

Practice case interview – Home Nurses for New Families

The case interview, done as a core part of the recruiting process, serves two purposes:

- It provides an example to you, the interviewee, of the types of problems that we help our clients tackle
- It allows us to learn, in real-time, how you approach problem-solving

Case interviews, at their best, are an in-depth exercise that provides a platform for you to demonstrate your analytical approach, problem-solving creativity, and passion for social change. The case interview will be a conversation between you and the interviewer. It tends to consist of several structured questions that allow for a multi-faceted exploration of the different parts of a case experience. Throughout the case interview, you should feel free to ask questions, both for clarification and for more data or information.

This practice case provides one example of the case interview and what it looks like. It is a case interview pulled from our own experiences in casework, set firmly in the nonprofit context. While pulled from our casework, this case has been fictionalized; the numbers are for illustration purposes only. It is intended to serve as a resource for candidates and should be augmented by practice cases from other sources (e.g., for-profit consulting firms, business schools, etc.). There are many ways to approach the problems we work on. Sample answers provided below show *one* way that this case could be done; however, there is no single correct answer.

Section 1: SETTING THE CONTEXT

Overview

- Your next project will be partnering with a new client that recently engaged Bridgespan on a strategic planning project focused on growing the organization's impact
- The client is Home Nurses for New Families (HNNF), a nurse home visitation program based in St. Louis, MO.
- HNNF sends specially trained registered nurses to work with at-risk, first-time mothers, meeting with them, in their homes, from pregnancy through the first six months post-birth to provide a number of services including health-assessment, counseling, pre- and post-natal care and parenting skills
- HNNF has successfully served ~5,000 mothers and their children across the United States. Recent evaluation results demonstrate extremely successful outcomes for families served by HNNF, with better academic achievement and reduced rates of child abuse and youth involvement in the juvenile justice system
- Given these results, HNNF is eager to expand the program
- The client has asked us to help them plan for growth. As part of the team, your manager has asked you to do two things:
 - Outline what HNNF should consider and evaluate as they plan for growth
 - Determine the cost of growth to a potential replication state

Question

- What critical issues does the client face?

Sample answer

- TIP: Often, asking clarifying questions about the client organization, their situation, and the broader context can help to deepen your understanding of the client and demonstrate your curiosity
- HNNF is confronting the challenge of translating its Mission into concrete strategy. To do this, it will need to address two issues:
- First, HNNF must determine its goals as an organization (to be achieved through growth): What impact does it hope to create?
- Second, HNNF must determine the best path forward to those goals: How should HNNF grow to realize this impact?

Response from interviewer

- Great. According to initial client interviews, it is clear that HNNF wants to pursue growth so that it can serve, directly, all first-time, low-income mothers in the United States

Section 2: FRAMING THE APPROACH

Question

- What are the different elements HNNF should consider as they think about the challenges and opportunities of growing to serve many more first-time mothers in the US?

Sample answer

- TIP: Here it will be important to provide a clear structure to your approach. It does not need to be either of the structures below, but should sort the elements into categories and convey a comprehensive, organized approach to the critical issue
- TIP: Before responding to this question, it is a good idea to take some time, thinking through your answer and your communication of it

Potential answer #1:

- I would sort the elements into two overarching categories: elements *external* to the organization (the context in which it operates) and elements *internal* to the organization (the dynamics of the organization itself)
- External elements (a sample list...)
 - Size of the target population
 - Presence, or lack thereof, of similar organizations
 - Local, state, and federal policy context
 - Availability of funding for replication
- Internal elements (a sample list...)
 - Management capacity for growth
 - Staff capacity / availability in replication sites
 - Effectiveness of programmatic model
 - Codification / standardization of programmatic model
 - Costs of programmatic model

Potential answer #2:

- Are they ready to grow?
 - Effectiveness of programmatic model
 - Codification / standardization of programmatic model
 - Management capacity for growth
- Where should they expand? (current vs. new geographies, breadth vs. depth)
 - Size of the target population
 - Presence, or lack thereof, of similar organizations
 - Local, state, and federal policy context
 - Availability of funding for replication
 - Staff capacity / availability in replication sites
- How should they grow?
 - Through internal growth or via partnership
 - Relationship between new locations and current locations
- What new capabilities will be required?
- How much will it cost?

