

# Optum Advisory Services

Applying consumer data and social determinants of health to improve results

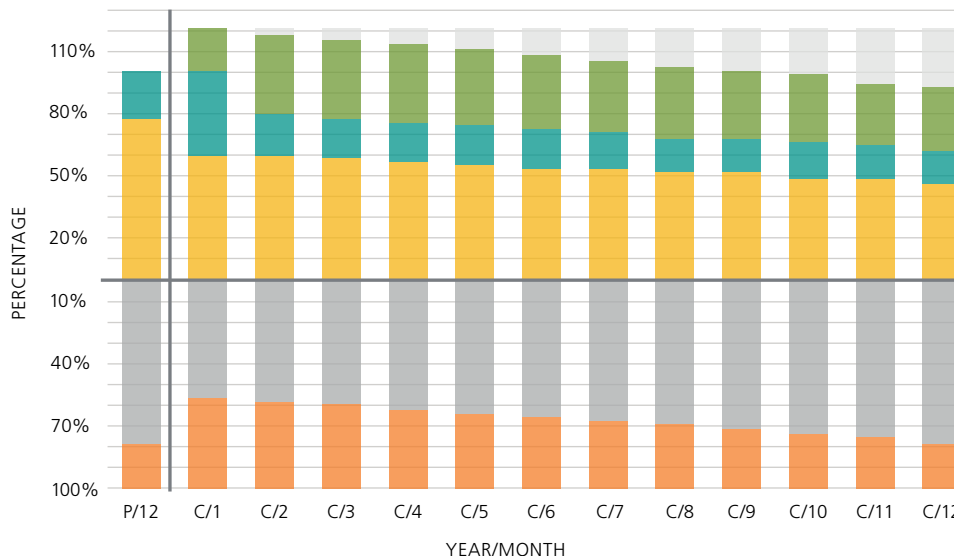


IMPROVE CARE QUALITY | MANAGE RISK | REDUCE COST | ADVANCE INFRASTRUCTURE | GROW MARKET SHARE

## Data gaps can often lead to health care disconnects

It is not uncommon for payers or providers to experience membership data disconnects and gaps. For example, many plans experience data gaps of 20–50 percent as a result of member turnover alone. Prevalent data gaps make it difficult to develop accurate member risk profiles, anticipate customer needs, personalize care experiences or prevent health care gaps.

## Member months in relation to participant growth



The orange bars in the chart illustrate how one key factor, membership turnover, can lead to significant data gaps and disconnects. In this typical case, **complete data is available for only 46 percent** of members as a result of typical member and employee membership turnover.

- Actual data
- Growth
- New members (first year)
- Original members
- New members (second year)
- Incomplete/missing data

Chart assumptions: 100,000 members, 20% turnover (coverage renewal date), 25% member turnover (annual turnover), 20% annual growth rate at renewal. 77% with complete data prior period. 89% total prior MMs prior to original member months. Results: 46% of members with complete data in both periods. 77% of members in current period with complete data. 33% of new current members as percentage of total (at beginning of current period). 49% of new current members as a percentage of total (at end of current period).

These gaps and other data limitations can significantly impact accuracy or improvement in renewal quotes, loss ratios, targets, care quality and consumer experiences. Benefits across the entire health care system can be bogged down when underwriting, patient care and patient engagement programs are limited to traditional data sources across plan populations.

