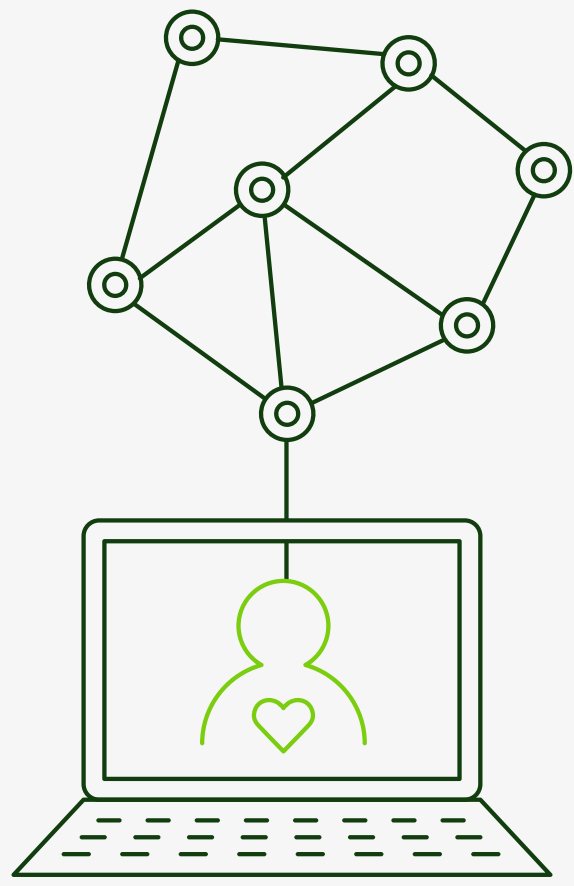


# Unlock the Power of Data for More Effective Social Programs

The problems facing children, families, and individual adults are multi-faceted. Addressing them effectively requires the effective sharing of information across traditional departmental boundaries.

Much of the data that caseworkers need is unstructured. That includes case histories and other vital information needed to deliver desired outcomes for social services.

Fortunately, new cognitive computing tools can unlock this trove of data to help caseworkers provide the assistance that individuals and families need.



# Data On the Rise<sup>1</sup>

People create 2.5 quintillion bytes of data every day.



90%

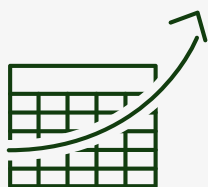
of existing data was created in the **last two years alone.**



70-80%



**of data is unstructured,** taking 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%** between 2015 and 2017.

2015

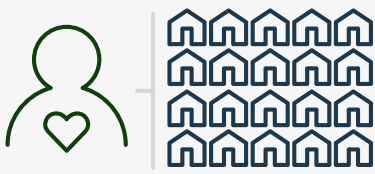
2017

## Challenges with Managing Data

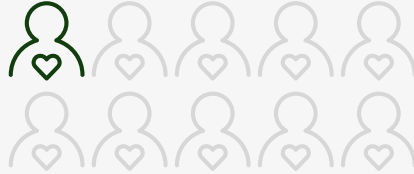
Caseworkers spend as little as **20% of their day** interacting with the families they serve or with professionals they collaborate with.<sup>2</sup>



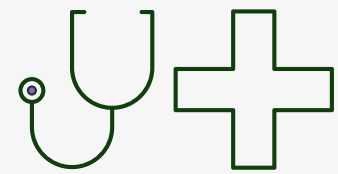
Paperwork and other non-interactive tasks consume up to 50% of these caseworkers' time.<sup>3</sup>



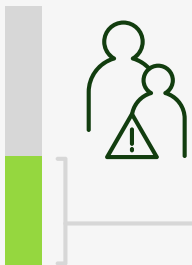
The 2,500 caseworkers of the Massachusetts Department of Children and Families must serve and manage information about more than **50,000 families on a typical day.**<sup>4</sup>



**Social worker turnover is as high as 90% per year** in some areas of the United States; heavy workloads, including paperwork, are a major contributing factor.<sup>5</sup>



