



Illinois Department of
Innovation & Technology

Illinois BEACON: Illuminating Pathways to Behavioral Care with AI

Artificial Intelligence

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EXECUTIVE SUMMARY



The Illinois Behavioral Health Care and Ongoing Navigation (BEACON) initiative is a centralized Behavioral Health Portal—a transformative, Artificial Intelligence (AI)-powered "no-wrong-door" initiative designed to radically simplify access to critical mental and behavioral health services for children and families in Illinois. In a landscape often characterized by complexity and fragmentation, BEACON leverages advanced AI, including Generative AI capabilities powered by Google Cloud, to create a seamless, intuitive, and highly effective intake and referral system. This project is not merely a technology upgrade, it is a profound reimagining of how government can compassionately and efficiently serve its most vulnerable constituents, setting a new standard for AI's role in public service.

IDEA



The youth behavioral health service delivery challenge in Illinois was stark. Families grappling with the immense stress of a child's behavioral or mental health needs faced an overwhelming and often impenetrable system. Six different state agencies, countless community providers, and a bewildering array of programs set the stage for a journey fraught with frustration, delays, and despair. This fragmented landscape led to delayed interventions, exacerbated crises, and ultimately, poorer outcomes for children.

Recognizing this critical bottleneck, Illinois envisioned BEACON, a single, intelligent portal that would serve as a compassionate guide, empowering families to navigate the system with unprecedented ease. The core idea

behind BEACON is rooted in human-centered design: to alleviate the burden on families by providing a personalized, responsive, and immediate pathway to care. Illinois understood that simply digitizing existing forms wouldn't suffice. True transformation required a sophisticated AI layer to make sense of complex needs, match them with diverse resources, and automate the initial, often daunting, steps of seeking help. This was a direct response to a pressing business need: to bridge the gap between families in crisis and the services designed to help them. BEACON offered the opportunity to establish a consolidated and efficient entry point, simplifying access and enhancing the coordination of care across a formerly segmented environment.

IMPLEMENTATION

The development process was both rapid and rigorous. Over the course of seven months, an agile, iterative methodology was employed to transition the project from concept to a full statewide deployment. Central to this approach was a robust, cloud-based infrastructure that ensures scalability and reliability while maintaining strict security and compliance standards and real-time data exchange across multiple agencies. The platform's technical design includes automated eligibility validation, dynamic case management, and real-time updates tailored to user needs. Enhanced security measures, such as role-based access controls, protect sensitive information while allowing for fluid data sharing

among authorized stakeholders. These technological choices ensure that the system remained both resilient and adaptable as demands evolve.

The project management approach was adaptable and involved iterative development cycles, continuous feedback mechanisms, and a focus on the swift delivery of a functional solution. The technical implementation incorporated automated eligibility assessments, real-time data synchronization, and multi-language support, ensuring accessibility for diverse populations. Development prioritized ethical AI principles, ensuring data privacy, security, and the avoidance of bias in matching algorithms. Ongoing feedback loops and data analysis are integrated to continually refine the AI's performance and ensure equitable access to services.

The initiative required a combination of resources, including state funding, the technology partner's time and expertise, and personnel from the involved state agencies that included program specialists, IT professionals, and executives.

The implementation of BEACON was a testament to strategic partnership and a commitment to leveraging cutting-edge technology responsibly. The project aligned with the broader perspective of several agencies serving children, their interconnectedness, and the need for a unified strategy. Collaborating with Google Public Sector, Illinois deployed a robust, secure, and scalable cloud-based platform. The AI engine at the heart of BEACON, drawing upon Google Cloud's advanced AI capabilities, including Generative AI, was meticulously developed to include:

- **Intelligent Intake and Contextual Understanding:** While not explicitly a chatbot for direct conversation with families, the portal's intake process is intelligently designed. Generative AI assists in processing the nuanced information provided by parents and guardians, understanding the context of their child's needs (e.g. age, presenting issues, geographical location, urgency). This allows the system to move beyond simple keyword matching to grasp the holistic picture.
- **Dynamic Resource Matching and Recommendations:** This is where BEACON's AI truly shines. Based on the interpreted needs, the AI dynamically identifies and recommends the most appropriate state-funded programs and community-based resources from a vast and complex database. This goes beyond static directories; the AI's ability to learn and adapt ensures more accurate and relevant matches, significantly reducing the trial and error that families previously endured.
- **Streamlined Data Flow and Interoperability:** The AI facilitates seamless data flow across the six participating state agencies. This includes intelligently routing information and applications, reducing duplicative efforts, and accelerating the referral process. This cross-agency collaboration, enabled by the AI's ability to interpret and translate data across disparate systems, is a hallmark of BEACON's success.
- **Empowering Resource Coordinators and Parent Navigators:** While AI handles the initial complexity, it augments, rather than replaces, human touch. The AI presents vetted information and recommendations to Human Resource Coordinators and Parent Navigators, enabling them to provide more informed, empathetic, and efficient support. This human-in-the-loop approach ensures ethical AI use and maintains personalized care.
- **Ease of Use Features:** The portal's user-centric interface and multilingual support demonstrate its commitment to inclusivity, ensuring that all Illinois families, regardless of background or location, have streamlined access.

