Sonoma County and IBM working together to change lives

Empowering caseworkers to better serve the most vulnerable

Contents

Executive summary

Society simply must change the way it serves its most vulnerable members. Service delivery models are outdated and constrained by budgets, organizational structures and legislation. Citizens aren't getting what they need to become more self-sufficient and recover from hard times or significant events, such as disasters. Government isn't keeping up with the demand generated by the complex times we live in and agencies are stressed to the breaking point by current service expectations. Government today needs a 360-degree view of citizens to streamline services and generate better outcomes. This requires better engagement between government and citizens which can lead to more self-reliant individuals and lower demands and costs on government.

In California, one county is tackling this challenge by creating cross-departmental citizen-centric services.

Introduction

No matter how good their intentions might be, government agencies are hindered by more than a lack of resources. The way they do business has become outdated, especially for individuals with multiple, complex needs. When people need help, going to one program or service office doesn't address all their needs or result in more holistic outcomes. Often, agencies are funded individually, which means separate facilities, management, staff, budgets and priorities. Each agency is essentially a "silo of service" with no way to reasonably coordinate with other programs to deliver services.

Sonoma County recognized they needed a better way to address the needs of their most vulnerable individuals and families. To do that, they needed tools and technology to transform how they delivered support services to these citizens.

The Sonoma County Board of Supervisors made strengthening of its safety net system a priority through a program called Accessing Coordinated Care to Enable Self Sufficiency (ACCESS) Sonoma County. This program identifies the most vulnerable people in the community and strives to help them through a personal crisis and become more self-reliant. This includes individuals experiencing ongoing unemployment, homelessness or housing insecurity, behavioral health and substance use issues, and those in the criminal justice system.

To succeed, Sonoma County safety net departments leaders are stepping out of their service and program silos to develop holistic strategies that address the complex needs of its citizens and improve their outcomes. These departments include Health Services, Human Services, Community Development Commission (the County's housing development organization), Child Support Services, Probation and other criminal justice units. Through closer coordination, agencies can more effectively and efficiently deliver services to clients with complex needs, while improving their health, well-being and economic stability.

These departments are each committed to designing better coordinated service delivery but face many challenges. For example, how do they:

– Collaborate to provide care to shared clients and reduce fragmentation of care.
– Understand what services are being accessed in other departments to reduce duplication of services.
– Collaborate on creating an effective, efficient care management plan.

The answer lies in forming integrated multidiscipline teams (IMDTs)—consisting of members from the safety net departments, working together on a client-by-client basis to provide holistic services for those in need. Let's examine how this worked for an individual client of the county.

Sandy needed help

Sandy Beech had to flee from her home in Santa Cruz when living conditions there became unbearable. Her son had issues with substance abuse and became threatening towards her; she feared for her safety. Sandy left her home and her support structures to seek refuge and get a fresh start in Sonoma County, California.

However, she knew no one in Sonoma and had a very modest income. When she was unable to find affordable housing, she started living in her car. The strain of living in her car exacerbated chronic health problems. She often visited the emergency room for treatment. Further, the trauma of being homeless and the abuse that she had experienced led to behavioral health challenges that went untreated.

Sandy had received services in the past from various agencies in Santa Cruz. In Sonoma, however, she found it difficult to find out about and register for available support systems in a new county.

Then came the wildfires

In October 2017, the Tubbs wildfire struck Sonoma County burning more than 36,000 acres, killing 22 people and destroying several thousand buildings. In desperate need to avoid the smoke, Sandy arrived at a local shelter, one of many that had been opened to help those who had lost their homes.

In the aftermath of the fire, many residents remained in the shelters and were vulnerable—needing food, clothing, shelter, employment and counseling among other things. But two weeks later, FEMA began to close the shelters before needs could be met for many individuals and families.

The Tubbs wildfire displaced thousands of Sonoma County residents, straining the County's safety net system.

Most of the people who had lost their homes found alternative living situations. But some found themselves with no resources and nowhere to go. What little they had before the fire had vaporized in its smoke.

Sandy was one of these people. And while the impacts of the fire are less common, Sandy's challenges are not. Economic stresses, housing instability, emotional trauma combined with external forces can create and perpetuate chronic homelessness in any community across the country.

Addressing the needs of vulnerable residents like Sandy had been identified as a priority of the County's elected officials. Before the fire, leaders had planned IMDT deployment to work on the multi-faceted and complex needs of residents like Sandy, but the team wasn't yet operational. The County's safety net system was under tremendous pressure to address the needs of more than 300 individuals who remained in shelters two weeks after the blaze.

The role of ACCESS Sonoma

County officials recognized they needed to speed IMDT deployment to coordinate and address urgent needs. They responded by accelerating planning and moved rapidly to IMDT deployment. People with significant needs, including Sandy, became the focus of Sonoma County's ACCESS initiative.

