Sonoma County and IBM working together to change lives

Empowering caseworkers to better serve the most vulnerable
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 Service delivery models are outdated and constrained by budgets, organizational structures and legislation.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. Something different must be done to generate better outcomes. This action 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 head on and has found a better way to serve their citizens.

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 The way they do business is outdated, especially for those with multiple, complex needs. When people need help, just going to one program or service office doesn’t address all their needs or result in more holistic outcomes for them.

Currently, each agency is separately funded, 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. But 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 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 get them the help they need to make it through their own personal crisis and become more resilient and 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, the Sonoma County safety net departments leaders are stepping out of their service and program silos to develop more holistic strategies that address the complex needs of its citizens and improve their outcomes. Through closer coordination between the departments of Health Services, Human Services, Community Development Commission (the County’s housing development organization), Child Support Services, Probation and other criminal justice departments support is more effectively and efficiently delivered to those clients with complex needs ultimately improving their health and 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 was soon living in her car. The strain of living in her car exacerbated some 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 some 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 start over and connect with the available support systems due to the challenges of learning about and registering with various systems in a new county.

Then came the wildfires
In October 2017, the Sonoma Complex Fires struck Sonoma County burning more than 36,000 acres, killing 22 people and destroying several thousand buildings. With nowhere to go, but desperately needing to get out of the smoke, which affected her COPD, Sandy found her way into a local shelter, one of many that had been opened to help those who had lost their homes.

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

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 unique, 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. Sonoma County officials had planned IMDT deployment before the fire to begin working on the multi-faceted and complex needs of residents like Sandy. But the team was not 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 the urgent needs this complex situation created. So, they responded by accelerating planning and moved rapidly to IMDT deployment. These 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:

1. Transform business processes to deliver services through the new IMDT
2. Breakdown programmatic siloes and share data between departments and systems
3. 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 face in providing services, and the profiles of the people that seek them, to assist the county in helping the fire victims that remained in shelters and then other vulnerable populations also in need of coordinated care across the safety net systems.

Working together, the County and IBM created a Rapid Response pilot, which combined the power of IBM Health and Human Services Connect360 with embedded Master Data Management, 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, allows frontline workers to get a holistic view of resident needs and status, and empowers them by bringing forward the key risks and barriers of each client in a single view, and providing the ability for all IMDT members to collaborate on the goals, actions and services that will make a difference in on-going 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 individualize plan of action available on tablets, laptops or mobile devices—ultimately improving the resident's experience with Sonoma County while improving their quality of life.

**Services tailored to 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, more coordinated care experience. The team can 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 and IBM Watson Care Manager working together.
IBM Connect360 is a data integration hub available as a cloud or on-premise solution. It brings together data from siloed source systems unique to each program and uses IBM WebSphere® Master Data Management to form a master person index. This creates a single, integrated, up-to-date record for each person. Watson Care Manager provides the window for the IMDT to see the integrated data about each person and enables integrated case management.

IBM Connect360 provides access to shared data using sophisticated algorithms that present shared data 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.

IBM Watson Care Manager, available on the 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 not just County Services but the broad array of non-governmental services into a single plan to support residents like Sandy and literally change the way needed 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 the IBM cloud to support front line 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.

*Figure 1: IBM Health and Human Services Connect360 and IBM Watson Care Manager aggregates data and helps connect stakeholders.*
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 – outcomes as diverse as the people this program serves. Some of the 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 improves access to a coordinated safety net system but improves the ability to move vulnerable residents out of it to greater overall stability.

The outcomes also translate into improvements in Sonoma County’s safety net system as well as for 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 new way of delivering services is only at its beginning. Working together, IBM and Sonoma County will continue identifying the County’s most vulnerable populations and collaborate in providing the appropriate services for them based on their individual needs. Watson will assist going forward in identifying additional groups of people that need help and will learn from past actions which can improve coordinated services and care.

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 challenges faced by the most vulnerable members of our communities aren’t solved by one-size-fits-all software products. They require solutions as nuanced and diverse as the people who seek them and those who collaborate to serve them. Putting the citizens at the center of service delivery and partnering with IBM, Sonoma County leveraged IBM subject matter 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, please contact your IBM representative or IBM Business Partner, or visit: [ibm.com/us-en/marketplace/watson-care-manager](ibm.com/us-en/marketplace/watson-care-manager)

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

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