The success of this initiative depended on the cooperative efforts of many state agencies. From inception to implementation, the Illinois Department of Innovation & Technology (DoIT) supplied technical knowledge and direction, while the Illinois Department of Human Services (DHS) championed the undertaking and convened the six child-serving state agencies: DHS, Department of Children and Family Services, Illinois State Board of Education, Department of Public Health, Department of Healthcare and Family Services, and Department of Juvenile Justice. The collaboration with Google allowed for the rapid creation and deployment of the platform, leveraging their cloud infrastructure and technical capabilities. Approval and support were secured through a statewide initiative focused on transforming children's behavioral health, established by the Governor, and fostering an unprecedented collaboration among the state entities. Communication and outreach strategies included internal updates within the agencies, engagement with community-based organizations, and public announcements highlighting the advantages of the new portal for families. Statements from agency leaders underscore the strong stakeholder buy-in and the perceived value of this initiative.

IMPACT

Postponements in obtaining suitable care can worsen mental health issues, hinder development, and negatively influence the overall well-being of a child. Parents and guardians experience substantial strain and frustration when trying to understand the complexities, potentially leading to delays in or abandonment of necessary support. The potential economic consequences of unmet behavioral health needs, including long-term medical expenses and effects on productivity, underscore the practical justification for this project. The sheer volume of families who can benefit from more easily accessible information and resources, and the prospect of improved outcomes, highlights the urgency and significance of this endeavor.

Successful implementation was gauged by the timely statewide rollout, the number of families utilizing the portal, and the effective resolution of their cases as illustrated by an initial resolution rate of 70% in the first quarter. Additionally, integration with existing state systems allowed seamless data exchange, reducing administrative burden and improving service coordination. The platform's role-based access controls ensured that authorized personnel could efficiently navigate case management workflows while safeguarding sensitive information.

The impact of BEACON's AI-driven approach has been profound and measurable, delivering on its promise of a more responsive and accessible behavioral health system, comprised of:

- **Reduced Time to Care:** By automating and intelligently streamlining the intake and referral process, BEACON has dramatically decreased the time it takes for families to connect with appropriate services. This direct intervention saves precious time in critical situations, allowing children to receive support when they need it most.
- **Increased Accessibility and Reduced Burden:** The "no-wrong-door" approach, powered by AI, eliminates the confusion and frustration of navigating a fragmented system. Families, regardless of their starting point, are guided efficiently to the right resources, reducing stress and improving their overall experience during a challenging time.
- **Improved Resource Utilization and Efficiency:** For state agencies, BEACON's AI optimizes resource allocation by ensuring that referrals are more targeted and appropriate. This leads to more efficient

use of taxpayer dollars and allows professionals to focus on direct care rather than administrative hurdles.

- **Enhanced Data-Driven Decision Making:** The rich data collected and analyzed by the AI within BEACON provides invaluable insights into behavioral health trends, service gaps, and demand patterns. This data empowers policymakers to make more informed decisions about resource allocation, program development, and future investments, fostering continuous improvement in children's behavioral health.
- **Model for Inter-Agency Collaboration:** BEACON stands as a powerful example of how AI can transcend bureaucratic silos, fostering unprecedented collaboration across multiple state agencies. This successful model of shared technology and collective impact can be replicated for other complex public service challenges.

This initiative has demonstrably enhanced the landscape of child behavioral healthcare access within Illinois. It has converted a previously intricate and frustrating system into a more navigable and user-friendly experience for families in need. The "before" situation was characterized by scattered information, numerous points of contact, and potential delays in obtaining appropriate services. Following BEACON's implementation, families have a singular point of access to learn about available resources, understand eligibility criteria, and connect with support. This simplified access alleviates the burden on families, leading to earlier intervention and improved outcomes for children. The ability to connect families with resources across six agencies ensures a more comprehensive and coordinated approach to care.

In its first year, BEACON has already served thousands of Illinois families, providing a beacon of hope and a clear pathway to much-needed behavioral health support. This is more than a technology project; it is a fundamental shift in how Illinois serves its most vulnerable, demonstrating the immense power of AI to create a more compassionate, efficient, and equitable government for all its constituents. BEACON is not just a technological advancement, it's a testament to the transformative potential of AI when deployed with purpose, empathy and a deep understanding of human need.