MassHealth Protecting Medicaid Resources for the Most Vulnerable

How Massachusetts Saved Hundreds of Millions through Enhanced Eligibility Verification

By Dr. William J. Oliver with Josh Archambault

Pioneer's Mission

Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to improve the quality of life in Massachusetts through civic discourse and intellectually rigorous, data-driven public policy solutions based on free market principles, individual liberty and responsibility, and the ideal of effective, limited and accountable government.

PIONEER HEALTH

This paper is a publication of Pioneer Health, which seeks to refocus the Massachusetts conversation about health care costs away from government-imposed interventions, toward market-based reforms. Current initiatives include driving public discourse on Medicaid; presenting a strong consumer perspective as the state considers a dramatic overhaul of the health care payment process; and supporting thoughtful tort reforms.

PIONEER PUBLIC

Pioneer Public seeks limited, accountable government by promoting competitive delivery of public services, elimination of unnecessary regulation, and a focus on core government functions. Current initiatives promote reform of how the state builds, manages, repairs and finances its transportation assets as well as public employee benefit reform.

PIONEER EDUCATION

Pioneer Education seeks to increase the education options available to parents and students, drive system-wide reform, and ensure accountability in public education. The Center's work builds on Pioneer's legacy as a recognized leader in the charter public school movement, and as a champion of greater academic rigor in Massachusetts' elementary and secondary schools. Current initiatives promote choice and competition, school-based management, and enhanced academic performance in public schools.

PIONEER OPPORTUNITY

Pioneer Opportunity seeks to keep Massachusetts competitive by promoting a healthy business climate, transparent regulation, small business creation in urban areas and sound environmental and development policy. Current initiatives promote market reforms to increase the supply of affordable housing, reduce the cost of doing business, and revitalize urban areas.

Table of Contents

Over the past four years, Massachusetts' Medicaid program (MassHealth) dug itself out of an eligibility crisis. Affordable Care Act rules required the state to change eligibility systems, and the initial project ended in a costly failure.[1] A month after the required ACA go-live date officials from MassHealth and the Connector (Massachusetts' health insurance exchange) started over with a new vendor.

To buy time for implementing the scaled-down solution, Massachusetts allowed new exchange applicants to enroll in Medicaid. Then-Governor Deval Patrick obtained permission from the Obama administration to stop mandatory annual eligibility redeterminations for all those on Medicaid. This allowed Massachusetts to extend "temporary coverage" in the Medicaid program to anyone who signed up, *regardless of income level*. Not surprisingly, enrollment and costs ballooned.

Patrick's successor, Charlie Baker, directed MassHealth to end the temporary coverage. First, MassHealth had to recover from five months of running Medicaid without a method for determining initial eligibility. Following that, MassHealth implemented a series of enhanced eligibility measures. Massachusetts was successful in these because the agency first proved each new measure in batch-mode, then measured and assessed its potential impact. This "baby steps" approach eventually allowed the state to save $1.2 billion that was redirected

to better meet the health and welfare needs of Massachusetts' neediest residents, instead of being spent on enrollees who did not qualify.

The Commonwealth's success demonstrates important lessons that can help other states enhance their eligibility systems. It also lays the groundwork for considering additional opportunities to improve Medicaid and other human services eligibility systems in Massachusetts.

Phase One: Unwinding Temporary Coverage

Under temporary coverage, Massachusetts enrolled 321,000[2] beneficiaries. This expanded MassHealth membership from 1.7 million to over 2 million. Once the basic ACA eligibility system was up and running, the Commonwealth started the first of three phases to implement eligibility changes. It conducted 1.2 million manual redeterminations over five months. This started with an automated letter requesting information from beneficiaries. Those who failed to send a timely response were found automatically ineligible for non-compliance, which is a federal standard. MassHealth found after manually verifying their information

