

Integrating claims and health risk assessment data to measure risk in a dual eligible population



Delivering the best care to individuals who are eligible for both Medicare and Medicaid presents unique challenges. These “dual eligible” patients are often difficult to locate and frequently have multiple health issues, making it particularly tough to accurately assess their risk.

Risk stratification for this population is typically based on claims data, but have you ever wondered if that data shows the whole risk picture? How much more risk might be identified in these high-needs patients if we had input directly from them in the form of self-reports? This case study reveals a compelling answer that may change the way you think about measuring health risk.

The project

In 2012, the Coordinated Care Initiative (CCI) was enacted in California “to enhance health outcomes and beneficiary satisfaction for low-income seniors and persons with disabilities by shifting service delivery away from institutional care to home and community-based settings.”¹ The ultimate goal was to provide this dual eligible population with coordinated medical care, behavioral care, and social supports through a single integrated delivery system.

Under the CCI, a California-based health insurer launched a demonstration project to provide integrated care to a defined dual eligible population in a large metropolitan area. Optum® was asked to design a Health Risk Assessment (HRA) for this population and administer it. The data from the completed HRAs would be used to help risk-stratify the members and develop their individual care plans.

Our approach

Collaborating closely with our client, we set out to:

- Stratify members by risk at enrollment based on claims data.
- Administer a comprehensive, state-approved HRA soon after enrollment.
- Feed real-time member-level reports to the patients' Integrated Care Management Teams.
- Refine the members' risk levels based on their HRA data.

To begin, we used **Impact Pro**[®], our claims-based risk stratification tool, to analyze claims data provided at enrollment. Then, using claims-specific criteria we established with our client's operations and clinical staff (see Figure 1), we grouped patients based on the level of care they needed (**high, moderate, or low**) in three health domains: medical, behavioral and social.

We then administered the HRA, starting with the highest risk individuals, and used our **Smart Measurement System**[®] to score the data and create real-time summary reports for clinical use. (See **Clinician's Reports** on the next page.) Next, we applied HRA-specific criteria (see figure 1 below) for **high, moderate and low** risk in the three domains to yield a second assessment of risk for each patient.

Figure 1

Domain	Criteria used for risk assessment	
	Claims	HRA
Medical	<ul style="list-style-type: none"> • Acute care history • Risk of inpatient stay • Clinical conditions • Pharmaceutical use • Gaps in care 	<ul style="list-style-type: none"> • Physical functioning (PCS) • Activities or daily living scale • Frailty • Pain scale • Memory and thinking
Behavioral	<ul style="list-style-type: none"> • BH acute care history • Risk of future BH costs • Clinical BH conditions 	<ul style="list-style-type: none"> • Mental functioning (MCS) • Substance use
Social	<ul style="list-style-type: none"> • Nutritional diagnosis • Alzheimer's or dementia • Seizure disorder with ER use • Falls (bone fractures) • ICU stays at least 6 mos. • Hospital bed at home • Home care • Home IV pain management • Wheelchair • Incontinence supplies • Urinary catheter • IV hydration • Clinical conditions 	<ul style="list-style-type: none"> • Falls (by report) • Physical functioning (PCS) • Activities of daily living • Frailty • Pharma compliance • Nutrition • Social support • Housing insecurity

Health Risk Assessments

Asking the experts

Our HRAs are customized versions of our SF-12v2[®] Health Survey, one of the most reliable, rigorously validated and widely used patient-reported health status measures in the world. The SF-12v2 measures eight health domains and offers summary scores for physical and mental health, which are standardized to be comparable across groups, time frames and populations. By going right to the experts — the patients themselves — and assessing how they are feeling and functioning today, our HRAs provide a better measure of near-term risk (<24 months) than traditional HRAs.

The HRA created for this project also identified several elements of health risk relevant to a dual eligible population:

- Activities of daily living, such as dressing, feeding, toileting, grooming, physical ambulation, balance/risk of falls and bathing
- Cognition and memory
- Physical health status measures, such as physical functioning, frailty and pain
- Emotional and psychological status measures, such as depression, stress, loneliness and fatigue
- Behavioral risks such as tobacco use, physical activity, alcohol, nutrition and personal safety
- Self-reported biometric assessments such as height, weight, blood pressure, blood lipids and glucose
- Demographics



It's easy to see how providers and payers can use the information generated by this pairing of claims data and HRAs. For example:

- At-risk individuals can be targeted for intervention and treatments to improve resource utilization and health outcomes.
- Doctors can use the reports to promote dialogue with patients.
- Patient progress can be quantified and tracked over time to measure the effectiveness of care plans.