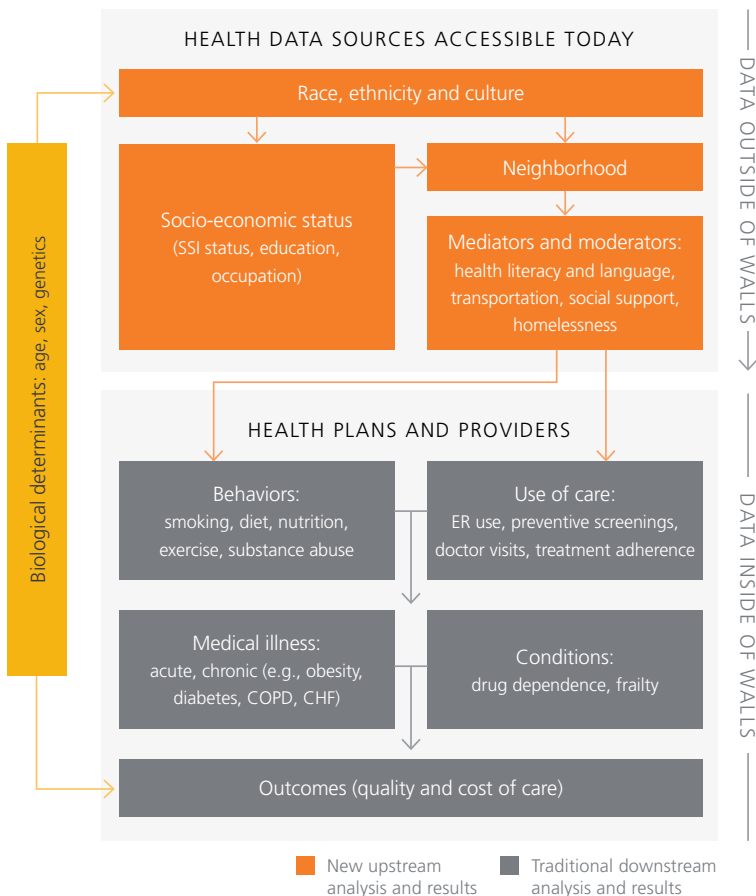
### When traditional predictive approaches fall short

In addition to data gaps due to member turnover, traditional actuarial models can fall short based on limited data and approaches. Predictive clinical analytics and traditional actuarial and underwriting models typically support projections based on what has happened in the past across member populations. Often this is not an indication of what will happen again in the future for a single patient. For example, a patient having knee surgery is not considered a recurring pattern. Therefore, it is unlikely the patient will require knee surgery on that knee again in the near future.

New predictive approaches effectively predict what is likely to happen for the overall population based on what is likely to happen for each individual patient, as well as for the overall population. Approaching models this way can be more accurate than predictions-based which has happened in the past across the entire population.

### New available factors can help to address gaps

Payers and providers have traditionally depended primarily on data inside their organization walls as highlighted in grey below, rather than consumer or SDOH data outside their walls for predictive modeling. However, new opportunities exist to combine social and behavior factors determining 60 percent of health care utilization and outcome.



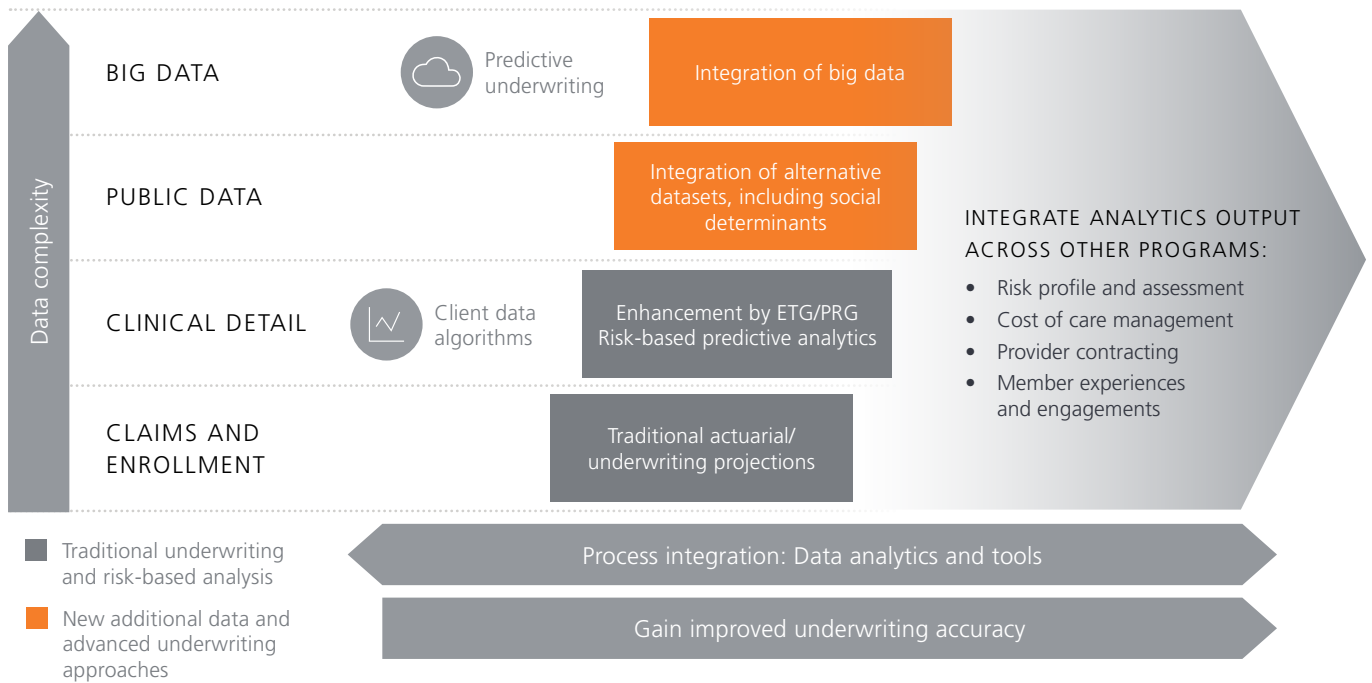
**Social determinants of health (SDOH)** are the structural determinants and conditions in which people are born, grow, live, work and age. SDOH include income, health literacy, transportation and social isolation. This information is integrated with health plan data at a group and member level to improve underwriting gains, operational performance and member outcomes.



