How social factors shape population health

Integrating the non-medical sources of health issues

Beyond the hospital walls

Managing population health goes beyond what happens in a hospital or doctor's office.

Studies indicate social, environmental and behavioral factors account for about 60 percent of the determinants of health, with genetics and healthcare factors representing 20 percent each*.

Important community and personal factors include:

- Housing
- Income
- Education
- Nutrition
- Air Quality
- Lifestyle

*Source: Elizabeth Bradley, Yale School of Public Health

20%
Healthcare

20%
Genetics

60%
Social, environmental and behavioral factors
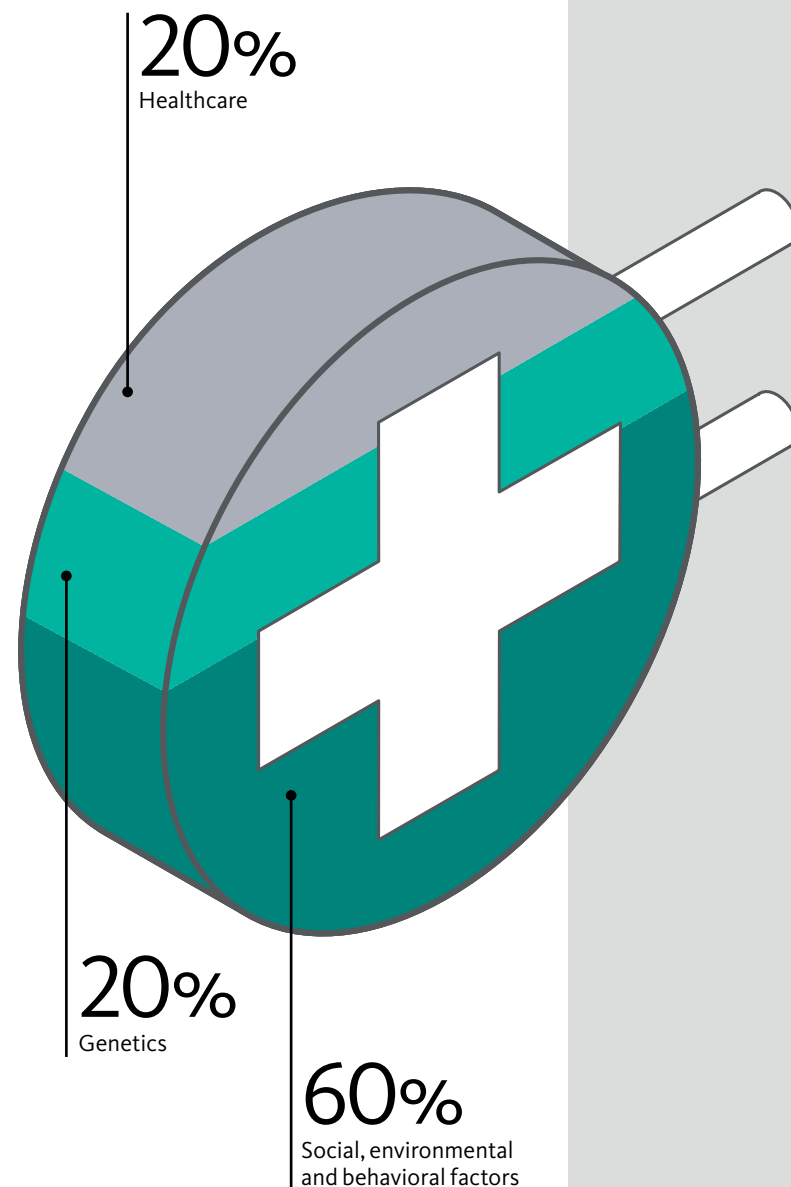
This makes sense

In communities all around the country, health providers, payers, health departments, employers and foundations are increasing their focus on social interventions that positively impact health outcomes and cost of care.

Sharing best practice

At Conduent, we're big believers in evidence-based healthcare.

We're also big believers in community partnerships aligned around health improvement strategies, and in re-engineering healthcare by combining clinical data (from EHRs and claims, for example) with community data.

In this eBook, we bring together some examples of successful programs that integrate social determinants and clinical insights into practical interventions that yield positive results.

