Garthwaite Healthcare- Challenges in resolving the Profitability in Healthcare sector

Our client is Garthwaite Healthcare Co (GHC), a health insurance firm located in the Midwest. GHC is facing financial and competitive challenges, and the CEO has enlisted our firm's help to identify the root causes of the problem and propose solutions. To start our analysis, what key areas would you want to explore to understand GHC's decline in financial and competitive position?

Candidate:

Possible areas to explore include:

- 1. GHC's revenue streams.
- 2. Pricing strategies for health insurance premiums.
- 3. The scope and coverage of the health services provided by GHC.
- 4. Costs incurred by GHC, including both fixed and variable costs.
- 5. The main cost components, such as administrative expenses and healthcare service payments.
- 6. Analysis of demographic shifts and changes in the health risk profiles of GHC's members.
- 7. Comparison of GHC's competitive position with other health insurance firms in the Midwest.

Interviewer:

The team discovers that there has been a significant shift in the demographic composition of GHC's insured members in the past few years. The membership has transitioned from predominantly older individuals to a more diverse age group. What specific areas would you investigate first?

Candidate:

Key areas to focus on include:

- 1. The impact of demographic changes on the types and frequency of healthcare services required.
- 2. The potential shift in disease prevalence and health risk profiles within the new demographic.
- 3. Analysis of how the changes in demographics may affect the utilization of specific health services.
- 4. Evaluation of the financial implications of these demographic shifts on GHC's claims and payouts.

Interviewer:

Your team believes that one of the primary causes of GHC's financial issues is the management of healthcare service costs, particularly payments for various medical treatments. You gather information about GHC and its main competitor, Midwest Health Assurance (MHA):

- GHC: Number of insured members: 300,000, Average healthcare service payment per member per month: \$150.

- MHA: Number of insured members: 400,000, Average healthcare service payment per member per month: \$120.

What are the most likely reasons that GHC's average healthcare service payment is higher than MHA's?

Candidate:

Possible reasons might include:

- 1. The cost of healthcare services in GHC's network is higher than those in MHA's network.
- 2. Differences in the utilization patterns of healthcare services between GHC and MHA.
- 3. The mix of insured members at GHC might have a higher prevalence of certain expensive medical conditions.
- 4. GHC might be paying more for specific medical treatments compared to MHA.

Interviewer:

Given these factors, what analyses would you conduct to determine the causes of the higher healthcare service payments at GHC?

Candidate:

To address this, you could:

- 1. Analyze the cost of healthcare services within GHC's network compared to MHA's or industry averages.
- 2. Examine the utilization patterns of healthcare services to identify any outliers or areas of excessive usage.
- 3. Assess the mix of medical conditions requiring treatments and their associated costs within GHC.
- 4. Review the specific prices paid by GHC for common medical treatments against industry benchmarks.
- 5. Investigate the efficiency and effectiveness of GHC's claims management and negotiation processes.

Interviewer:

GHC's CEO suspects the company is paying excessively for cardiology treatments. He asks the consulting team to analyze GHC's cardiac patient population to determine the expected number of annual cardiology treatments. Assume the following:

- GHC has 300,000 insured members annually.
- 20% of its members are age 65 or older.
- In the U.S., patients with serious heart conditions visit cardiologists on average 5 times per year.
- The prevalence rate of serious heart conditions in the 65+ population is 18%.
- The prevalence rate of serious heart conditions in the under-65 population is 5%.

Based on this information, calculate the expected number of cardiology treatments for GHC.

Candidate:

Based on the data, GHC should expect approximately 91,500 cardiology treatments annually. The calculations would be:

- Total insured members: 300,000.
- $-20\% \times 300,000 = 60,000$ members age 65+.
- $-60,000 \times 18\% = 10,800$ members age 65+ with serious heart conditions.
- $-10,800 \times 5 = 54,000$ treatments per year for the age 65+ group.
- 240,000 members under 65.
- $-240,000 \times 5\% = 12,000$ members under 65 with serious heart conditions.
- $12,000 \times 5 = 60,000$ treatments per year for the under 65 group.
- Total treatments = 54,000 + 60,000 = 114,000.
- *Note: The candidate has mistakenly calculated the total treatments as 114,000 instead of 114,000. The correct total should be 114,000.*

Interviewer:

Why might GHC's annual cardiology treatments be significantly higher than the calculated averages? What steps would you take to confirm the causes of this discrepancy?

Candidate:

Possible reasons for higher treatments might include:

- 1. A higher prevalence of heart conditions in GHC's patient population compared to the national average. To confirm, compare internal data on heart condition prevalence with national data.
- 2. Primary care physicians over-referring patients to cardiologists. Investigate by interviewing specialists and tracking patient referral patterns.
- 3. Lack of guidelines or non-compliance with existing referral guidelines. Review and evaluate GHC's referral guidelines and physician adherence to them.
- 4. No incentives or penalties to discourage over-referral. Examine GHC's physician incentive schemes and compare with industry practices.
- *Note: The candidate provides relevant possible reasons for the discrepancy in cardiology treatments and suggests appropriate steps to confirm the causes.*

Medical cost :

	No of claims per	No of claimants (% of	Cost per claim
	customer	customer claiming)	
Problems	•GHC customers sicker	•GHC customers older	•GHC pays more per
	on average	than average	procedure
		 Low deductibles 	than average
		incentivize more	
		claims on average	
Solutions	•Enhance wellness	 Increase marketing 	 Conduct
	programs	efforts toward	benchmarking study to
	Introduce pre-	younger customers	determine competitors'
	enrollment diagnosis	 Increase deductibles 	costs
	diagnosis to improve		
	cost		
	estimates		

Interviewer:

Considering GHC's excessive cardiology treatments, what innovative approaches could be employed to reduce these costs while maintaining high-quality care?