Research shows that SDOH and behavioral propensities **account for 60–80 percent of health outcomes** and utilization. Optum Advisory Services and consumer analytic models allow prioritization and targeting on “need” and “want” levels. This allows for a more efficient and effective utilization of care management and quality resources.

Consumer data and SDOH can help fill in data gaps and develop more accurate patient-based predictive modeling. While consumer and SDOH data has been applied by some payers and providers to improve care quality and address gaps, there are now new methods for adding highly impactful SDOH data to underwriting and other strategic approaches in order to improve predictive accuracy and results.

### Applying new data and approaches to underwriting and other strategic priorities can improve accuracy and financial impacts.



### Increasing your accuracy and results

New underwriting models can now apply PRGs that can help fill in some missing data gaps. Adding new data and underwriting approaches highlighted in orange above, can significantly impact results. In addition, applying SDOH and consumer data can augment PRG data and potentially fill in gaps that PRGs may not be able to address.

Applying SDOH can fill important data gaps for underwriting and care management through:

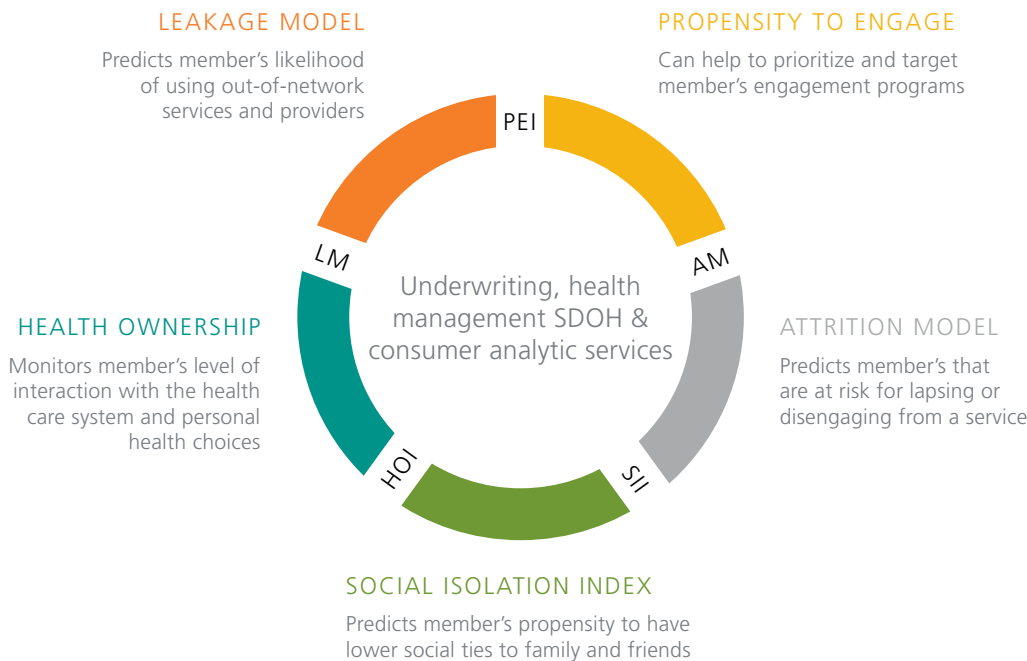
- Analysis of historical member engagements and propensity to engage with the health system
- Members understanding their health ownership to help us understand how their attitudes toward their health and actions impact care
- Assessment of member support or isolation from family and friends
- Evaluation of attrition and coverage lapse behaviors
- Automation and integration into analytics tools, such as Optum Symmetry and StepWise®. By combining the data and analysis from both tools, organizations can be even more effective at predicting and managing expenses. Integrating SDOH and consumer data with these tools can help to forecast costs based on each member and forecast as a population, rather than the reverse.

