Pharmaceutical Marketing Assessment

Context:

Your client is a Senior Director of Marketing at a major pharmaceutical company in the US. They have an extensive sales and marketing program that directly targets physicians. Their current focus is a new drug that has been heavily marketed since released 3 years ago.

Their sales and marketing program includes:

- **Speaker Programs:** The physician is invited to attend a social event involving a high end dinner, a chance to network with other doctors in the same field, and a presentation by a well known industry expert who will usually speak favorably about the latest research showing the efficacy of the drugs from the sponsoring company. Some doctors may be receptive to this information, others may recognize the potential bias of a sponsored event and are only there for the free meal.
- Free Samples: Free samples of the drug are provided to the doctor for the doctor to
 give away to patients at their discretion. Ideally the doctor gives a small number of
 samples to a large number of patients, allowing many patients to try the drug for
 free before prescribing them for long term use. Sometimes a doctor may decide to
 not use the samples and let them just sit in their cabinets, and a other times a
 doctor may give many free samples to a small number of patient, which reduces the
 intended impact of the samples.
- Loyalty Cards: Similar to the Free Samples, Loyalty Cards are given to the doctors to be distributed to certain patients who qualify for the Loyalty Card Program, usually low income and those without health insurance. The program allows the patients to buy the drug at a significant discount, lowering the barrier of cost for the patients, and therefore hopefully extending the length of time the patient stays on this prescription.
- Sales Rep Details: Our client has a large team of sales representatives who will make regular visits to a list of high potential doctors in their geography. A visit and chat with the doctor is called a "detail", and usually involves the sales rep presenting new research papers / results about the efficacy of their drug as well as answering any questions from the doctor. Usually the sales reps are good looking, charming, and very likable. They often build strong relationships with the doctor and the office staff, by bringing boxes of coffee + donuts or even catered lunches when they visit.

The specifics of this drug are not important for this analysis. It treats a chronic condition which means patients often stay on this drug for many months or even years. There are many similar competitor drugs on the market (branded products only, no cheap generics), each running their own marketing programs and sales forces, which means doctors have many choices to offer new patients, and existing patients may switch brands based on changes in their medical condition or based on their doctor changing their opinions about the drugs.

The profitability of the drug is not as important as their profit margins are generally high. The goal is to increase unit sales (number of prescriptions) as much as possible. Marketing budgets in large companies are generally siloed and decided top down, so there is little incentive to reduce marketing spend, and also difficult to justify increase in marketing spend.

Objectives:

- Your client would like you to help them assess the effectiveness of their recent marketing efforts. (Some suggestions: Did any of them generate a lift in sales in any way, and if so, how effective were they? Should they continue to run these programs, or increase / decrease the extent to which these programs are run, or in any way change the way that they are currently executed? Any follow-up analyses they should consider?)
 - Often in cases like this, the client doesn't even have a clear idea what type of insights can actually be gleamed from the available data. The Statement of Work is often worded broadly, in order to allow the analyst room to explore the dataset and "hunt" for insights that supports the client's overall goal of maximize sales.
- Additionally, the client is considering to attend several **medical conferences** where they can sponsor a booth (for a fairly large fee). The booth will be stationed with the company's top sales reps, and they will attempt to speak with the physicians who walk by the booth during the conference. How should they think about determining the effectiveness of attending these conferences? What should they measure / record while they are there, and how can they use this information to assess?