To make this initiative a success, Sonoma County determined they needed to:

– Transform business processes to deliver services through the new IMDT.
– Break down programmatic siloes and share data between departments and systems.
– Let care plans be collaboratively created and managed between IMDT members.

They knew if the County could accomplish these tasks, caseworkers, clinicians, housing specialists, and other community partners could view client needs holistically and identify the clients at highest risk. They could then coordinate support from the various agency providers to deliver a cohesive support solution for each client.

Beyond the formation of the IMDT, County officials also recognized the need for tools and technology to enable the change.

Rapid Response pilot program

The County also realized any program partner must understand the issues that impact local governments and provide sophisticated tools that could be tailored to fit Sonoma's unique needs. IBM was that partner.

IBM rapidly convened a Design Thinking workshop attended by Sonoma County executives, supervisors and frontline workers from each agency. The goal of the workshop was to:

– Delve into the challenges these workers faced in providing services and the profiles of the people that seek them.
– Assist Sonoma County in helping the fire victims that remained in shelters.
– Help other vulnerable populations in need of coordinated care across the safety net systems.

Working together, Sonoma County and IBM created the Rapid Response pilot, which combined the power of IBM Health and Human Services Connect360 with embedded IBM® InfoSphere® Master Data Management (MDM) and IBM Watson™ Care Manager, providing a holistic approach to managing the care of vulnerable populations—all powered by IBM Cloud™.

This solution enables data integration across agency systems and allows frontline workers to get a holistic view of resident needs and status and empowers them by highlighting the key risks and barriers of each client in a single view. Additionally, it helps provide the ability for all IMDT members to collaborate on goals, actions and services that will make a difference in ongoing care.

Consisting of more than 90,000 resident profiles at inception, this solution possessed the data needed to find commonalities between cases and develop an individualized plan of action available on tablets, laptops or mobile devices — ultimately improving the residents' experience with Sonoma County and their quality of life.

Services tailored for Sandy and more

With this solution in place, Sonoma's IMDT is better equipped to help residents like Sandy. In fact, that's how they were able to connect with Sandy. After a health services mental health caseworker met Sandy at the homeless shelter, the caseworker quickly realized Sandy needed a higher level of care if she was to achieve improved well-being and stability to overcome the challenges that had led her into homelessness in the first place. The caseworker asked Sandy to give permission to share vital information about her circumstances across the IMDT. This would allow appropriate services to be coordinated across multiple agencies.

The newly established IMDT was now able to access and evaluate her service needs and work collaboratively to address individualized challenges and goals. Applications for Medi-Cal, California's free or low-cost health coverage for children and adults with limited income and resources, and food stamps were completed with the help of the IMDT. While preparing the paperwork for those applications, Sandy's bank statements revealed she was paying for multiple insurance policies that strained her modest monthly income. Eliminating one of those policies by having Medi-Cal pay for her Medicare insurance provided Sandy with a significant percent of additional income.

Other IMDT members were able to help Sandy with a Section 8 housing application so that she could start looking for a new home. A new program through the Sonoma County Human Services department was able to provide her with temporary housing while she searched for a home she could afford.

In addition, IMDT workers connected Sandy with a health care provider who was able to address her chronic pain. The result—IMDT members put an end to her ER visits, saving the hospitals and the community thousands of dollars.

With more integrated access to Sandy's profile, IMDT workers could give Sandy a better and more coordinated care experience. The team could now monitor and manage her case quickly and easily, collaborating to identify the best course of action for their client. More importantly, Sandy is better now than before the fires. She now has an affordable place to live, is more secure financially and is healthier in mind and body.

Technology at work

What about the technology behind ACCESS Sonoma? The technology consists of IBM Health and Human Services Connect360, IBM InfoSphere Master Data Management and IBM Watson Care Manager solutions working together.

Sonoma County social workers now have access to the information and tools needed to ensure clients get the help they need.

IBM Connect360 is a data integration hub available as a cloud or on-premise solution. IBM Connect360 working with IBM InfoSphere Master Data Management brings data together from siloed source systems unique to each program to form a master person index. This creates a single, integrated, golden record for each person which can be updated in real-time.