Example 1

The San Francisco Sobering Center
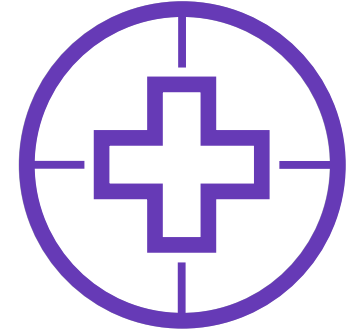
The problem

In 2002, San Francisco's emergency departments were overcrowded.

In response, more than 50 stakeholders came together to create data-driven solutions.

The data

Digging into the data, the stakeholders discovered high rates of hospital admissions due to alcohol abuse: more than 64 admissions for every ten thousand residents (with each case costing over $2,800).

The team also found that homeless, alcohol-dependent people accounted for a significant portion of the escalating problem – and that they were concentrated in a few neighborhoods.

The response

As a result, the San Francisco Department of Public Health worked with the non-profit Community Awareness and Treatment Services organization to launch The San Francisco Sobering Center.

The Center is a 24x7, nurse-managed program that offers specialized, targeted care to people who would otherwise end up in the emergency department.

The result

Since July 2003, the program has provided care to more than 8,100 people and diverted more than 29,000 encounters – 75 percent are direct diversions from emergency departments.

The Center operates at a cost of about $2,700 a day and treats from 10-14 people a day – all for less than the cost of a single ED case.

Frequently Asked Questions

The Value of Integrated Community Health Data

How can public health data be used to improve the health of a population?
What we do is to pull together diverse, publicly available data into one system that helps you do three things: see all the health and social and behavioral data in your community; find relevant, evidence-based programs that have worked to solve the issues you discover; and measure the impact of programs you deploy.

What kind of data are you bringing together?
Everything from medical metrics (mortality, cancer cases, diabetes, immunizations) to environmental and occupational data (air and water quality, transportation, education, public safety) to behavioral data (exercise, nutrition, weight, substance abuse).

It's a lot of data but it's almost all publicly available – you can add your private data sets. The key is that it's brought together in one place where it can be combined, analyzed, visualized and queried.

Is this data more valuable than the clinical data from, for instance, EHRs or claims data?
It's not either/or. It's bringing both together. That's where the really interesting insights happen. By understanding what is happening within the care system and in the community, it is possible to holistically manage population health.

How do you put this kind of data into action?
It's a simple, practical, three-step process: look at the data (especially the community's social determinants factors); select health improvement priorities to focus on; then implement a program with a way to measure its impact.

Example 2

Health Leads

Health Leads is a high-impact healthcare organization based on the belief that all healthcare providers should be able to prescribe solutions that improve health, not just manage disease.

As a service provider, Health Leads' tools and services help health systems integrate patient social needs into care delivery.

