

Analytical Services

One of the unique services that Blue Grotto Technologies, Inc (BGT) has been providing since 1996 are high quality analytical services. This refers to the use of information and data, facts and assumptions, for the purpose of decision making. We have extensive experience in developing applications which more clearly quantify the benefits and consequences of specific actions, thus enabling them to be communicated in a much more persuasive way.

Analytical Services provided by Blue Grotto Technologies include:

Pharmaco-Economic Modeling Influence Mapping

Optimization Studies Competitive Effectiveness Analysis

Pharmaco-Economic Modeling – This involves the extraction of data from various sources including, outcome studies, the NIH, or insurance companies to determine the prevalence and burden presented by various diseases, and the expected overall impact of a specific intervention. Often these quantities are matched to pertinent demographic characteristics of a specified population (such as members of a health plan or other managed care organization).

These models have become more common over the years and have demonstrated their effectiveness in use by account managers and representatives who call on healthcare organizations. BGT's experience helps make these models much more compelling and effective.

Optimization Studies – These studies are the healthcare equivalent of time motion studies which have been used in manufacturing for years. In healthcare, where interventions involve much more than an ordinary prescription, BGT has analyzed numerous competing treatments in terms of time and effort to help make the difficult decisions regarding resource allocation.

Influence Mapping – BGT can take any set of data that conveys a relationship and present it in a visual, searchable and meaningful way; often used to link KOLs with physicians or KOLs with MCOs. The data is typically retrieved from electronic or phone surveys, and can then be used to help highlight those key clinicians that may be able to best influence organizational decisions so that marketing resources can be used most efficiently.

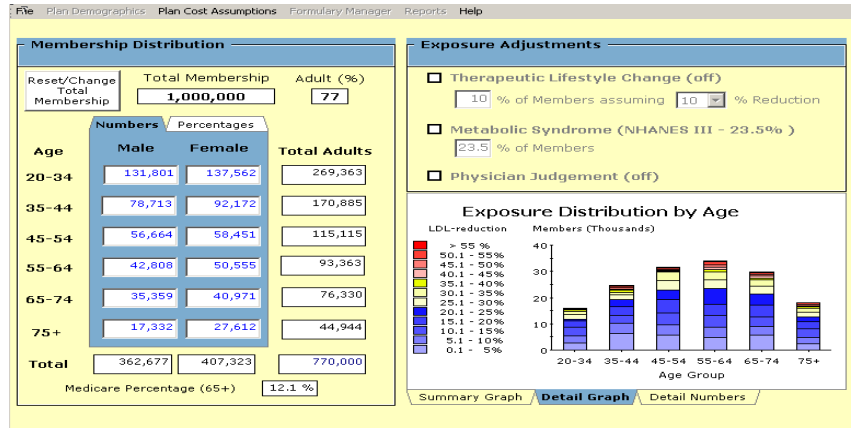
Competitive Effectiveness Analysis – Sometimes the best way to express a value proposition is to have a vendor use the information to validate worth. BGT can design a study that can be used to compare your solution to that of your competitors as well as show proactive steps that can lead to a better return on everyone's time and investment. In some cases, BGT has gone into a client's or third party's operations, and worked with them to generate the study from their data set.