> **1.2 million manual redeterminations over the course of five months**

MassHealth Enrollment from June 2013 – September 2017
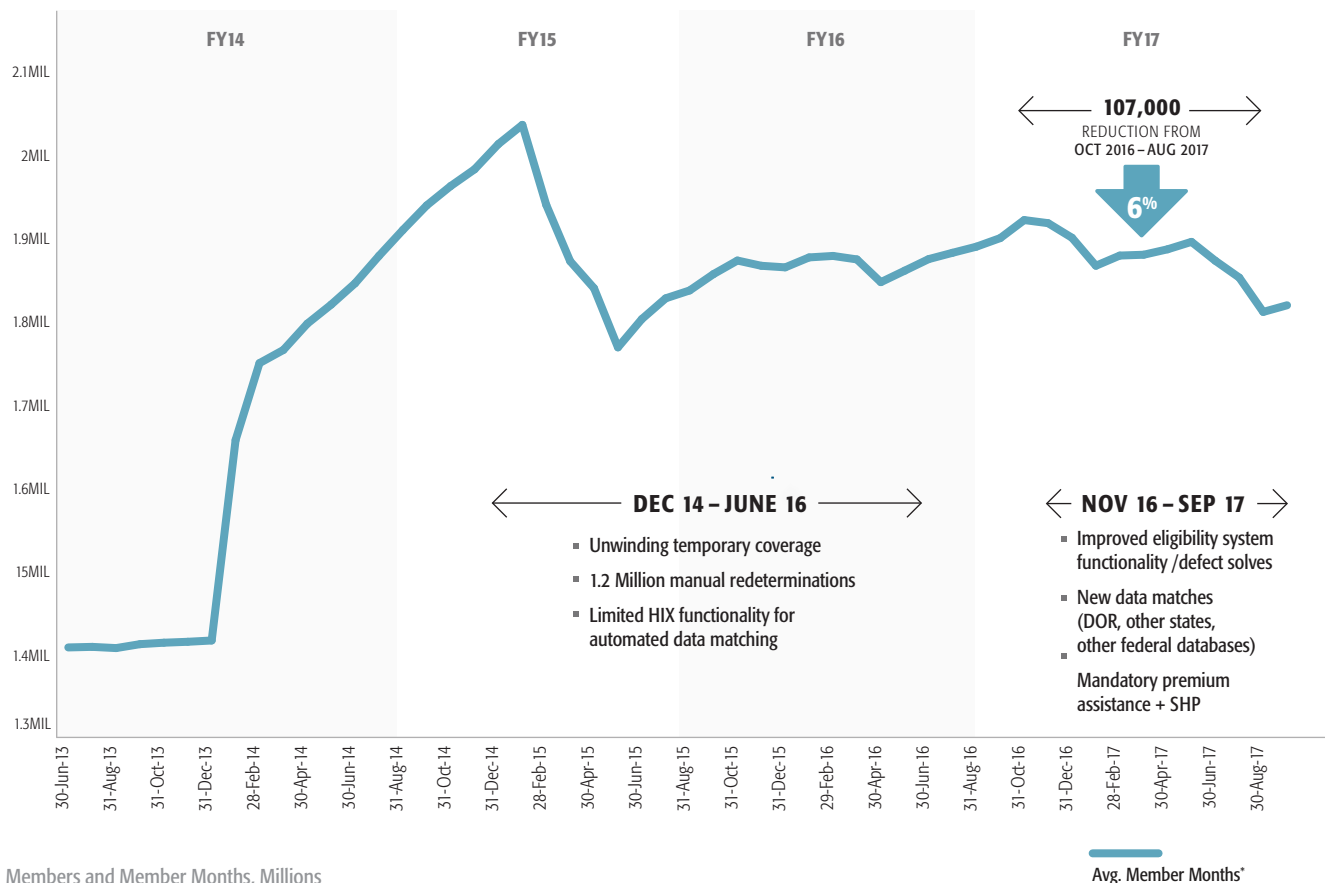
Members and Member Months, Millions

Avg. Member Months*

4

that the majority of those who responded were ineligible. Many of these were removed to the Connector.