It's a simple model where doctors and nurses prescribe nutritious food, heat in the winter and other basic resources for their patients – the same way they prescribe medication.
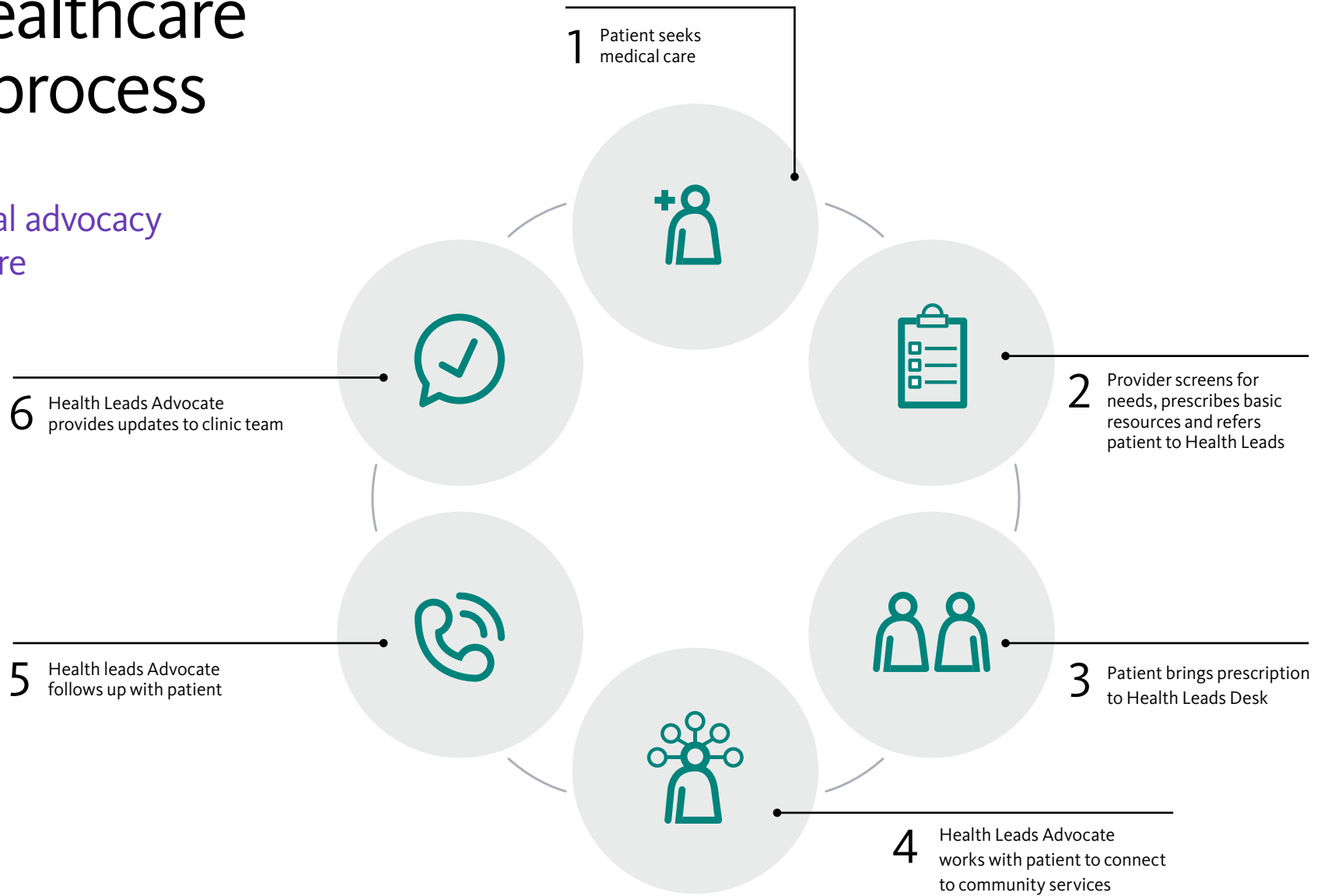
Patients take their prescriptions' to the Health Leads desk in the clinic, where trained college student advocates connect families with the community resources they need.

To hear about the birth of Health Leads, watch the powerful TEDMED Talk by co-founder Rebecca Onie.

Rebecca Onie
Can we rewrite the DNA of the healthcare system?

The Healthcare Leads process

Building social advocacy into healthcare

1 Patient seeks medical care

2 Provider screens for needs, prescribes basic resources and refers patient to Health Leads

3 Patient brings prescription to Health Leads Desk

4 Health Leads Advocate works with patient to connect to community services

5 Health leads Advocate follows up with patient
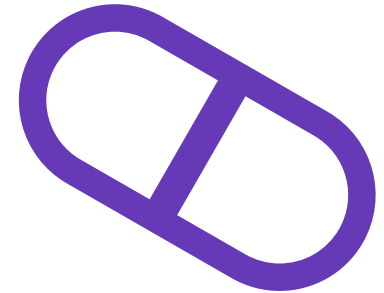
6 Health Leads Advocate provides updates to clinic team

"Poor housing conditions, including overcrowding, have been shown to have a direct relationship to poor mental health, developmental delay, heart disease and other medical issues."

National Health Statistics Reports

Example 3

Orange County:
the OC Health Indicator Dashboard

Orange County is a healthy place. But there are still real health challenges and disparities in the county.

The Health Improvement Partnership (HIP), an advisory group (now comprising over 30 partner organizations) created Healthier Together, a community-wide initiative that aligns public and private resources to improve health for all communities in Orange County.

