**Use Case Task Description**

Healthcare practitioner perspective:

Jane is a healthcare policymaker. She would like to ensure that the policies have a positive impact on the patients' lives. To improve her understanding of the patients, she decides to read the conversations on medical-related forums.

She read posts on Reddit but found it difficult to understand the big picture: "What do most people who suffer from multiple sclerosis need help with?" Jane wondered.

Jane decides to use our forum-mining software because it provides an overview for thousands of online posts. She launched the software by visiting www.\_\_\_.com and selects the MS patient group. Within seconds, an interactive sentiment visualization dashboard is loaded. The dashboard provides both macro-information graphics as well as a scrollable "example pane" with real top-voted posts about MS.

In the macro-graphic charts, she sees a pie chart showing (for example) 50% of people are happy with the cost of their MS treatments, 25% are unhappy, and 25% are extremely unhappy (distinguished by an angry face emoji). She hovers the mouse over the slice for "extremely unhappy" posts, a floating pie chart appears, showing that 50% are talking about Drug A, 25% are talking about Drug B, etc.

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During these interactions with the dashboard, the scrollable example pane is updated dynamically to allow detailed post-level exploration of the different clusters. By reading the posts of her research interest, she understands that most people are unhappy about the cost for Drug A is because their insurance company does not cover the costs.

Patient perspective:

Harry is a 50-year-old male who is recently diagnosed with MS. His doctor recommended Drug A to him. C. Harry wants to know if Drug B or C will be better for him than Drug A. He visits www.\_\_\_.com. He selects the people who share the same age group, gender to see what other people with the same demographics are saying about Drug A, and other alternatives.

On the dashboard, Harry multi-selected Drug A, B, and C among all MS drugs. Then, posts that mention Drug A, B, and C are loaded, and the sentiment overview shows that most people are satisfied with Drug A, but not as many people are satisfied with B and C. He also sees that most people are satisfied with Drug A to have the following top 3 reasons: 1. "effective", 2. "cheap", 3. "fewer side-effects". However, he sees the top 3 reasons for people who prefer Drug B are: 1. "availability", 2. "effective", 3. " fewer side-effects ".

Since Harry lives in a small town, the availability of the drug is an important concern. He thinks Drug B might be better for his case than A and C. He discusses drug B with his doctor and gets a prescription for Drug B as result.