Improving the accuracy of the financial projections for an employer enables payers to reduce underwriting margins and provide more competitive rates to the market.

- Leveraging Pharmacy Risk Groupers (PRGs) in conjunction with Optum Impact Pro's Actuarial Underwriting model can **increase predictive accuracy by over 60%**, as measured by R-squared, relative to using the Actuarial Underwriting model independently.
- Similarly using SDOH in conjunction with Optum's Actuarial Underwriting model can **increase predictive accuracy by over 50% as measured by R-squared.**

## Increase accuracy and results with Optum Advisory Services

SDOH and consumer analytics offered through Optum Advisory Services can help leaders to address shortcomings in data, health management programs and underwriting. Our proprietary propensity models help leaders easily integrate rich new data and operationalize these new analytic results for improved accuracy. We help payers and providers consider each member's level of social isolation, engagement with the health care system and personal health choices. We also help leaders consider their patients and member level of engagement impacts on underwriting, risk profiles, utilization, clinical care and quality.



We can help make it easy for organizations to add SDOH and new modeling to their analysis based on unique technology, operations and expert capabilities. Our services can help you improve your financial risk, health outcomes and care quality by:

POPULATION ID/STRAT	MEMBER/PROFILING	POPULATION RISK	FINANCE
<ul style="list-style-type: none"> <li>Finding patients who are at high financial risk, or likely to be admitted to the hospital</li> <li>Finding patients who have multiple comorbid conditions</li> <li>Understanding patient gaps in care</li> <li>Creating disease registries</li> <li>Matching patients to specific program opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Holistic view of member's care history as well as drivers and gaps in care</li> <li>Insight into the member's likelihood of near-term hospitalization or emergency room usage</li> <li>Identification of frequent flyers</li> </ul>	<ul style="list-style-type: none"> <li>Population trends in overall risk</li> <li>Understanding difference between populations (dual-eligible, CHIPs, traditional)</li> <li>Identifying emerging drivers of cost</li> <li>Identifying shifts in place of service</li> <li>Assessing improvements in gap closure</li> </ul>	<ul style="list-style-type: none"> <li>Honing financial forecasts</li> <li>Determining resource requirements</li> <li>Assessing the effectiveness of various programs</li> <li>Key metrics and leading indicators for performance management dashboards</li> <li>Refine underwriting practices to incorporate clinical data</li> </ul>
<b>COMPLIANCE</b>			



### Key questions leaders are asking themselves today:

- How can my organization identify high clinical risk and high financial risk members?
- How can my teams leverage new consumer and clinical data to improve underwriting accuracy?
- How can I anticipate which members/groups are most likely to lapse?
- Which members are most to over use a specific plan design feature?
- How can I demonstrate value to my employer customers by showing changes in their members' behaviors and attitudes?
- How do I identify which care gaps I can address to drive the greatest savings?
- What are easy steps I can take to improve predictions and prevent potentially avoidable high-cost care?
- How can I more effectively compare the impacts of proposed clinical initiatives?
- How will I know if my resources are sufficient to address our clinical program needs?
- How can I target engagements to create better consumer experiences?
- How do I address compliance requirements for applying data outside the walls of my organization?

## CONSIDER HOW OPTUM ADVISORY SERVICES CAN HELP YOU IMPROVE YOUR ACCURACY AND CARE



### Increase efficiencies and impacts with scale

- Apply consistent indices and modeling across the entire enterprise for higher results
- Impact all lines of business including: Commercial, Medicaid, Medicare, and Individual Coverage

### Develop a common language and simplify across programs

- Utilize standardized and proven indices that can easily be analyzed, tested, understood, and applied
- Connect programs and create more synergy across underwriting, benefit design, risk management, clinical care and employer reporting

### Augmenting existing models and analytic tools with a centralized process

- Centralize processes apply compliant requirements
- Operationalize as a supplement to existing data analytics environment and tools

### Stay relevant with periodic refreshes

- Update quarterly to support and benefit from trend analysis and analysis providing the ability to effectively engage with new members
- Update member profiles to help inform ongoing program decisions

## Explore ways to improve care quality and financial results

Meet Optum Advisory Services experts to learn more about how we can make it easier for you to apply proven consumer data and SDOH approaches to improve care, costs and accuracy.