Subsequently, enrollment rebounded somewhat. Some beneficiaries who had failed to reply to the initial request for information eventually reapplied and were reenrolled.

Phase Two: Experimenting with Automation

After unwinding temporary coverage and conducting redeterminations, enrollment continued to grow by 180,000[3] between May 2015 and October 2016.

Prior to Phase Two, MassHealth still relied largely on paper documents or manual data look ups before entering eligibility information into the new system, much as they had done for decades in their old system. MassHealth started a switch to auto-redetermination, introducing two important steps toward automating data collection for redetermination. First, it automated the redetermination trigger — automatically collecting whatever data was available for an upcoming redetermination. Second, MassHealth implemented auto-completion: filling in the redetermination fields with as much data as it had available electronically.

This administrative improvement decreased staff labor and member time to process a redetermination. It also improved the accuracy of information by assuring that the redetermination record already coincided with information MassHealth had access to electronically. Beginning in October 2016, MassHealth tested a series of new enhanced eligibility matches to reduce redetermination caseload and increase accuracy.

Enhanced eligibility verification serves two purposes: to reduce the occurrence of incorrect data from inadvertent misstatements or intentional misrepresentation, and to decrease the time lag in finding errors that do occur.

Phase 3: Automation Initiatives

❑ Potential Access to Employer-Sponsored Health Insurance (ESI)

❑ Department of Revenue Quarterly Wage File

❑ Department of Revenue New Hire File

❑ Mandatory enrollment in Student Health Insurance Program (SHIP)

❑ Eliminate Health Insurance Exchange (HIX) duplicates

❑ Asset verification for applicants older than 65 or applying for Long Term Care

❑ Eliminate SSN discrepancies

❑ Department of Public Health Vital Statistics file (deaths)

Benefits of Enhanced Eligibility Verification

Enhanced eligibility verification reduces one important source of errors: the many times data is read from a paper document and entered under a manual eligibility process. Data collection based solely upon manual review of paper records is often incomplete and inconsistent. For example, auditors in Oregon found Medicaid workers entered data inconsistent with electronic sources half the time during manual eligibility determination.[4] Manual input errors can cause inappropriate eligibility determinations and ultimately incorrect payments to providers or insurance carriers. Automated matches cannot eliminate human error, but they can help prevent many simple mistakes. MassHealth found what other states have also discovered: that automated matches require a new form of collaboration between agencies.[5]

Phase Three: Leveraging Additional Data Sources

At the end 2016 and into 2017, MassHealth set out to test, then implement additional external data matches to improve eligibility. As examples, these data sources included information about access to employer-based insurance, new hire data, and death registry information. Automated matches allowed MassHealth to flag households for further manual investigation. Each new step toward enhanced eligibility started with a batch test run. MassHealth generated an automated request for information to the beneficiary. Those who failed to reply were disallowed for non-compliance. In other cases, beneficiaries were found eligible through redetermination provided by the beneficiary.

Overall, enhanced eligibility proved an effective method of finding and correcting many eligibility issues. Batch tests were conducted with internal personnel, using existing computer resources, at essentially no incremental cost to the agency. Once the efficacy of each enhanced eligibility method was proved in batch mode, MassHealth committed resources to rolling it into the production system. Even this was done largely with internal systems maintenance resources, at minimal incremental cost. This is in stark contrast to projects such as one in Illinois, which spent $150 million to achieve similar ends.[6]

The Result: $1.2 Billion in Savings and Counting

Enhanced eligibility has transformed MassHealth eligibility verification. MassHealth analysts have estimated annual savings by modeling the cost reduction for each beneficiary type. The greatest impact was found among non-disabled adults, who have annual costs between $3,500 and $5,000. MassHealth estimated that three-to-six months of costs are typically avoided thanks to these enhancements. In many cases, the closings would have happened naturally through the

income test during annual redetermination, but much later than it did. This protected valuable resources for the truly needy in a managed care environment under which insurers are automatically paid a monthly per-member per-month fee. In the case of the Student Health Insurance Plan[7], the initiatives represented new sources of saving.

