

Prompt

Acne is the most common skin condition in the United States. It is caused when hair follicles become clogged with dead skin cells and oil forms on the skin. Acne presents as areas of blackheads, whiteheads, pimples and/or greasy skin and may also result in scarring.

Your client, a mid-size pharmaceutical company, is considering developing a product to treat acne in the pediatric population (under 18). They have asked us to first determine the **potential market size for acne in the United States pediatric population.**

Guide Question #1:

What pieces of information must be estimated in order to determine the size of pediatric acne market in the United States?

Answer to Guide #1:

1. Disease Prevalence

About 1 in every 6 Americans is affected by acne.

2. Disease Segmentation

Of those with acne in the United States, about half are under the age of 18.

3. Diagnosis Rate

Of the pediatric population affected by acne, just 80% will receive an acne diagnosis.

4. Treatment Rate

Only ~50% of pediatric patients diagnosed with acne will opt to receive treatment.

5. Treatment Segmentation & Pricing

Of those receiving treatment:

- 50% receive over-the-counter (OTC) medications since it's the cheapest at \$100/year and their acne may only be mild-to-moderate
- 40% receive generic medications that cost \$250/year since their cases are likely more severe and the doctor feels the need to prescribe medication
- 10% receive branded medications that are reserved for the most severe cases and cost about \$1,000/year

Guide Question #2:

Using these pieces of information, how would you calculate the current pediatric acne market size?

Answer to Guide #2:

1. Disease Prevalence

300M US Population * (1/6) = 50M Americans with Acne

2. Disease Segmentation

50M * 50% = 25M Americans with pediatric acne

3. Diagnosis Rate

25M * 80% = 20M Americans diagnosed with pediatric acne

4. Treatment Rate

20M * 50% = 10M Americans receiving treatment for pediatric acne

5. Treatment Segmentation & Pricing

10M * 50% * \$100 = \$500M

10M * 40% * \$250 = \$1B

10M * 10% * \$1,000 = \$1B

$\$500M + \$1B + \$1B = \mathbf{\$2.5B}$ estimated current value for the US pediatric acne market

Additional Scenario – Prompt

Your client aims to earn peak revenues of \$500M/year in the United States with their pediatric acne product. **Based on your dollar value estimate of the US pediatric acne market and any other factors that may influence the success of the product, how realistic is your client's revenue target?**

Guide Question #3:

What share of the current US pediatric acne market must your client capture in order to reach their peak revenue target of \$500M/year?

Answer to Guide #3:

$\$500\text{M} / \$2.5\text{B} = 20\%$ share of the US pediatric acne market

Guide Question #4:

What are key factors that may determine whether your client's target is realistic?

Answer to Guide #4:

- Safety
- Efficacy
- Product Price
- Convenience
- Competitors on Market

General Casing Guidance

Don't be afraid to do rough estimates

Ask the interviewer for guidance throughout if struggling to move forward

Be comfortable with new information provided by the interviewer during the case