Case Studies

At-Risk

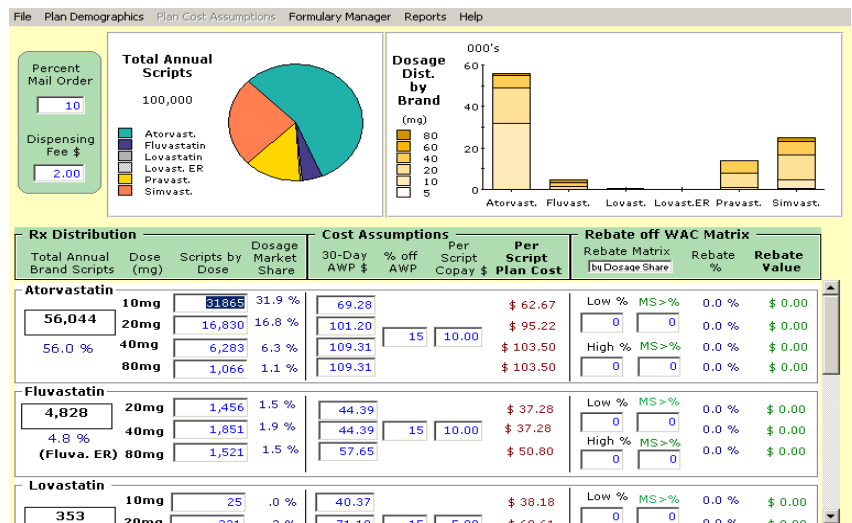
The Challenge

A Pharmaceutical client was marketing a statin that was less expensive and less effective than the statin offered by their competitor.



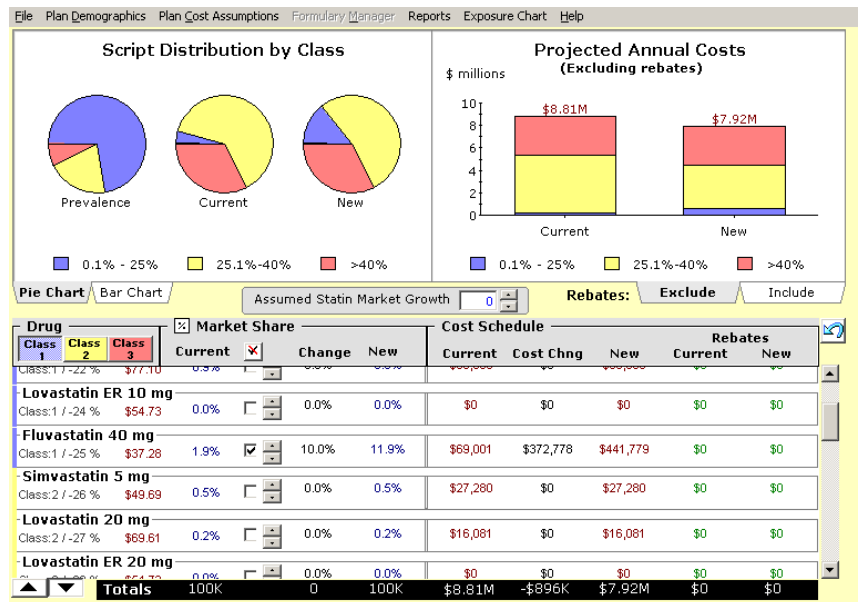
The Goal

Show MCOs that the integrity of the plan could be maintained and they could save money if specific sub-populations of their members were switched to the lower cost (and less effective) statin.



Solutions

- Use NIH Data to show prevalence of lipidemia among MCO's members – categorize them by levels of reduction required (according to ATP)
- Use prescription benefit data to characterize determine the distribution of statins being prescribed
- Demonstrate that a large segment of members are using statins that are stronger than necessary (being overmedicated)
- Calculate the overall savings if only a small percentage of members are switched to the less expensive statin



Analytical Services

Vendor/Protocol Comparison

The Challenge

A home infusion company felt they were superior to their competitors when performing home infusions. They knew they saved the payers money and could demand better reimbursements if they could prove this to them

