portals with patient information in order to encourage collaboration across the care team.

Monitor, Measure and Reassess - Not only should the patient's progress toward goals and plans be monitored, but provider quality and outcomes should be measured, leading to reassessments on the most impactable populations. Only as outcomes are measured against programs and populations, will there be evidence of which programs and approaches net the biggest savings as well as the healthiest populations.

Analytics will add a layer of insight not possible with raw data. As care manager interventions are identified and documented, they need to be shared through exchanges or secured access to portals with patient information in order to encourage collaboration across the care team.



In the past two decades, Medicaid spending has grown by 450%. Another 69% growth is expected between 2012 and 2019. (12,13) The only way to stem the expected growth is to use analytics based on aggregated data, and empower the providers, as well as the patients themselves, to engage in collaborative care.

Analytics save lives, reduce inpatient hospitalizations, reduce costs and are critical to managing the Medicaid beneficiaries, including Dual Eligibles and Dual Diagnoses sub populations. Never have there been more compelling reasons to collaborate through clinical integration and analytics, to impact outcomes and move beneficiaries' health toward the health and wellness spectrum, avoiding emergencies, admissions/readmissions and higher costs.

Through collaborative care, non emergent care will shift to the primary (and behavioral health, where applicable) providers, ensuring that ED providers can focus on trauma and emergency related care and not primary care for Medicaid patients. For those patients who are admitted to an acute care setting, enhanced discharge planning and follow up post discharge will improve the overall readmission rates for those beneficiaries.

Using analytics to measure activity for beneficiaries who could have been managed better in an outpatient setting, but instead were hospitalized, will be key to avoiding further admissions, as well as risks for readmissions. These metrics will become part of bundled (and incentive based) payment arrangements.

Engaging beneficiaries at levels that they can relate to will enhance the outcomes of their care, as well as improve their understanding of the self management needed to maintain optimum health.

Through collaborative care, U.S. health care for Medicaid patients will achieve improved health of the population, enhanced experiences of the patients (including quality, access and reliability), all the while reducing or controlling the per capita cost of care.

Engaging beneficiaries at levels that they can relate to will enhance the outcomes of their care, as well as improve their understanding of the self management needed to maintain optimum health.