A survey of social workers in Taiwan revealed a range of health problems, including insomnia and anxiety, among respondents **due to excessive workloads.**<sup>6</sup>

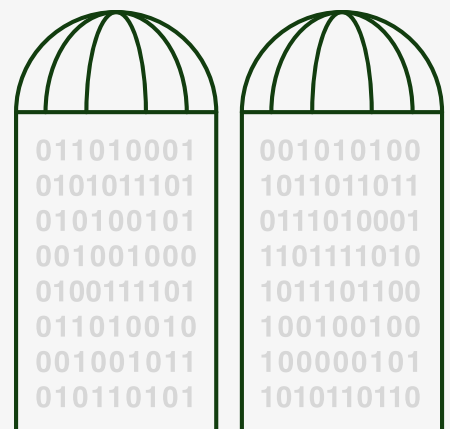


42% of social workers surveyed in the U.K. said they left work at the end of the day with **serious concerns about at least one of their cases.**



70% of those said their concerns were related to **paperwork they were unable to complete.**<sup>7</sup>

Most data that could be used by social workers is locked up in departmental or organizational silos, preventing collaboration between specialists.<sup>8</sup>



# Solutions from Watson Health

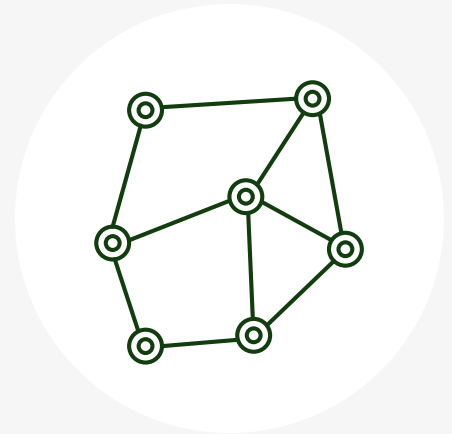
Moving beyond structured data and statistics is key to realizing the best outcomes for people served by social programs.<sup>9</sup>



**Giving caseworkers easy access to case notes, written assessments, and other unstructured data** that is already in records kept by agencies is an important step.



**Leveraging the capabilities of data analytics and unstructured as well as structured data**, cognitive computing has the potential to change the face of social programs in terms of time and cost efficiency, and improve caseworker success and client satisfaction.



**Social program professionals can begin to address large-scale issues** permeating the social sector that now bring frustration by leveraging cognitive computing technology to help bring meaning to data.

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**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.

For more information on how social workers can use cognitive computing to do more for a growing world in the digital age, visit **IBM Watson Health Social Program Management.**

### Sources

<sup>1</sup> IBM, "Cognitive Computing and Government Social Programs," <http://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=ZZW03405USEN>

<sup>2,3</sup> U.S. Department of Health and Human Services, Child Welfare Information Gateway, "Caseload and Workload Management," [https://www.childwelfare.gov/pubPDFs/case\\_work\\_management.pdf](https://www.childwelfare.gov/pubPDFs/case_work_management.pdf)

<sup>4</sup> Accenture, "Massachusetts Department of Children and Families: A new model for human services," <https://www.accenture.com/us-en/success-department-childrenfamilies>

<sup>5</sup> U.S. Department of Health and Human Services, Child Welfare Information Gateway, "Worker Turnover," <https://www.childwelfare.gov/topics/management/workforce/retention/workforceretention/turnover/>

<sup>6</sup> "Excessive workloads take toll on social workers' health," The Guardian, <https://www.theguardian.com/social-care-network/2014/jul/10/workloads-toll-social-workers-health>

<sup>7</sup> Unison and Community Care, "Social Work Watch Report," <http://www.communitycare.co.uk/2014/06/15/call-action-work-life-balance-survey-reveals-pressure-social-work-places-practitioners-home-lives/>

<sup>8,9</sup> American Academy of Social Work and Social Welfare, "Harnessing Big Data for Social Good: A Grand Challenge for Social Work," <http://aaswsw.org/wpcontent/uploads/2015/07/Big-Data-GC-edited-and-formatted-for-committee-review-7-17-20151.pdf>