The dashboard
One of the Healthier Together tools for change is the OC Health Indicator Dashboard, a public, web-based tool that lets anybody access, analyze, query and create reports on over 170 health, social and economic indicators for Orange County. Each report in the dashboard also connects people to relevant initiatives relevant to that indicator.
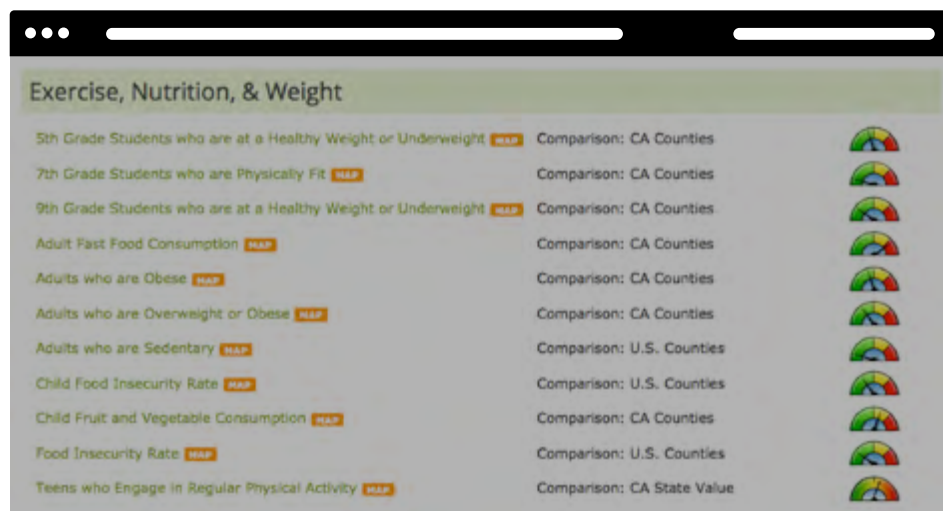
The priorities
The data-driven approach supported by the dashboard and analytic tools helped HIP identify four priority areas to address:

1) Infant and child health
2) Older adult health
3) Obesity and diabetes
4) Behavioral health and public health
   system improvements

Example 3

Orange County:
the OC Health Indicator Dashboard

Topline reports, with traffic light indicators, for the Exercise, Nutrition & Weight section of the Community Dashboard.
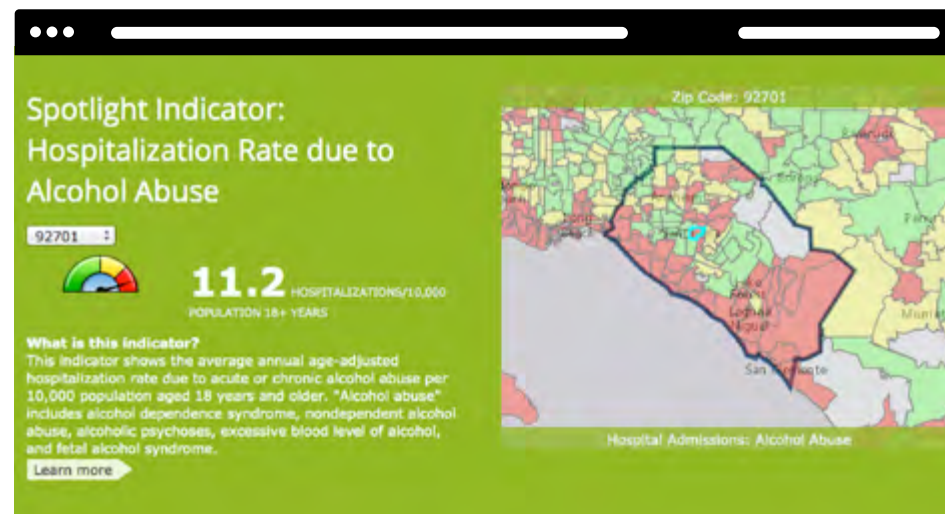
A Spotlight Indicator from the dashboard home page: Hospitalization due To Alcohol Abuse.

The MAPP Framework

To develop Healthier Together, Orange County used the Mobilizing for Action through Planning and Partnerships (MAPP) framework, a community-driven strategic planning process for improving community health.