Overview of Patient Population - TPN

Gender	Male						Female						Total
Co-Morbidity	Cancer			Non-Cancer			Cancer			Non-Cancer			
Age	<50	50-65	>65	<50	50-65	>65	<50	50-65	>65	<50	50-65	>65	
Home Solutions	22 ⁵ ₄	20 ⁷ ₆	77 ²² ₂₁	16 ⁵ ₆	19 ⁵ ₃	61 ¹⁷ ₁₅	19 ³ ₂	22 ⁶ ₂	59 ¹⁸ ₁₂	11 ³ ₃	17 ⁵ ₂	44 ¹⁷ ₁₅	387
Vendor B	16 ⁷ ₆	15 ⁸ ₄	61 ³⁷ ₂₁	10 ⁷ ₄	12 ⁴ ₃	52 ⁷⁸ ₁₂	12 ⁵ ₁	15 ⁴ ₃	51 ⁷⁵ ₁₅	10 ⁷ ₂	1 ¹ ₁	40 ⁷⁸ ₁₂	296
Vendor C	13 ⁵ ₂	10 ⁶ ₇	51 ¹⁴ ₁₂	8 ⁵ ₇	11 ⁵ ₅	44 ¹⁰ ₉	11 ⁶ ₁	11 ⁶ ₅	48 ¹¹ ₉	9 ³ ₂	1 ¹ ₅	37 ¹⁰ ₉	254
Vendor D	8 ⁵ ₂	6 ⁴ ₁	33 ³² ₁₁	6 ⁶ ₂	10 ⁹ ₃	22 ¹⁵ ₅	8 ⁴ ₁	8 ⁷ ₃	42 ²³ ₈	8 ³ ₁	1 ⁰ ₁	28 ²¹ ₅	180
Vendor V	3 ¹ ₁	4 ⁰ ₁	5 ⁴ ₃	0 ⁰ ₀	2 ² ₁	2 ² ₂	1 ⁰ ₁	3 ¹ ₁	8 ³ ₂	1 ¹ ₀	1 ⁰ ₁	3 ² ₂	33
Total	x	x	x	x	x	x	x	x	x	x	x	x	1500

The Goal

Illustrate to MCOs that the all of the factors influencing the cost of a home infusion, mainly readmissions and associated sequela are reduced when they use our client's service.

The Solution

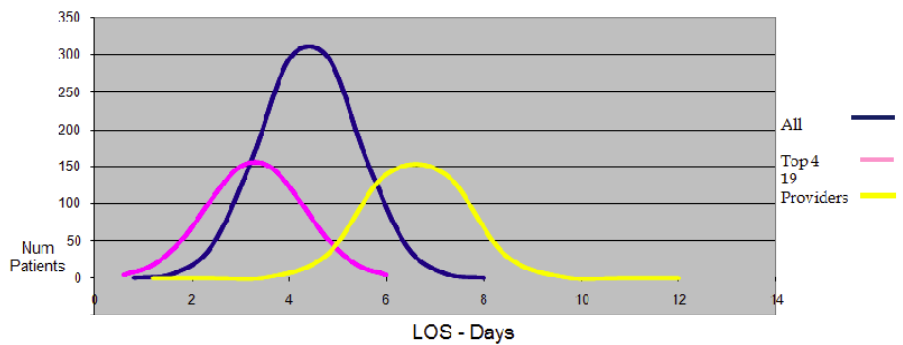
- Design a study that would report, review and analyze, in a fair way, the performance of various home infusion providers.
- Work with home infusion personnel to present the study to the medical directors at various managed care organizations to convince them to let us perform this retrospective study with their data.

Note: study was to be paid for by our client (home infusion company)

- Go to MCO site, work with IT personnel their, and create the study for their use, with their data.

Note: had to do onsite for security/privacy reasons.

Diagnosis	Malabsorption (579)						Cancer			Short Bowel Syndrome	Crohn's Disease (555)		
ICD9	579.0	579.1	579.2	579.4	579.8	579.9	154.1,3,8	157.0-4	other	579.2	555.0	555.1	555.9
Home Solutions	13	18	9	13	17	3	29	19	38	15	21	12	13
Vendor B	9	3	2	5	6	7	7	4	16	9	13	5	12
Vendor C	4	5	4	3	7	8	5	5	14	12	13	7	11
Vendor D	3	5	5	7	4	5	5	3	10	16	11	6	9
Other 19 Providers	25	33	27	30	29	14	54	12	55	38	45	28	29
Total	54	66	47	58	63	37	102	43	133	90	103	58	74



Vendor	Total - patients	Total hospital days	Average (days)	SD (days)
All (23)	1000	4400	4.4	3.3
Top - 4 (performers)	650	2100	3.3	1.8
19 providers	350	2300	6.6	3.8
Value If all providers had same performance as top 5				
350 patients	3.3 days reduced	\$1,500 per day	1.7 million dollars	