In all, MassHealth reports $1.2 billion in Medicaid funds were preserved for the recipients who need them. Most of the savings came from ending the temporary coverage, yet $250 million resulted from enhanced eligibility through automated matches. The Commonwealth believes this is an ongoing savings. It allows Massachusetts to better prioritize healthcare funding, helps preserve resources for those who need them and improves the sustainability of the program.

To be clear, enhanced eligibility is not a method for achieving significant administrative savings. MassHealth must still mail automated requests for information. Then, when beneficiaries reply to the automated letter, eligibility personnel must conduct a redetermination. Enhanced eligibility is a method for concentrating administrative work, not reducing the need for case workers.

According to a Georgetown University survey, as many as 34 other state Medicaid agencies have started down a path toward more automated data matching tor eligibility determination and redetermination, but many are far from comprehensive.[8] Of those, only 10 have added automated data match to the majority of redeterminations. Internal cultural barriers exist in some states that prevent or slow greater adoption of such changes. Other states have been struggling to determine the best sources or uses of data to automatically match or analyze. The more robust Massachusetts experience should provide helpful context to those discussions and show the value of proactively automating some "low-hanging fruit" data checks.

The Georgetown survey also highlighted the need for leadership that knows "it will be painful for a while" and that "it takes perseverance" to implement these changes. In addition, the importance of designing and deploying new technology using best-practice approaches.[9]

Lessons Learned

Massachusetts took away four crucial lessons from four years of struggling to recover from a system development failure.

First, **MassHealth demonstrated that automated sharing of existing state data sources produces big savings**. The Commonwealth derived significant benefits from matching low-cost, high-value sources of data that most states are collecting. Enhanced eligibility verification has already allowed Massachusetts to redirect $250 million annually to the most pressing public health issues, and more savings are expected as they expand enhanced eligibility verification.

Second, **MassHealth learned to carefully test new**

Lessons learned:

❑ Automated sharing of existing state data sources produces big savings

❑ Roll out matches in batches; avoid "big bang" implementation

❑ Measure the results

❑ Manage vendors

systems capability by rolling out in batch mode through a sequence of steps rather than as a big bang. This is consistent with the Agile project management method.[10, 11] Only after confirming the benefit was each new batch implemented in the system. Batch testing allowed MassHealth to consider the cost and benefit before "pouring concrete".

Third, **MassHealth measured the results**. It tested and tracked each initiative to demonstrate effectiveness before proceeding. In contrast, some states execute new approaches with little more than hopeful expectations that they will yield benefits. Careful assessment of batch testing results can assure highest impact before spending money on system changes.

Finally, **the Commonwealth once again learned a painful lesson about the importance of vendor management over systems development**. Failure of the first system led to a decade of added cost. During a time of increasing pressure on healthcare finances, funds were unnecessarily directed away from pressing needs. Massachusetts' Health Policy Commission estimates temporary Medicaid coverage for all cost taxpayers cost at least $658 million.[12] The ultimate responsibility for this debacle lies squarely with state contract managers at both MassHealth and the Connector during the previous administration.

During recovery, MassHealth significantly scaled back the project scope, and appears to have more carefully planned and managed the project. While issues still arose, and some are still being addressed, the system largely worked as intended and MassHealth was able to turn its attention to enhancing verification checks.

Additional Automated Data Check Opportunities

Automated information matches haven proven their initial value at MassHealth, but more work is needed. Current enhanced eligibility approaches require a technology solution based on large warehouses of data that is fielded to allow matching. Several additional enhanced eligibility measures are being implemented in other states:

▪ *Enhanced Residency Checks*: Misrepresentation of residency

is a problem in Medicaid programs, and the current practice of relying on mailing addresses is not sufficient. Few states use automated methods for verifying residency.[13] One small step MassHealth could take is to partner with the Department of Transitional Assistance to analyze out-of-state SNAP (food stamps) spending patterns to see if MassHealth enrollees appear to no longer live in Massachusetts.