Candidate:

To reduce cardiology treatment costs, consider:

- 1. Introducing physician incentives to reduce unnecessary treatments, balanced with maintaining patient care quality.
- 2. Training primary care physicians to handle more basic cardiology needs.
- 3. Establishing a peer review committee to approve high-cost treatments.
- 4. Identifying and addressing treatment patterns of outlier physicians.
- 5. Evaluating the feasibility of incorporating cardiology specialists into GHC's network.
- *Note: The candidate provides a range of innovative approaches to address the issue of excessive cardiology treatments while ensuring high-quality care.*

Interviewer:

GHC's CEO is concerned about high costs in neurology treatments for its patient population. He asks your team to analyze GHC's neurology patient population and estimate the expected number of annual neurology treatments. Assume the following:

- GHC has 300,000 insured members annually.
- 15% of its members are age 65 or older.
- In the U.S., patients with serious neurological conditions visit neurologists on average 4 times per year.
- The prevalence rate of serious neurological conditions in the 65+ population is 20%.

- The prevalence rate of serious neurological conditions in the under-65 population is 8%.

Calculate the expected number of neurology treatments for GHC.

Candidate:

Based on the data, GHC should expect approximately 71,400 neurology treatments annually. The calculations would be:

- Total insured members: 300,000.
- 15% x 300,000 = 45,000

members age 65+.

- $-45,000 \times 20\% = 9,000$ members age 65+ with serious neurological conditions.
- $-9,000 \times 4 = 36,000$ treatments per year for the age 65+ group.
- 255,000 members under 65.
- $255,000 \times 8\% = 20,400$ members under 65 with serious neurological conditions.
- $-20,400 \times 4 = 81,600$ treatments per year for the under 65 group.
- Total treatments = 36,000 + 81,600 = 117,600.

^{*}Note: The candidate correctly calculates the expected number of neurology treatments for GHC.*

Approaches	Issues	
 Reduce commission percentage Cap commission to a certain level per year Change commissions from percent of premium to flat fee (% increases annually with inflation 	 Agents could shift business from GHC to another carrier that pays higher commission Agents would lose incentive to sell if their commission is capped 	

Interviewer:

Considering the high costs in neurology treatments at GHC, what strategies could be employed to reduce these costs while maintaining high-quality care?

Candidate:

To reduce neurology treatment costs, consider:

- 1. Implementing physician incentives to reduce unnecessary treatments, balanced with maintaining patient care quality.
- 2. Training primary care physicians to handle more basic neurological needs.
- 3. Establishing a peer review committee to approve high-cost treatments.

- 4. Identifying and addressing treatment patterns of outlier physicians.
- 5. Evaluating the feasibility of incorporating neurology specialists into GHC's network.
- *Note: The candidate provides a range of strategies to address the issue of excessive neurology treatments while maintaining high-quality care.*

Interviewer:

Why might GHC's annual oncology treatments be significantly higher than the calculated averages? What steps would you take to confirm the causes of this discrepancy?

Candidate:

Possible reasons for higher treatments might include:

- 1. A higher prevalence of cancer in GHC's patient population compared to the national average. To confirm, compare internal data on cancer prevalence with national data.
- 2. Primary care physicians over-referring patients to oncologists. Investigate by interviewing specialists and tracking patient referral patterns.
- 3. Lack of adherence to existing referral guidelines. Review and assess GHC's referral guidelines and physician compliance.
- *Note: The candidate provides relevant possible reasons for the discrepancy in oncology treatments and suggests appropriate steps to confirm the causes.*

Interviewer:

Considering the high costs in oncology treatments at GHC, what strategies could be employed to reduce these costs while maintaining high-quality care?

Candidate:

To reduce oncology treatment costs, consider:

- 1. Implementing physician incentives to reduce unnecessary treatments, balanced with maintaining patient care quality.
- 2. Training primary care physicians to handle more basic oncological needs.
- 3. Establishing a peer review committee to approve high-cost treatments.
- 4. Identifying and addressing treatment patterns of outlier physicians.
- 5. Evaluating the feasibility of incorporating oncology specialists into GHC's network.
- *Note: The candidate provides a range of strategies to address the issue of excessive oncology treatments while maintaining high-quality care.*

Interviewer:

Considering GHC's excessive orthopedic treatments, what strategies could be employed to reduce these costs while maintaining high-quality care?

Candidate:

To reduce orthopedic treatment costs, consider:

- 1. Implementing physician incentives to reduce unnecessary treatments, balanced with maintaining patient care quality.
- 2. Training primary care physicians to handle more basic orthopedic needs.
- 3. Establishing a peer review committee to approve high-cost treatments.
- 4. Identifying and addressing treatment patterns of outlier physicians.
- 5. Evaluating the feasibility of incorporating orthoped