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## Case 3: Health Insurance

### **BACKGROUND**

**Firm:** Booz Allen Hamilton

**Round:** 2005 Summer, First

**Content:** Qualitative and quantitative

### **CASE QUESTION**

A health insurance company experienced a loss of \$40M this year, after recording a \$40M profit last year. They have hired us to determine the cause(s) of this decline and identify potential solutions.

The company is in only one line of business, Commercial Risk Insurance, in only one region. They have several direct competitors.

Their cash flows originate from premiums, which are paid in on a periodic (e.g. monthly, semi-annually, annually) basis by its customers, and claims are paid out to the customers' caregivers as appropriate.

For the sake of simplicity, the company's Profit = Premiums – Claims.

Currently this company has 4 million members, which equates to a 40% market share.

All revenue, cost and profit figures are measured on a per-member basis.

How would you go about identifying potential solutions for their decline in profitability?

### **INTERVIEWER BRIEFING**

**Recommended approach:** This is a typical profitability case, with the addition of a problem-solving section to discuss the area that is hurting profitability. First, you should hone in on what is causing the company to lose money. Look at revenues (price X quantity) and costs (fixed + variable costs). This will lead you to the crux of the problem. At that point, you should ask questions that explore the problem and identify ways to address it.

#### **Key facts:**

- Revenues have been stable from last year to this year. Premiums charged per member have been stable at an average of \$200/year, and membership has been flat at 4 million members.
- The company has made no large recent capital expenditures
- Per member variable costs are rising by \$20/year. This is largely the result of a decline in utilization of resources due to poor management
- Within the company's structure, there are several functional groups:



- New Admits
- Pre-authorizations
- Case management
- These groups are staffed with MDs and RNs that used to be in the field treating patients. They are now responsible for managing hundreds of doctors and nurses that are currently treating patients. They are more used to working in practices of 5-10 professionals and unaccustomed to managing such a large staff, causing problems in controlling referrals and unnecessary testing/procedures.

### **EXAMPLE DIALOGUE**

**Interviewee:** Since we're dealing with a profitability issue here, I'd like to explore both the revenue and the cost side of the business. Starting with the revenue side, have the premiums charged changed over the last year?

**Interviewer:** *No, they have been stable. Incidentally, premiums are charged at an average of \$200/year/member.*

**Interviewee:** Has the member base been stable? The reason I'm asking this is to understand whether revenue as a whole has been stable.

**Interviewer:** *The member base has been stable, so revenues have as well.*

**Interviewee:** OK. Since revenue is stable, I'd like to explore the cost side of the business. First, let's take fixed costs. Have they made any large capital investments to spur growth?

**Interviewer:** *No. They aren't in a growth stage and haven't made any large capital expenditures except for a new claims payment system two years ago. In general, this is not a capital intensive business.*

**Interviewee:** That makes sense since it is a service company. So let's look at variable costs. Has the cost of servicing members been growing?

**Interviewer:** *Yes. Per member costs are rising to the tune of \$20/member/year. Why do you think this is happening?*

**Interviewee:** The cost of care may be going up – on the doctor, equipment or medicine front.

**Interviewer:** *The biggest cost driver is actually utilization, i.e. how frequently the doctors use other sources for a patient's care. So now I'd like you to derive the total variable costs that the company had last year versus this year.*

**Interviewee:**

Profit = Revenue – Costs

\$40M (last year) = (4M members \* \$200/year/member) – Costs



\$40M = \$800M – Costs  
Costs = \$760M last year

Profit = Revenue – Costs  
-\$40M (current year) = (4M members \* \$200/year/member) – Costs  
-\$40M = \$800M – Costs  
Costs = \$840M current year

*Interviewer: What were the variable costs on a per member basis for each year?*

**Interviewee:**

Per Member Variable Costs = \$760M last year / 4M members = \$190/member/year  
Per Member Variable Costs = \$840M current year / 4M members = \$210/member/year

*Interviewer: Good. Let's talk about utilization now. What might affect this measure?*

**Interviewee:** It could be a change in what MDs want to prescribe. For instance, maybe they are more risk-averse because of a rise in malpractice cases, so they are more frequently seeking second opinions. Another thing that might affect utilization is how well the company manages the MDs.

*Interviewer: To your second point, what would you look for within the company to see where the problem resides?*

**Interviewee:** I would look at several things, including strategy, skills of the MDs, shared values, staffing, technology used, leadership system and functional organizational structure, to name a few.

*Interviewer: OK. What would you want to know about the organizational structure?*

**Interviewee:** I'd like to know how the company is structured.

*Interviewer: Within the company's structure, there are several functional groups:*

- *New Admits*
- *Pre-authorizations*
- *Case management*

*These groups are staffed with MDs and RNs that used to be in the field treating patients. They are now responsible for managing hundreds of doctors and nurses that are currently treating patients.*

**Interviewee:** Are those MDs and RNs used to managing large groups of people (i.e., **many** doctors in the field)?

*Interviewer: No, they are more accustomed to working in practices of 5-10 professionals.*



**Interviewee:** Makes sense. What types of people compose the upper management of the company?

**Interviewer:** *They are also MDs that used to be in the field. What's your hypothesis about this problem and potential solutions at this stage?*

**Interviewee:** The problem seems to be in the management of the doctors and nurses that are treating the patients. Due to the difficulty in getting all necessary data, and the fact that the staff managing those doctors/nurses is not used to managing a large, remote organization, variable costs (specifically the costs associated with utilization) have risen. I would recommend reviewing the current information systems for a way to consolidate the view of data for each job function so that everyone has all the necessary information to manage their cases. They should also consider providing leadership/management training for those who are responsible for case management.