Bibliography/Citations

- 1 Source: Sellers Dorsey analysis of figures from Center for Health Care Strategies, Kaiser Family Foundation, and CMS Office of the Actuary (CMS/OACT) [2011]
- 2 Medicaid and the Uninsured, A Profile of Medicaid Managed Care Programs in 2010: Findings from a 50 State Survey (Gifford, Smith, Snipes) [September 2011]
- 3 Chris Fleming, Health Affairs Blog, "Medicaid Spending Variations Driven More By Volume Than Price, Says Study in New Health Affairs", July 7, 2011
- 4 Kaiser Commission on Medicaid and the Uninsured, Publication Number: 8317, Publish Date: 2012-05-24
- 5 Associated Press, April 22, 2012, "Targeting ER Medicaid Costs Tricky for State"
- 6 "The Faces of Medicaid II: Recognizing the Care Needs of People with Multiple Chronic Conditions", Kronick, Bella, Gilmer, Somers, October 2007
- 7 "Successes and Opportunities for Population-Based Prevention and Control, At A Glance 2011", CDC, 2011
- 8 Shiller JS, Lucas JW, Ward BW, Peregoy JA, Summary health statistics for U.S. aduts: National Health Interview Survey, 2010. National Center for Health Statistics. Vital Health Stat 10(252), 2012
- 9 MacColl Institute for Healthcare Innovation, Group Health Cooperative, 2004. The chronic care model: model elements. (ICIC is a national program supported by the Robert Wood Johnson Foundation with direction and technical assistance provided by Group Health Cooperative's MacColl Institute for Healthcare Innovation.)
- 10- AHRQ, Diabetes Care Quality Improvement: Resource Guide, Module 4
- 11- Urban Institute for the Medicaid Institute at United Hospital Fund (Coughlin and Skang, 2011)
- 12 Committee on Oversight and Government Reform, Uncovering Waste, Fraud and Abuse in the Medicaid Program [April 25, 2012]
- 13 Sellers Dorsey analysis of figures from Center for Health Care Strategies, Kaiser Family Foundation, and CMS Office of the Actuary (CMS/OACT)
- 14 Frequent Users of Emergency Departments: The Myths, the Data, and the Policy Implications, LaCalle E, Rabin E, March 29, 2010
- 15 Growth in Medicaid Patient Hospital Admissions Outpace Those for Privately Insured Patients. AHRQ News and Numbers, January 19, 2011. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/news/nn/nn011911.htm
- 16 Medicaid Cost-Savings Opportunities, HHS.gov, February 3, 2011
- 17 Hospital Readmissions among Medicaid beneficiaries with Disabilities: Identifying Targets of Opportunity. Center for Health Care Strategies, December 2010
- 18 Coleman EA, Parry C, Chalmers S, Min SJ. The care transitions intervention: results of a randomized controlled trial. Arch Intern Med. 2006 Sep25;166(17):1822-8
- 19 CMS Analysis of Inpatient Hospital Spending for Blind/Disabled Non-Dual Medicaid Beneficiaries, FY2008, MSIS (Medicaid Statistical Information System), FFS only. Inpatient claim count is used as a proxy for inpatient admission count.
- 20 One Year of Innovation Taking Action to Improve Care and Reduce Costs, CMS Center for Medicare & Medicaid Innovation, 2011
- 21 Managing Medicaid Patients with Physical and Behavioral Health Dual Diagnoses through Advanced Analytics webinar, Kip Piper, May 1, 2012
- 22 Sellers Dorsey analysis of figures from Center for Health Care Strategies, Kaiser Family Foundation, and CMS Office of the Actuary (CMS/OACT), May 2012, presented in Managing Medicaid Patients with Physical and Behavioral Health Dual Diagnoses through Advanced Analytics webinar. Kip Piper. May 1, 2012
- $23-An\ Overview\ of\ Medicaid\ Enrollees\ with\ Diabetes\ in\ 2003,\ Mindy\ Cohen,\ The\ Urban\ Institute,\ October\ 2007$
- 24 Illinois Department of Healthcare and Family Services (HFS) today announced \$262 million in net savings during the fourth year of Your Healthcare Plus, July 2011

For More Information:

Call 866.242.1442 or visit www.lexisnexis.com/risk/healthcare

About LexisNexis® Risk Solutions

LexisNexis Risk Solutions (www.lexisnexis.com/risk) is a leader in providing essential information that helps customers across all industries and government assess, predict and manage risk. Combining cutting-edge technology, unique data and advanced analytics, LexisNexis Risk Solutions provides products and services that address evolving client needs in the risk sector while upholding the highest standards of security and privacy. LexisNexis Risk Solutions is part of Reed Elsevier, a world leading provider of professional information solutions.

Our identity management solutions assist states with ensuring appropriate access to public benefits, enhance program integrity and operational efficiency, reduce the impact of identity theft and fraud, and proactively combat fraud, waste and abuse throughout government programs. Our health care solutions assist payers, providers, and integrators with ensuring appropriate access to health care data and programs, enhancing disease management contact ratios, improving operational processes, and proactively combating fraud, waste and abuse across the continuum. The NAC is in the unique position to benefit by overlaying state data with the complex analytics of LexisNexis's solutions.



Due to the nature of the origin of public record information, the public records and commercially available data sources used in reports may contain errors. Source data is sometimes reported or entered inaccurately, processed poorly or incorrectly, and is generally not free from defect. This product or service aggregates and reports data, as provided by the public records and commercially available data sources, and is not the source of the data, nor is it a comprehensive compilation of the data. Before relying on any data, it should be independently verified.