Section 3: PRIORITIZING A KEY ISSUE

Question

- HNNF is particularly interested in determining where they should grow. They have found the state context to be extremely important as a unit of growth. Given this, they need to determine which states make the most sense for expansion. How would you help them think through how to prioritize states?

Sample answer

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- As mentioned above, several elements external to HNNF will be critical to evaluate to prioritize the states. I would establish these three categories of criteria.
 - Need in state
 - Size of target population
 - Potential for success
 - Presence of funders / good funding environment
 - Presence / absence of other players providing similar services
 - Presence of potential partners
 - Presence of effective state policy context
 - Potential leverage from state to broader goals
 - Relative importance of state (e.g., visibility / relevancy in national environment)
 - Presence of key political figures (e.g., Congress committee chairs)
- Once these criteria are clear and vetted with the client, I would use quantitative and qualitative data to rank states against these criteria. Here it would be important to consider the relative weight of each of these criteria (in terms of their importance to the success of HNNF). I would use the quantitative data first to narrow the list of potential priority states, and then dig deeper with qualitative interviews (of both HNNF staff and external experts) to finalize the evaluation of states against the other criteria

Section 4: ANALYZING THE DATA

Question

- In advance of detailed analysis, let's develop a rough estimate of the cost of fully serving a state's low-income, first-time mothers. Assume that CA was highly ranked in the prioritization. Assuming they serve all first-time, low-income mothers in CA, what is your back-of-the-envelope estimate today for the estimated cost per mother served?

Sample answer

- TIP: As you make your own assumptions, watchout for the details!
 - E.g., Don't forget that target population is mothers that are *both* first-time mothers and low-income
- TIP: For each assumption you make, understand your level of confidence in that assumption. Be prepared to share your rationale for why it is a good estimate. Consider ways that you could test or validate it.
- TIP: Don't hesitate to ask if there is more information; when you do so, be specific. The interviewer will either provide you with that information (e.g., the percent of women of childbearing age who have a baby every year) or say that the information is not readily available and ask for an estimate
- First, let's establish the structure of the analytics and then dig into the actual estimates and fluctuations. To get to a cost / mother to serve California, I'll need to come up with two figures: total estimated cost and total target mothers.
 - Equation: $\text{Cost / mother} = \text{Total cost to serve CA} / \text{Total mothers served in CA}$
- To generate the total cost, let's break down the different types of costs. There are fixed costs that don't depend on the number served and there are variable costs that do.
- Variable costs:
 - Nurse salaries and benefits: \$50K / nurse
 - Transportation costs: \$5K / nurse, based on home visits
 - Supplies: \$10K / nurse
 - Referrals to other services: \$10K / nurse
 - TOTAL variable costs: \$75K / nurse
 - Do we know the case load per nurse?
 - *INTERVIEWER: Yes, it's 10 mothers / nurse*
 - Ok, so the variable cost is **\$7.5K / mother**. I will multiply that by the number of mothers to get TOTAL variable costs
- *INTERVIEWER: For the fixed costs, why don't you tell me your categories, and I'll provide cost estimates for you.*

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- Fixed costs categories:
 - Administration salaries and benefits
 - Facilities
 - IT infrastructure
 - Professional development and training materials
- *Fixed costs estimates (provided by INTERVIEWER):*
 - Administration salaries and benefits: \$35M for central support staff (includes state director, operations support, etc.)
 - Facilities: \$5M in rent
 - IT infrastructure: \$5M
 - Professional development and training materials: \$5M
 - TOTAL fixed costs: **\$50M / year**
- Now I'll determine the total mothers served in CA
 - ~30M Californians
 - With an estimated life expectancy of 75, I'll assume that 1/75 of the total population is born each year: $30M / 75 = 400K$ births / year
 - 30% of babies are low-income, $400K * 30\% = 120K$
 - Ask if information is available on proportion of population that is low-income.
 - If not available, make estimate, based on any available benchmark, e.g. "I've heard that ~15% of people are in poverty. However, I want to use an expanded definition of low-income that captures people on the cusp of poverty as well, so I'll estimate 30%"
 - One-thirds of births are the first time the mother has had a child (first time births), $120K * 33\% =$ **40K first-time, low-income mothers in CA**
 - Potential rationale: Mothers in this target group likely have ~3 kids, so each kid has a $1 / 3 = 33\%$ chance of being the first birth to that mother
- Now I have the information I need to determine cost / mother.
 - With 40K target mothers, the total variable costs are $40K \text{ mothers} * \$7.5K \text{ cost / mother} = \$300M$
 - So, total costs are \$50M in fixed costs + \$300M in variable costs = \$350M in total costs
 - With 40K mothers served, cost / mother is $\$350M \text{ in total costs} / 40K \text{ mothers} =$ **~\$8.75K / mother**