But, in this case, the data offered our client even more: a remarkable insight into the differences of using claims data versus HRA assessments when measuring a population's risk.

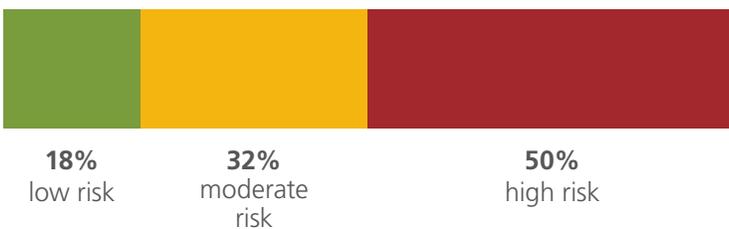
The hidden gem

To see what we mean, let's examine the data related to medical health needs.

The **claims data** provided at enrollment classified our client's population² pretty much according to expectations:



Yet surprisingly, the **HRA** classified this population quite differently and found a much greater overall level of medical needs:



As we compared the results more closely, we also noted how little the two approaches agreed on which members fell into which risk category. They agreed on only 1 percent of members as high risk, 9 percent as moderate risk and 13 percent as low risk. That adds up to a total of only 23 percent of patients with the same medical needs level, according to both claims and HRA data. For the remaining 77 percent of members, the claims and HRA data were at odds, each telling a different risk story.

In the most startling result, **35% of the members** were classified as high medical risk according to the HRA, but low medical risk according to claims data. In other words, if our client relied only on claims data to assess their patients' levels of medical risk, they would miss a sizable high-needs group, **more than one-third** of the total population.

Clinician's Reports

Real-time snapshots

Our Clinician's Reports provide many insights that can be used by providers to zero in on patient needs and fine-tune treatments. One of the most valuable features of the report is the flagging system that highlights potential problems, such as untreated chronic conditions or high-risk behavior.



So, we asked ourselves what you're probably asking: What's going on here? What is happening with that 35 percent to classify them as high needs according to the HRA even though their claims data did not flag them?

What we found when we drilled down into the data was that many patients were reporting high levels of pain and problems with cognition that were not reflected in the claims data. The strength of patient-reported data is that it reflects what is happening with a patient at the moment. If a person has a condition that has not yet been treated, it won't show up in claims. On the other hand, an HRA gets the most accurate answer today by going straight to the source: the patient.

The impact

For this project, we were collaborating with our client to create a better system to deliver health care to a very difficult-to-manage population. Out of that collaboration came the discovery that the need for care was distributed throughout this population in a much different way than originally thought. That discovery provided our client with a more accurate view of the population so they could reach out to more high-needs patients proactively and allocate their resources more efficiently, thus boosting their overall population health.

How about you?

Are you confident you know the real makeup of your member population? Are health outcomes and cost containment efforts suffering because some populations are not receiving the care they need? By integrating HRA data with claims data on an ongoing basis, you can obtain a clearer picture of your members and what they need now and in the future. That will enable you to better inform providers and engage members so that it's easier for everyone in your health care universe to reach their goals.

Put an HRA to work

We can customize an HRA to help your organization:

- Measure health burden from chronic disease.
- Identify members at high risk for adverse outcomes.
- Predict probability of near-term utilization such as hospital readmissions and use of health services.
- Identify frail members at high risk of falls.
- Screen for depression and other emotional distress.
- Monitor members' physical functioning, activities of daily living and emotional well-being.
- Quantify population and individual wellness for intervention and behavioral change initiatives.
- Identify negative health trends using longitudinal score analysis and comparisons to benchmarks.

Notes:

1. State of California — Health and Human Service Agency Department of Health Care Services Duals Plan Letter 13-002, June 24, 2013.
2. 15,170 members enrolled between May 2014 and June 2016. Claims data taken at enrollment. HRA data reflects first HRA after enrollment, if within 90 days.

To learn more about customized HRAs and how Optum can help you, contact Donna Fontaine, Senior Account Executive at 401-642-9266.



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