- **Sharing Ineligibility Information**: Many MassHealth enrollees are also enrolled in other public assistance programs. When enrollees are found to be ineligible by one program, that information should be shared with other agencies to determine if an eligibility redetermination is necessary. CMS has already created a model data sharing agreement for use with related state agencies.[14]

- **Passive Asset Checks**: The ACA precludes states from checking assets to determine enrollee eligibility for those under 65 unless the enrollee is receiving long-term care. Yet using current asset verification checks for more populations can signal a change in income that could impact eligibility. Examples include changes in bank accounts, registered vehicles, and home ownership. These kinds of passive automated checks can also help spot misrepresentation of household composition, another important Medicaid issue.[15]

- **Testing Frequency**: More frequent batch checks for additional enhanced eligibility verification would be beneficial to find the optimal balance of administrative cost versus spending money on ineligible enrollees, especially since most states operate on a blanket 12-month annual timeline.[16] Frequency should be increased to once every three or six months.

- **Enhanced Social Security Number Checks**: Over 500,000 Medicaid recipients nationally are registered using a fictitious SSN. Mathematica reviewed SSNs of 50 million beneficiaries in state Medicaid Management Information systems[17] and found valid numbers present in 91.7 percent of the records. This sounds good until you turn the number around; nearly 10 percent of beneficiary records either had no SSN, or the SSN failed either on date of birth or gender. AARP reports 17.7 million Americans were victims of medical identity theft in 2017.[18] Given the dangers and costs associated with stealing medical identity, assuring the accuracy of Medicaid SSNs is crucial. New, inexpensive tools for finding bad SSNs are emerging.[19]

The Future of Automated Eligibility

Three technology innovations could trigger the next phase of improvement.

1. **Blockchain:** Blockchain offers a different approach to assembling eligibility information. The technology may allow Medicaid agencies to address many of the privacy, security, and interoperability problems that currently plague data matches.[20] Blockchain overcomes the challenges of combining distributed data sources by creating chains of data blocks in a distributed ledger. Each "block" is a history of an individual's transactions with a party, for example, with departments of Labor, Revenue, Motor Vehicles and Child Support. Each transaction is securely encrypted into an unchangeable data block that can be used to confirm a person's identity and key household information. A blockchain solution could reduce the need to build and maintain data warehouses and eliminate the need for matches altogether. This could be implemented faster and at lower cost, while providing better information than a data warehouse built around a master person record.

2. **Robotic Process Automation**: Robotic process automation offers Medicaid agencies the possibility of a different method of assembling data from various sources into the eligibility system. This is not R2D2; it is merely a tool that allows humans to instruct their computers to draw data repetitively across many sources, then write it into the system. In addition to automating manual eligibility steps, robotic process automation could make it easier to conceive and test new types of data match. The "bot" could be taught to execute a new external data verification process. This could follow an Agile approach and allow Medicaid to experiment with smaller tests compared to a large, fully automated batch.

3. **Artificial Intelligence:** Data analytics and machine learning are sometimes dubbed "artificial intelligence" or "cognitive computing". Machine learning could enable Medicaid to "fill the top of the funnel" with cases in which eligibility seems suspect. A data analytics application could review household data or claims information to spot anomalous patterns that suggest ineligibility. CMS has suggested that "staff investigators can use information from these tools to focus their efforts and resources on the areas of greatest risk and return, thereby managing the Medicaid program more efficiently, recovering more money and discouraging future abuse."[21] Machine learning can help Medicaid agencies find patterns in structured and unstructured data to potentially help them automate certain customer service inquiries, help members fill out applications, and avoid mistaken eligibility determinations.[22]

> **The Future:**
> ☐ Blockchain
> ☐ Robotic process automation
> ☐ Artificial Intelligence/ machine learning

Conclusion

Under the Baker administration Massachusetts saved $1.2 billion in Medicaid through effective eligibility initiatives. Every state faces the constantly evolving challenge of managing eligibility. However, misdirected Medicaid spending reduces the resources available for other public priorities like education, transportation, or to fight the opioid crisis.