Potential follow-up question #1

- Given your estimated cost / mother (as well as total cost), what implications arise for the client as it thinks about growth?
- Sample answer
 - Given the scale of the costs involved (\$8K+ per beneficiary and ~\$350M total), it is clear that HNNF will have to cultivate large funding streams to be able to reach this many mothers. The most likely source for that scale of resources will be from the government
 - We'll need to make sure to think about the potential funding sources, their feasibility given HNNF's model and fundraising capabilities, and determine the pace of growth given this funding context

Potential follow-up question #2

- Where would you look for real data on the number of first-time, low-income mothers in CA?
- Sample answer: The state of CA should have good information on number of births. I would check the Department of Health and Human Services for any available datasets or numbers. Also, many of these mothers and their children might be covered by Medicaid, so that may be another good source of information.

Section 5: DETERMINING THE IMPLICATIONS

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Question

- That's a great estimate for CA. Let's assume that you ran the numbers for another state, Oregon, and found that it would cost \$5K / mother and could serve 5K mothers. With this data and your previous thinking, what are the opportunities and challenges of going to CA vs. going to OR and what would your recommendation be?

Sample answer

- TIP: Here is an opportunity to display creative thinking, focused on a realistic assessment of the tradeoffs of choosing one state over another
- Let's revisit the thinking of the criteria to guide the recommendation
- California ranks relatively better on the several criteria
 - Need: The target population is 8X larger (40K vs. 5K) which means there is a higher degree of need
 - Potential leverage from state to broader goals: I would also hypothesize that CA has greater national visibility given its size and prominence in national debates (as one example, the recent movement on climate change spearheaded by CA policy)
- Oregon ranks better on other criteria
 - Potential for success: Lower cost / mother (potentially due to identified funding sources or a better funding environment)
- Several criteria remain undiscussed
 - Presence of partners
 - Presence of effective policy context
- Based on what I know now about the criteria, I'd recommend California, as it has more potential for impact and we've established that HNNF's impact is large-scale service delivery. However, we'd need to be really cognizant of the tradeoffs we're making, and solidify a plan to increase the potential for financial sustainability in that more costly environment

Section 6: SUMMARIZING THE RECOMMENDATIONS

Question

- Your manager pops in to check on your work, what is the one-minute summary you could give to describe your work, the "answers" and any recommendations you would have for HNNF?

Sample answer

- TIP: Focus here should be on summarizing in a concise yet organized way that hits the high points of the conversation
- TIP: Make sure to take a stance and make a recommendation. There is no right answer, but it's important to put your perspective out there along with your rationale.
- I've been investigating the growth opportunities and challenges for our client HNNF
- I've thought through the different elements that will impact growth, including those that are external to HNNF and those that are internal
- An issue of importance is the prioritization of states for replication. I drafted criteria to help HNNF think through which states should be prioritized.
- Based on initial calculations and some qualitative information, California is top priority for replication, though not without challenges. It has a large target population and is nationally visible, but would be more expensive to serve than Oregon. With HNNF's focus on scale of impact, however, it appears to be the right choice.
- As HNNF serves only 5K mothers now, growth to California would represent tremendous growth for the organization, as the target population is ~40K mothers, an 8X increase in mothers served. We will need to help HNNF think through the challenges of growing so rapidly to such a scale.

END OF CASE