IBM Connect360 provides access to shared data using sophisticated algorithms that present it to workers based on client consent as well as local rules regarding the role and organization of the worker viewing the data. IBM Connect360 can be installed on premises or on the IBM Cloud which creates a secure environment for storing and accessing the data. Watson Care Manager provides the window for IMDT to see the integrated data about each person and enables integrated case management.
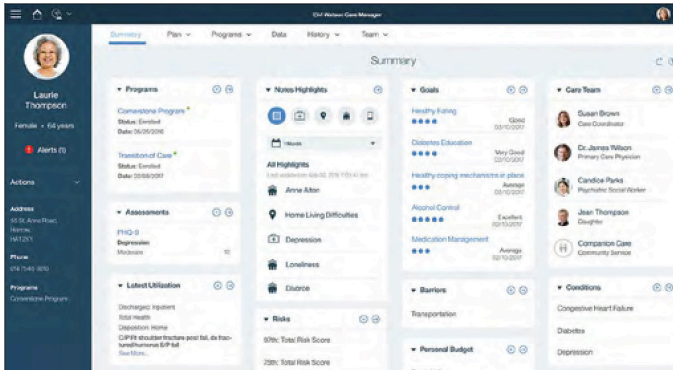

Figure 1: IBM Connect360, IBM InfoSphere Master Data Management and IBM Watson Care Manager aggregates data and helps connect stakeholders.

IBM Watson Care Manager, available on IBM Cloud, allows Sonoma County's IMDT to view data, capture and perform assessments, record case notes, set goals and actions, and track client progress. It provides the IMDT a 360-degree view of each client's unique needs and challenges. IBM Watson® brings insights from case notes front and center for the IMDT members to discuss and develop the best action plan for each individual. With the full view of a resident's needs, IMDT members can evaluate capacity across community providers, incorporating County Services and non-governmental services into a single plan. This approach supports residents like Sandy and changes how services are identified and delivered.

At Sonoma County, the IMDT was formed at the same time the new system was installed and launched. The Design Thinking session between IBM, County managers and case workers from each of the IMDT departments was critical in clarifying objectives while identifying challenges and solutions to be implemented by IBM and the IMDT. IBM and Sonoma knew they were changing the way governments have traditionally worked. In support of this, the team followed an agile development process, delivering Sonoma County monthly releases via IBM Cloud to support frontline workers collaborating on complex cases in a secure and responsive environment.

Thereafter, the IMDT met regularly to discuss the cases of those affected by the fires and to provide direct feedback to the IBM team as they tailored and configured Watson Care Manager to their specific needs. IBM and the IMDT have also worked with Sonoma County Compliance and Legal Departments, on an ongoing basis, to identify the data that is authorized to share across departments as they collaboratively deliver services for each person. Integration and communication across departments is the new way of doing business, and the solutions delivered by IBM enable more complete, timely and accurate access to information.

The result for Sonoma is a simple experience, with the right information to make informed decisions while hiding the sophisticated integrations, access controls and hybrid cloud technologies running in the background.

Better solutions mean better outcomes

Without ACCESS Sonoma, many people would not receive the help they need. They either wouldn't know what is available or lack the ability to navigate a complex organizational maze to find and receive benefits. More importantly, service delivery would continue to be fragmented and inefficient.

With ACCESS Sonoma outcomes are greatly improved and are as diverse as the people served. Using preexisting IBM data models and its best-in-class matching engine, Sonoma County loaded data from four source systems into IBM MDM software. They mastered 91,000 clients within five months. Improved outcomes include increased income or better utilization of limited income, fuller access to public benefits, housing stabilization, improved health and well-being, and an increased connection with the community. The system not only boosts access to a coordinated safety net system but also improves the ability to move vulnerable residents to greater overall stability.

The outcomes also translate into improvements in Sonoma County's safety net system and the community in general; fewer trips to hospital emergency rooms for routine treatments, reduced recidivism, reduced administrative costs, streamlined administrative processes, and most importantly a happier, healthier citizenry that is more self-reliant.

The journey is not yet complete. This way of delivering services is only at its beginning. Working together, IBM and Sonoma County continue to identify the County's most vulnerable populations and collaborate to provide appropriate services based on individual needs. Going forward, Watson™ will be used to help identify people who need help and improve coordinated services and care by learning from past actions.

In addition, IMDTs will be formed wherever needed in the future. With better tools and a new process, even less experienced frontline workers, who may not have the breadth of experience to understand all the options available, will be able to make meaningful contributions faster that make a big difference in people's lives. Ultimately, the technology creates a scalable solution and blueprint for how county safety net departments can holistically manage care for citizen populations with complex needs.

Why IBM

The most vulnerable populations face challenges that aren't solved by one-size-fits-all software products. They require scalable solutions as nuanced and diverse as the people who seek them. Putting citizens at the center of service delivery and partnering with IBM, Sonoma County used IBM expertise in the technology and collaborative care delivery required to build a solution that enables better care and quality of life for its citizens.

For more information

To learn more about IBM Watson Care Manager and IBM Connect360, contact your IBM representative or IBM Business Partner, or visit: ibm.com/us-en/marketplace/watson-care-manager

To learn more about IBM InfoSphere Master Data Management visit: ibm.com/master-data-management

To learn more about IBM Design Thinking visit: ibm.com/ industries/government/digital-reinvention-workshop

About the author

Kenneth Wolsey, Associate Partner and Project Delivery Executive, IBM

IBM