Highlights

- Helps social program organizations find the most appropriate benefits or services provider match for an individual or family.
- Can replace manual tools and help reduce the amount of time that caseworkers spend on administrative tasks.
- Designed to help the user make difficult choices and to effectively cope with conflicting goals.
- Aids in reducing the overwhelming pool of available options for citizens.

Many social services and social security systems around the world are administered and delivered by varying numbers and types of governmental and non-governmental organizations (NGOs). Each is commissioned with a specific task in the operation and oversight of the social system. The responsibility for the entire social system is typically spread across a number of government bodies.

Depending on the functional area (for example pensions, health and child welfare) and the country, the government organization responsible could be federal, provincial, state, county, city or town. The actual delivery of services can occur through public entities, NGOs, or the private sector. Even within a single country, it is possible to find some programs administered at a federal or country level and others at a regional or local level. Some programs will be legislated centrally and delivered locally, while others are legislated and delivered at a single level of government.

In spite of this complexity and variability, there is one aspect of social program delivery that seems to be consistent worldwide. Governments rely more than ever on NGOs for the delivery of social programs. Consider the following:

- An estimated 18,000 NGOs, with an estimated 39,500 establishments, were involved in providing or arranging adult social care in England in 2014.¹
- Canada has 19,000 nonprofit and voluntary social services organizations. Two-thirds of the revenue reported by these organizations comes from the government.²
- At least half of the government agencies in Australia report that, except for health and emergency services, at least fifty percent of their services were delivered by external organizations. Social services nonprofits in Australia employed almost 297,000 people in 2012/2013.³
- Government agencies in the US have approximately 200,000 contracts and grants with about 30,000 human services nonprofits. They paid close to USD 81 billion to those organizations through contracts and grants in 2012.⁴

Finding the appropriate benefits or services providers for an individual or family can be a daunting task. According to a recent Frost & Sullivan study, there are an overwhelming number of programs and services available. Caseworkers have to understand and navigate these programs and services to match client needs to service availability.⁵

However, it's not just the number of programs that presents a challenge. The world creates 2.5 quintillion bytes of data every day. Seventy to eighty percent of that data is unstructured in the form of audio, video, photographs, notes, reports and other narrative formats. The amount of data that governments are dealing with is expected to grow by 94 percent by 2017 (compared to 2015).⁶
Today, when a social program caseworker works with clients to help find the appropriate services provider, they are often challenged on a number of fronts:

- **Manual Processes.** Caseworkers might be expected to use tools such as spreadsheets, paper documents or brochures to identify potential programs or services that are available.

- **Choice Overload.** There may be many providers—governmental and non-governmental—providing what appear to be the same programs and services. The caseworker is then left to narrow down that list and find the best fit for their client. They are often left to do this based on their experience and knowledge, with little access to objective information on the efficacy of these programs.

- **Frustration.** There can be a great deal of manual work and re-work (such as telephone calls and emails) involved in identifying programs and services. Caseworkers spend less than 20 percent of their day in face-to-face interactions with clients. The remaining 80 percent of their day is spent on administrative tasks and travel.

- **Anxiety.** Making an informed decision is difficult when you don’t have access to the information needed to identify the best options for your client. Forty-two percent of social workers surveyed in the UK said they left work at the end of the day with serious concerns about at least one of their cases. Seventy percent of those workers said that their concerns were related to the paperwork they were unable to complete.

Find the appropriate services providers to meet specific client needs

IBM® Cúram Provider Match with Watson is a business and technology solution that delivers prebuilt social program components, business processes, toolsets and interfaces on top of a dynamically configurable architecture. The solution helps enable social program caseworkers to manage the service providers they contract with and document the outcomes these providers produce for individuals and families.

Caseworkers, supervisors and program managers can use the solution to select what they believe to be the best service provider for an individual based on performance attributes or provider quality, proximity and cost. Provider Match is designed to help support the process of making difficult choices and to help effectively cope with conflicting goals. The service uses a mathematical filtering technique called Pareto Optimization that enables users to explore tradeoffs when considering multiple criteria for a single decision and aids in reducing the overwhelming pool of available options. The top options identified from the Pareto filtering based on specified preferences might yield a relatively large number of candidate options.

However, Provider Match can help application users reach a final decision with innovative visualization capabilities, data analytics, and valuable guidance simulating the human decision-making process. These capabilities help refine the selection routine and stimulate a better understanding of the alternatives through detailed exploration and explanation.

IBM Cúram Provider Match with Watson can help caseworkers make informed decisions in their selection of the most suitable service providers for their clients. The user has a rich interactive experience to filter and compare available providers and is able to make evidence-based decisions.
IBM Cúram Provider Match with Watson includes:

- Configurable integration with Watson tradeoff analytics
- Configurable pre-defined provider selection criteria
- Enhanced user interface for the provider selection tradeoffs

Provider Match helps enable centralized management of social program providers and services to support integrated service delivery. It not only assists organizations in managing providers holistically, but it might also help them improve service delivery, enhance efficiency, and achieve desired outcomes for the citizens they serve.

Provider Match does this by replacing many of the manual tools and processes that caseworkers use to select service providers for clients. The solution provides information that caseworkers, supervisors, and program managers need to help them make the best decisions based on the individual's needs and characteristics. Cúram Provider Match with Watson helps caseworkers optimize provider selection.

Cúram Provider Match with Watson helps caseworkers compare tradeoffs when presented with multiple conflicting goals and visually look at what small compromises could yield large gains.
About IBM Watson Health

IBM Watson Health™ is working to enhance, scale and accelerate human expertise across the domains of health, human services, workforce services and social security, to help people live healthier, more productive lives. It is pioneering the use of cognitive technologies that understand, reason and learn to help social program organizations unlock the potential of data and analytics to improve service delivery. To IBM, health is not just healthcare. It is individual health, community health, employer health and economic health to help foster better outcomes at lower cost.

For more information

To learn more about IBM Cúram Provider Match with Watson, please contact an IBM sales representative, or IBM Business Partner, or visit ibm.co/socialprograms

Endnotes