Medicaid agencies around the country can benefit from the lessons MassHealth has learned. Starting with baby steps is common sense and can yield significant benefits. Taking the opportunity for enhanced eligibility seriously can put state Medicaid programs on a more sustainable path. Ignoring the lessons from Massachusetts will only lead to increasingly difficult funding tradeoffs in the future.

Endnotes

1. Bebinger, M, *All The Confusion' Surrounding Mass. Health Connector's Open Enrollment Period*, WBUR Common Health. http://www.wbur.org/commonhealth/2017/11/01/mass-health-connectors-confusion. See also, Norris, L, *Massachusetts health insurance marketplace: history and news of the state's exchange*, https://www.healthinsurance.org/massachusetts-state-health-insurance-exchange/. See also, Archambault, J., *Whistleblowers Expose the Massachusetts Connector: A Behind-the-Scenes Account of What Went Wrong*, Pioneer Institute White Paper No. 128, March 2015

2. "Report of the Working Group on Medicaid Managed Care Organizations", Committee on Health Care Financing of the Massachusetts Legislature, October 1, 2015. Viewed at: http://cliniciansunited.org/wp-content/uploads/2015/10/Final-MCO-Working-Group-Report.pdf

3. As measured by member month

4. "OHA: Automated Medicaid Eligibility Is Processed Appropriately, Yet Manual Input Accuracy and Eligibility Override Monitoring Needs Improvement", Oregon Secretary of State Audit Summary, Report Number 2017-09, May 2017, viewed at: http://sos.oregon.gov/audits/Documents/2017-09.pdf

5. A survey indicated this has been a problem in many states, see: "State Health Access Program State Medicaid Eligibility System Survey: Report on the Modernization of State Medicaid Eligibility Systems", State Health Access and Data Assistance Center, June 2012, viewed at: http://www.shadac.org/sites/default/files/publications/SHAPSurveyReport_2012Jun.pdf

6. HFS and DHS Launch Enhanced Eligibility Verification Project, Illinois Department of Healthcare and Family Services, viewed April 16, 2018 at: https://www.illinois.gov/hfs/medicalclients/medrede/pages/launch.aspx

7. Under the Student Health Insurance Plan (SHIP), MassHealth requires that students enroll in and pay the premiums for their school's health insurance program. Medicaid may not be a substitute. MassHealth offers SHIP Premium Assistance. For more information, see: https://www.universityhealthplans.com/MHPA/

8. "Making Medicaid Work Better: Lessons from States on Implementing Ex Parte Renewals" Tricia Books and Eugene Lewit, Georgetown University Health Policy Institute: Center for Children and Families, April 2016. p. 5

9. Ibid, p. 7

10. See a discussion of Agile in, "Agile project management: A comprehensive guide", CIO Magazine, April 2018

11. See discussion of CMS' adoption of Agile in, "CMS Agile Transformation", viewed on March 27, 2018 at: https://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/Agile-Transformation/index.html

12. Estimated by the Executive Office of Health and Human Services and reported at the Health Policy Commission: "MassHealth driving increased health spending, says HPC", Worcester Business Journal, December 16, 2015. Viewed at: http://www.wbjournal.com/article/20151216/NEWS01/151219957/masshealth-driving-increased-health-spending-says-hpc

13. According to CMS, only 8 states use electronic data sources for residency at application, see: "Eligibility Verification Policies", viewed April 16, 2018 at: https://www.medicaid.gov/medicaid/program-information/eligibility-verification-policies/