Developed by the National Association of County and City Health Officials, MAPP is a powerful, 6-phase interactive approach to prioritizing public health issues and identifying resources to address them. The phases are: organizing, visioning, assessments, strategic issues, goals/strategies and action cycle.

For more on the framework,
visit the MAPP Framework website.

Children in poverty are 5x more likely to have higher lead-blood levels, which can lead to neurological damage, learning disabilities, hyperactivity, and other health problems.

National Health Statistics Reports

5x more likely
to have higher
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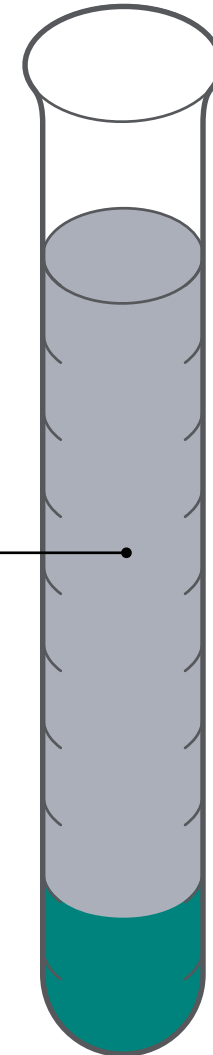
Example 4

WYhealth: data analytics improves care and reduces ER admissions

With 85,000 enrollees, Wyoming Medicaid covers approximately one in every seven people in the overall Wyoming population.

WYhealth, the state's total population health management program, analyzes data provided by Wyoming's Medicaid Management Information System (MMIS) to identify super-users of ER as well as potential gaps in care.

WYhealth's local clinicians then work with patients and their physicians, to develop care plans and preventive measures that improve care while reducing the state's Medicaid costs.

"Our priority is to help people make informed decisions about their healthcare, like how to best manage chronic conditions and where to seek treatment when necessary."

Dr. James F. Bush,
Medical Director, Wyoming Department of Health.

The ER initiative
One example: the data helped identify a significant problem in repeated visits to the ER. WYhealth then works with individuals to find alternative resources for care in their community.

The healthcare analytics data also highlights patients who miss outpatient appointments after a hospital stay – a cause of additional ER visits and hospital readmissions.

WYhealth also provides a 24/7 Nurseline to help members answer urgent health questions and determine whether or not they need to go to the ER. The service helps patients learn more about their condition and identify the right healthcare resources.

The result
By reducing the amount of ER visits from its members, WYhealth has reduced ER costs per member per month by more than 20 percent since the program's inception in October 2012. In the first year, the state's 30-day hospital readmission rate dropped from 7.4 percent to 6.88 percent.

Conclusion

Clearly, exciting things are happening where healthcare meets the public and private services that address the social determinants of health.

From the examples collected in this brief overview, a few clear themes emerge:

The importance of collaboration
Successful public health initiatives often bring together many different organizations from across the entire health and social spectrum, including health care providers, payers, employers, academic institutions, community-based organizations, and other government agencies.

Divided, we struggle. United we do amazing things.

Start with data
The most successful community health initiatives seem to be the ones that are evidence-based and start with data, for identifying issues, designing interventions and measuring results.

Prioritize
Every community and population has many more challenges than they could ever attack. So it's critical for communities to align around top priorities – the ones where a small intervention can make a massive impact.

Involve the community
Great population health programs don't happen to a community, they happen with a community. The more people who are consulted and invited to get involved, the greater the chance of sustained success.

At Conduent, we're excited about the future of healthcare when payers, providers and communities work together.

Further reading

Healthcare analytics

How data is changing everything

CONDUENT

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About Conduent

Conduent is the world's largest provider of diversified business process services with leading capabilities in transaction processing, automation, analytics and constituent experience. We work with both government and commercial customers in assisting them to deliver quality services to the people they serve.

We manage interactions with patients and the insured for a significant portion of the U.S. healthcare industry. We're the customer interface for large segments of the technology industry. And, we're the operational and processing partner of choice for public transportation systems around the world.

Whether it's digital payments, claims processing, benefit administration, automated tolling, customer care or distributed learning – Conduent manages and modernizes these interactions to create value for both our clients and their constituents.

Learn more at www.conduent.com or email us a communityhealth@conduent.com.

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