Magna Health

- Our client is Magna Health, a health care company in the Midwest. It both insures patients and provides health care services. Employers pay a fixed premium to Magna for each of their employees in return for which Magna covers all necessary health services of the employee (ranging from physician care and medications to hospitalization).
- Magna currently has 300,000 patients enrolled in its plan. It has 300 salaried physician employees who provide a broad range of services to patients in six centers. These physicians represent a wide range of specialty areas, but not all areas. When a patient needs medical treatment in a specialty area not covered by a Magna physician, they are referred outside of the Magna network for care, and Magna pays all referral costs on a fee-for-service basis. Magna does not own any hospitals itself, instead contracting services from several local hospitals.

What key areas would you want to explore in order to understand Magna's decline in profitability?

- Magna's revenues
  - Price paid by employer for employee health coverage.
  - Number of employees covered by Magna.
- Magna's costs (or fixed and variable costs)
  - Magna's main cost components consist of administrative (non-medical) and medical costs (e.g., hospital, drugs, outpatient care)
  - Outpatient costs can be split into internal physician costs versus external referral costs
- Magna's patient base demographics/overall risk profile which may affect medical costs

The team discovers that the demographics of Magna's subscribers have changed significantly in the past 5 years, from majority industrial workers/laborers to majority office employees. Knowing this, are there any specific areas you would investigate first?

- Claim costs, as the change in the subscriber base will change the profile of diseases (e.g., more heart disease/stress and less work related injury)
- External referral costs, due to the change in the disease profile for which they have in-house competency

After reviewing the basics of Magna's business, your team believes that one of the root causes of Magna's financial problems is how it manages medical costs, particularly the cost of referrals to specialists outside of its physician network. Your team has gathered the following information on Magna and its primary competitor, Sunshine HMO:

	Number of patients	Average cost of referral(per member per month)
Magna Health	300,000	$20
Sunshine HMO	500,000	$15

What are the most likely reasons that the average cost of referral at Magna is higher than at Sunshine? (At this point you should feel free to offer hypotheses, and you could ask your interviewer questions to clarify the information)

- Referral pricing: Magna might be paying more than Sunshine for specialist services (e.g., its outside contracts with oncologists might be at higher rates than Sunshine's contracts).
- Number of referrals: Magna's physicians might have different practice patterns than Sunshine physicians, i.e., they may be less comfortable treating heart disease patients or have different training/protocols.
- Mix of specialties: Magna's mix of specialties that requires referrals (cardiology and neurosurgery) are probably more expensive specialties (than cardiology and psychiatry, Sunshine's referral specialties).
- Mix of patients: Magna has sicker or older (>65) patients (individuals over 65 are more likely to need medical care in the specialty areas outside of Magna's network, particularly cardiology).

What analyses would you do if the things you suggest were contributing to this problem?

- Referral pricing:
  - Gain data on prices currently being paid by Magna for a sample of common specialties
  - Gain similar data for a competitor if possible for an industry average (perhaps through interviews with non-Magna specialists)
- Number of referrals:
  - Interview Magna physicians and non-Magna physicians to see if any obvious behavioral differences exist
  - Consult industry publications on this issue
- Mix of specialties:
  - Check number of referrals by specialty for Magna and estimate similar for Sunshine
  - Interviews with external specialties used by Sunshine may help again here
- Mix of patients:
  - Compare demographic data for Magna and Sunshine: should be easy to obtain from Magna; a scan of the employee schemes covered by Sunshine should give a good general picture of their demographic profile
  - See if Magna's referral cost has increased in line with the change in demographics of the subscribers

Magna's CEO has a hypothesis that Magna is paying too much in cardiology referral costs for its patient population. He asks the McKinsey team to look at Magna's cardiac patient population more closely and tell him how many referrals he should expect on an annual basis. Assume the following:

- Magna has 300,000 patients in any one year
- 20 percent of its patients are age 65 or older
- In the U.S., patients with serious heart disease visit specialists (cardiologists) on average of five times per year

Once asked, your interviewer would provide you with the following information:
The prevalence rate of serious heart disease in the 65+ population is 30 percent

- The prevalence rate of serious heart disease in the under age 65 population is 10 percent

Based on the correct calculations, your response should be as follows: Magna should expect 210,000 cardiac referrals annually based on its patient population. You should have approached the calculations as follows to arrive at that answer:
300,000 total patients

- 20 percent x 300,000 = 60,000 patients age 65+
- 18,000 x 5 = 90,000 referrals per year
- 240,000 Magna patients under the age of 65
- 240,000 patients x 10 percent = 24,000 patients under age 65 with serious heart disease and 24,000 x 5 visits per
- year = 120,000 visits per year total
- 90,000 + 120,000 visits per year = 210,000 total Magna patient external cardiology visits

When the team tells Magna's CEO that based on Magna's patient population he should expect about 210,000 cardiology referrals a year he exclaims, "We currently pay for 300,000 annual cardiology referrals for our patient population!"

Why might Magna's annual cardiology referrals be significantly higher than U.S. averages?

What would you do to try to verify if any of these were a key cause of this problem?

- The prevalence rate of heart disease in Magna's patient population is higher than average. To see if this was a cause of the problem, McKinsey should audit the internal data on heart disease prevalence and compare it to US National data.
- Magna's primary care physicians are referring patients who do not have serious heart disease to specialists. The team should interview specialists to get their opinion, or follow through a sample of patients who were referred.
- Primary care physicians are not comfortable (e.g., they are poorly trained or inexperienced) treating cardiac patients, even those with minor problems; they want to avoid malpractice suits. McKinsey should interview Magna physicians and institute an external review.
- Magna doesn't have clear guidelines on when physicians should be referring patients to specialists (or if guidelines exist, physicians are not complying with them). The team should gain an expert opinion on the current guidelines to see if this was a key cause of the problem.
- There are no incentives or penalties to prevent physicians from referring patients with less serious problems to specialists. In order to verify this is a key cause of the problem, the team should review incentive schemes if they exist. They should also compare similar companies/situations (e.g., prescription control mechanisms, etc.).