

# Accelerating & Enhancing Access to Critical Medical Benefits for Low-Income Individuals & Families Through Comprehensive, Digital-First Website Modernization

## Background

The Centers for Medicare & Medicaid Services (CMS) is the agency within the U.S. Department of Health and Human Services (HHS) responsible for administering the nation's major healthcare programs, including Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). Within CMS, the Center for Medicaid and CHIP Services (CMCS) specifically focuses on the administration and oversight of Medicaid and CHIP. CMCS serves as the focal point for all the national program policies and operations for three important, state-based health coverage programs.

Medicaid: provides health coverage to low-income people and is one of the largest payers for health care in the United States.

The Children's Health Insurance Program (CHIP): provides federal matching funds to states to provide health coverage to children in families with incomes too high to qualify for Medicaid, but who can't afford private coverage.

The Basic Health Program (BHP): allows states an option to provide affordable coverage and better continuity of care for people whose income fluctuates above and below Medicaid and CHIP eligibility levels.

These programs are vital to ensuring that all Americans have access to quality and affordable health care with a particular focus on low-income individuals and families. To help ensure these individuals and families can take full advantage of all available benefits and coverages, CMCS created, manages, and maintains the Medicaid.gov and InsureKidsNow.gov websites that serve to provide access to critical information and resources. This information includes details about the Medicaid program to include eligibility, benefits and the application process. It also includes details related to application assistance, preventive care, policy updates and changes, and state-specific information.

Literally millions of people use Medicaid.gov and InsureKidsNow.gov to gain access to this information, and to better understand how they can take advantage of all available benefits.

## Context and Challenges

Providing and administering benefits to millions of people through Medicaid, CHIP, and BHP is highly complex. These programs and the medical needs of the people they serve to support, continue to change and evolve at an exponential pace. Common drivers of this evolution include policy changes and uncertainty, budget constraints, increased coordination between federal and state entities, new requirements around health information exchange, unforeseen global health crises such as Covid 19, aging and obsolete technology, and new expectations around user experience. These drivers

necessitated a comprehensive website modernization effort led by Sky Solutions to mitigate several underlying challenges that put at risk CMCS' ability to deliver on its mission.

The challenges faced by CMCS were multi-faceted, spanning across technology, processes, accessibility, and security. Their existing infrastructure, notably the Drupal-based content management system, stood outdated, raising concerns about security vulnerabilities and its limited capabilities. These technological limitations were coupled with inefficient legacy business processes, hampering the prompt delivery of critical updates and features.

Accessibility to information posed another significant hurdle, with millions seeking Medicaid and CHIP program details but facing constraints due to the inadequacies of the current platforms. Policymakers encountered difficulties in effectively reviewing public comments, impacting the policymaking process. Moreover, compliance risks loomed large due to the sensitive nature of healthcare data, necessitating compliance with ATO (Authorization to Operate) and FISMA (Federal Information Security Management Act) requirements. The absence of streamlined collaboration and change management methods further impeded progress, affecting the efficiency of development and maintenance processes.

Addressing user experience shortcomings became imperative, accompanied by the need for comprehensive end-user training to integrate new functionalities effectively. Operational inefficiencies in server configurations and code management hinted at potential performance issues, compounded by the necessity for regular vulnerability assessments and remediation. Ultimately, the technology stack demanded alignment with modern cloud technologies and platforms, highlighting the breadth and depth of the challenges necessitating a comprehensive overhaul.

## Solution and Approach

To address these challenges, Sky initiated a comprehensive modernization effort. We tackled the outdated technology stack by migrating to the latest Drupal versions and implementing advanced technologies such as ServiceNow to enhance performance and security. Additionally, we introduced an Agile and DevSecOps culture that streamlined business processes therefore facilitating faster development cycles and improved collaboration. We also optimized content deployment processes, ensuring the rapid dissemination of up-to-date information. With security being of the utmost importance, Sky implemented robust measures to ensure compliance with ATO and FISMA requirements, along with significant infrastructure upgrades that leveraged cloud-based solutions on AWS to enhance scalability and reliability.

Sky embarked on a comprehensive modernization journey targeting various facets critical to transforming the landscape. At the forefront was the cultivation of an Agile and DevSecOps culture, introducing automation that streamlined processes, significantly reducing the time and effort required for new feature delivery and content posting. To fortify compliance and security measures, robust cloud and platform management strategies were implemented. Governance standards were established to ensure adherence to regulations and security requirements, alongside the execution of a

meticulously devised cloud strategy for Acquia cloud Drupal version upgrades. This initiative also encompassed migrating legacy business processes to the ServiceNow digital workflow platform, optimizing operational efficiency.

An equally vital focus was the ability to maintain stringent compliance with accessibility standards and regulations. Sky diligently ensured compliance with a spectrum of stringent standards, including U.S. Web Design/DigitalGov, OMB Federal Web Standards, CMS and HHS policies, and W3C Web Accessibility Initiative (WAI) standards. Upholding Section 508 of the Rehabilitation Act was pivotal, demonstrating a commitment to inclusivity and accessibility for all users.

Security was paramount in the transformational journey, with Sky implementing robust controls and mechanisms to safeguard data and content. Rigorous security measures included regular application of patches and upgrades to minimize the risk of data breaches. Further fortification involved establishing comprehensive processes and tools for encryption, network security, and threat detection, significantly mitigating potential risks and vulnerabilities.

Sky strategically engineered a robust CI/CD pipeline, ushering in a DevOps culture and embracing test-driven development methodologies. The integration of security and compliance tools into the CI/CD pipeline ensured proactive identification and resolution of vulnerabilities before deployment, enhancing the overall security posture of the platforms. The introduction of Mini Orange for single sign-on (SSO) to Drupal sites and the utilization of Akamai for CDN configuration significantly improved user experience and site performance, underlining the commitment to enhancing accessibility and usability.

## Benefits and Outcomes

Ultimately, our efforts will enable CMCS to keep pace with the changing health landscape and continue to provide a fast and reliable web presence via Medicaid.gov and InsureKidsNow.gov websites, available to the public 24 hours a day, 7 days a week. We will help accelerate speed-to-market as it relates to ongoing regulatory and benefit changes that need to be communicated and accessible to beneficiaries in a timely manner. We will help to drive the best consumer and usability experience possible, making it easier and more intuitive for beneficiaries to find and use the information and resources they need. Lastly, we ensured compliance with all security guidelines and accessibility requirements, aligning to CMS's aspiration to be a model employer of people with disabilities and provide equally effective access to its programs and services.

## Conclusion

Sky Solutions is a Digital-First transformation partner, driven by our desire to help our federal clients achieve their missions. We believe our efforts can positively impact millions of people who rely on the critical benefits and services our federal clients provide. Our support of the CMCS website modernization initiative is a perfect example of this kind of work and we're excited to see those real-world benefits take shape.