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## Optum helps leaders make the right changes at the right time

Optum Advisory Services specializes in helping health care leaders address their biggest challenges with guidance, insights and precise strategies to help organizations assert control of their future.

### Guide your organization with precise and strategic insights

We'll help you realize your vision by tapping into a team with real-world experience. We start by assessing your organization's position in the marketplace, using the industry's largest health care data asset. We then chart strategic courses with actuarial precision for your organization's greatest sustainable successes.

### Hardwire meaningful and sustainable results with proven expertise

We are more than consultants. We are also operators with real-world health care expertise who can help you hardwire meaningful and sustainable results. Whether it's growing your organization's top line or defending the bottom line, we work alongside you to implement lasting change by drawing upon a unique breadth of financial, IT, operations, analytics and clinical capabilities.

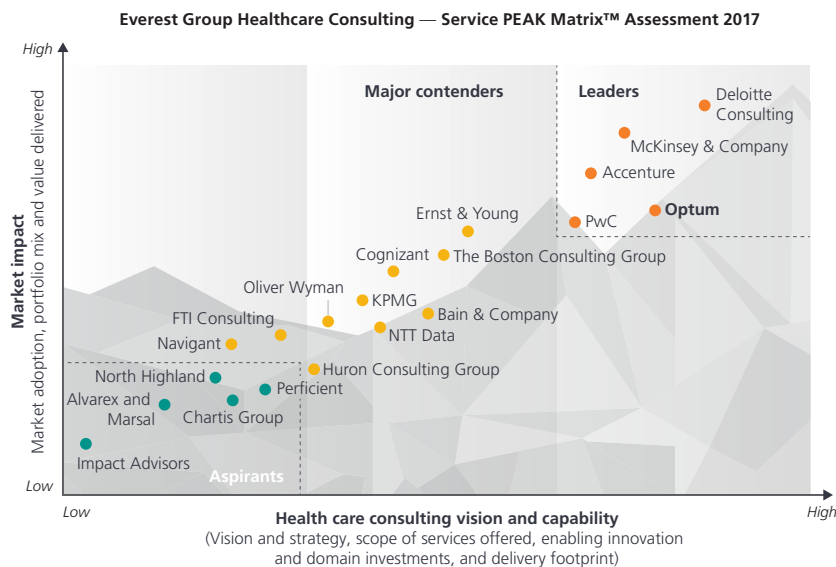
### Collaborate and disrupt with unique relationships

We are here to help your organization thrive. We can help you to create new relationships across the health care spectrum to create new opportunities for value in the financing and delivery of health care. Developing new relationships and cutting-edge business and clinical models can help you to deliver cutting-edge results.

## What others say about Optum Advisory Services

### Everest Group Healthcare Consulting — Service PEAK Matrix™ Assessment 2017

Everest Group ranks Optum Advisory Services as a leader among 20 competitors for its diverse capabilities, spanning the entire consulting value chain that caters to payers, care providers and PBMs across the globe.



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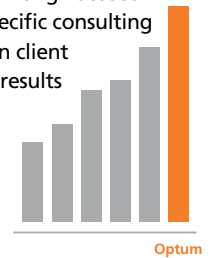
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- Unrivaled breadth and granularity of clinical and claims data, including 98 million lives of clinical data and 188 million lives of claims data
- A team of more than 1,300 experts in health care
- Serves more than 200 health plans

## TOP RATED

for expertise among Focused Healthcare-Specific consulting firms, based on client feedback and results



\*Source: 2018 KLAS Healthcare Management Report

## Work with a trusted partner

Clients rated Optum Advisory Services the highest for expertise among Focused Healthcare-Specific consulting firms in the 2018 KLAS Healthcare Management Report. KLAS reported that clients often view Optum Advisory Services experts as "trusted partners" who help to guide organizational vision and strategy, and solve problems.



*"Optum, with its deep domain strengths, strong data assets and differentiated consulting pedigree, is positioned well to help health care organizations navigate these winds of change and embrace the digital-first normal."*

— Jimit Arora, partner,  
Everest Group