14. States continue to struggle with the silo nature of state data management. This despite the "Department of Health/State Medicaid Agency, Inter-Agency Data-Sharing Agreement" viewed April 16, 2018 at: https://www.medicaid.gov/Federal-Policy-Guidance/downloads/SMD102298.pdf

15. For an excellent description of the asset verification process, see Implementation of the Asset Verification System (AVS), State of New Jersey, Department of Human Services, Division of Medical Assistance and Health Services, Medicaid Communication No. 17-16 Date: December 27, 2017, viewed April 16, 2018 at: http://www.state.nj.us/humanservices/dmahs/info/resources/medicaid/2017/17-16_Implementation_of_the_Asset_Verification_System.pdf

16. See an excellent study of alternative redetermination cycles in, Swartz et al, "Evaluating State Options for Reducing Medicaid Churning", 2015, National Institutes of Health, NIHMS708512, viewed on April 16, 2018 at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4664196/

17. Czajka, J., "Social Security Numbers in Medicaid Records: Reporting and Validity, 2009", January 15, 2013, Mathematica Policy Research, conducted for and released by CMS, viewed on April 16, 2018 at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/Downloads/FinalSSNreport.pdf

18. Gibson, W, "Identity Theft Soared to a Record High in 2017", February 7, 2018, AARP, viewed on April 16, 2018 at: https://www.aarp.org/money/scams-fraud/info-2018/id-theft-fraud-fd.html

19. See for example: "Social Security Number Validation", April 16, 2014, Quality Control Systems Corp, viewed on August 18, 2018 at http://www.quality-control.us/fraud_detection_simulations.pdf

20. Vian, K, "A Blockchain Profile for Medicaid Applicants and Recipients", Institute for the Future, Blockchain Futures Lab

21. "Data Analytic Capabilities Assessment for Medicaid Program Integrity", Centers for Medicare & Medicaid Services, Medicaid Integrity Institute, Medicaid Data Analytics Working Group, September 2014, viewed at: https://www.cms.gov/medicare-medicaid-coordination/fraud-prevention/fraudabuseforprofs/downloads/data-analytic-assesstoolkit-092214.pdf

22. Najerol, M, "Smart Medicaid: Leveraging Cognitive Technologies to Improve Health and Program Efficiencies", January 17, 2018. Viewed at: https://www2.deloitte.com/insights/us/en/industry/health-care/smart-technology-in-health-care-medicaid-programs.html

About the Author

Dr. William J. Oliver has transformed benefits eligibility systems and processes in Texas, Florida, Indiana, Pennsylvania, Mississippi and Arkansas. He has outsourced, insourced and retooled eligibility systems for both Medicaid and human services benefits. Dr. Oliver has built, selected and implemented leading-edge systems in hospitals, pharmacy, retail, and other industries, and has driven major benefits eligibility reform including the Mississippi Hope Bill. He is a CPA and holds a Masters in Management from MIT and a Doctor in Management from Case Western. Dr. Oliver is a Principal at The Stephen Group and is published widely on healthcare business model innovation and assessing program outcomes.

Josh Archambault is a Senior Fellow at Pioneer Institute. Prior to joining Pioneer, Josh was selected as a Health Policy Fellow at the Heritage Foundation in Washington, D.C. In the past, Josh served as a Legislative Director in the Massachusetts State Senate and as Senior Legislative Aide in the Governor's Office of Legislative Affairs. His work has appeared or been cited in outlets such as *USA Today*, *Wall Street Journal*, *The New York Times*, *Fox News*, *NPR*, *Boston Herald* and *The Boston Globe*. He is the editor and coauthor of *The Great Experiment: The States, The Feds, and Your Healthcar*e. Josh holds a Master's in Public Policy from Harvard University's Kennedy School and a BA in Political Studies and Economics from Gordon College.

About Pioneer

Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to improve the quality of life in Massachusetts through civic discourse and intellectually rigorous, data-driven public policy solutions based on free market principles, individual liberty and responsibility, and the ideal of effective, limited and accountable government.