

# Optimizing Medical Savings Through Provider Networks, Technology, and Data Science

#### Introduction to the Importance of Provider Networks

The healthcare landscape in the United States is characterized by high costs, significant price variations, and ongoing efforts to improve quality and efficiency. Provider networks, particularly Preferred Provider Organizations (PPOs), are crucial in negotiating reduced rates with healthcare providers and offering significant financial benefits. The integration of hospitals and physician practices, as Baker et al. (2015) explored, demonstrates how ownership structures can influence patient choices and healthcare costs. Hospital-owned practices often direct patients to higher-cost hospital services, highlighting the need to manage provider networks to balance cost and quality carefully.

#### **Direction of Care to Contracted Providers**

Directing care to contracted providers with better outcomes or lower costs is a central strategy in healthcare management. Whaley et al. (2018) examined the impact of reference pricing programs that set a maximum contribution for specific services, encouraging patients to choose lower-cost providers. This approach led to substantial savings and shifts in patient volumes towards more cost-effective facilities. A similar study by Whaley et al. (2022) on financial incentives for using lower-priced providers found that targeted consumer incentives can modestly reduce prices and increase the use of lower-priced providers. These programs align patient choices with cost-saving goals, demonstrating the effectiveness of financial incentives in directing care to more economical options.

## How ComplQ Can Impact Cost Savings with Network Analysis and Advanced Analytics

ComplQ conducted in-depth savings analysis for several customers to determine an improved PPO strategy that would yield improved outcomes and savings. This review included various specialties, including Physical Therapy, Diagnostics, Pain Management, Durable Medical Equipment (DME), and Home Health.

These results underscore the financial benefits of adopting a broad-based PPO strategy that creates a mosaic of contracting methodologies and strategies across several network types, as well as the immense difference on a state-by-state basis across varies network options. By negotiating reduced rates with a wide range of providers and PPO programs, ComplQ can help insurers, TPAs, and employers manage healthcare costs more effectively, leading to improved claim metrics and lower total program costs.





#### A few highlights from our analysis:

- Broad-Based Network Savings: The analysis conducted for a TPA client revealed a significant increase in savings
  when utilizing broad-based networks compared to specialty networks. The savings with broad-based networks
  were 22% higher than with Diagnostic Networks, 181% higher than with Physical Therapy (PT) Networks, and
  156% higher than with Pain Management Networks. This shift underscores the financial benefits of broad-based
  networks, which provide substantial cost reductions across various specialties.
- Enhanced Savings: Broad-based networks led to notable savings improvements for another TPA client. Our analysis showed a 17% increase in savings compared to Diagnostic Networks, a 63% increase compared to PT Networks, and a 15% increase compared to Pain Management Networks. The broad-based approach facilitated a more comprehensive and cost-effective management of specialty bills.
- Comprehensive Savings: For a third TPA, a thorough analysis highlighted savings across multiple specialties.
  Broad-based networks resulted in 42% higher savings compared to PT Networks, 118% higher compared to Pain
  Management Networks, 128% higher compared to Diagnostic Networks, and 102% higher compared to Durable
  Medical Equipment (DME) Networks. Additionally, savings from Home Health Networks were 174% higher. These
  results emphasize the efficiency of broad-based networks in managing diverse healthcare services.
- Physical Therapy Savings: A focused analysis of Physical Therapy services indicated that broad-based networks provided significantly higher savings. For instance, original savings were \$63,825, while savings after using a broad-based network approach amounted to \$99,026, resulting in added savings of \$35,200. This demonstrates the effectiveness of broad-based networks in reducing PT service costs.

The added savings
amounted to \$1,118,000,
leading to total
annualized savings
of \$13 million and
a net increase of
\$7 million.

- Pain Management Savings: Similar substantial savings were observed in Pain Management services. The original savings were \$34,279, and after using the more comprehensive ComplQ network program, savings reached \$56,256, leading to an added savings of \$21,976. The broad-based approach proved highly beneficial in managing pain management expenses.
- Total Savings Strategy: Our TPA client, who adopted our total savings approach, improved their medical savings by \$2,575,000 with broadbased networks, compared to \$1,133,000 with specialty networks. The added savings amounted to \$1,118,000, leading to total annualized savings of \$13 million and a net increase of \$7 million.
- These figures highlight the significant impact of broad-based networks on overall healthcare cost management.

### **Use of Technology**

Technology plays a pivotal role in cost containment and care management. Price transparency tools are another technological advancement that empowers patients with information about healthcare costs. The study by Miller et al. (2020) discusses how price transparency initiatives can help patients make informed decisions, although their effectiveness has been mixed due to low engagement rates. The use of technology to provide real-time pricing information illustrates the potential for technology to drive cost savings and improve patient decision-making. The <a href="ComplQ AuditlQ program">ComplQ AuditlQ program</a> is an example of how ComplQ leverages these advanced technologies and data as part of a comprehensive solution for our clients.





#### Analytics and Data Analysis - How We Do What We Do

Analytics and data analysis are pivotal in optimizing healthcare outcomes and costs. They involve accessing and analyzing large sets of claim data to enhance the validity and reliability of research findings. This process enables CompIQ data experts to uncover trends, identify inefficiencies, and make evidence-based recommendations. The Analytics and Data Science team at ComplQ works with large data sets when conducting these comprehensive savings analyses to control various factors by analyzing millions of data points, ensuring that the observed effects are robust and generalizable. This extensive data analysis provides valuable insights to guide our clients and claim administrators toward better decisionmaking. This helps to design a custom savings strategy that is based on your specific data.

Our analytics can identify which providers or networks offer the best combination of cost and quality, enabling clients to make informed choices about the care of their employees and the strategic partners that help to deliver treatment.

Claim administrators can use these insights to design benefit structures that incentivize the use of high-value providers, driving down costs while maintaining or improving care quality. Additionally, predictive analytics can identify high-risk patients who may benefit from targeted interventions, further enhancing the efficiency of healthcare delivery.

By integrating these findings into our daily work, ComplQ can deliver a more efficient and patient-centered system that advocates quality providers who can yield claim program savings. Our rigorous analysis of claims and medical data enables our clients to make decisions that align with the best interests of employees and the overall financial results of their program. This data-driven approach ensures that resources are used effectively, promoting sustainability and better health outcomes.





#### CONCLUSION

Optimizing healthcare delivery requires a multifaceted approach that includes strengthening provider networks, directing care to cost-effective providers, and leveraging technology. Ask us how we can help you learn more about your data and outcomes and how our strategies can improve your outcomes and costs.

#### Bibliography:

- Baker, L. C., Bundorf, M. K., & Kessler, D. P. (2015). The effect of hospital-physician integration on hospital choice. NBER Working Paper No. 21497. National Bureau of Economic Research.
- Goldberg, C. (2010). Cost containment and cost management strategies. Journal of Healthcare Management, 55:5, 308-311.
- Melnick, G. A., Shen, Y.-C., & Wu, V.Y. (2011). The increased concentration of health plan markets can be nefit consumers through lower hospital prices. Health Affairs, 30(9), 1728-1733.
- Miller, B. J., Mandelberg, M. C., Griffith, N. C., & Ehrenfeld, J. M. (2020). Price transparency: Empowering patient choice and promoting provider competition. Journal of Medical Systems, 44(3), 80.
   Robinson, J. C., Brown, T. T., & Whaley, C. (2017). Reference pricing changes the 'choice architecture' of health care for consumers. Health Affairs, 36(3), 524-530.
- Speer, M., McCullough, J. M., Fielding, J. E., Faustino, E., & Teutsch, S. M. (2020). Excess medical spending: The categories, magnitude, and opportunity costs of wasteful spending in the United States.
- American Journal of Public Health, 110(12), 1743-1748.

   Whaley, C. M., & Brown, T. T. (2018). Firm responses to targeted consumer incentives: Evidence from reference pricing for surgical services. Journal of Health Economics, 61, 111-133
- Whaley, C., Sood, N., Chernew, M., Metcalfe, L., & Mehrotra, A. (2022). Paying patients to use lower-priced providers. Health Services Research, 57(1), 37-46.

