

WHITEPAPER

The Power of Patient Segmentation





What Is Patient Segmentation?

Patient segmentation divides a patient population into distinct groups, each with specific needs, characteristics, and behaviors, to allow care delivery and policies to be tailored.

For pharmaceutical companies, patient segmentation **informs the clinical development process from pre-clinical through commercialization.**

When Should Patient Segmentation Be Used?

Patient segmentation is effective for pharmaceutical companies targeting large markets with high barriers. Therapeutic categories with biosimilars, generics, and other accepted brands are highly competitive, with formularies placing some potentially life-saving drugs and treatments as a last resort option, when it may be too late. For certain indications, a patient may need to fail with two or three drugs before other options are available.

To avoid this, patient segmentation has the power to pinpoint clinically eligible populations with unmet needs and favorable socioeconomics, increasing opportunities for preferred formulary status and successful market penetration.

The Benefits of Patient Segmentation

Identifying patients with unmet needs is paramount for treatments to be developed and made available.

Patient segmentation is a cross-functional solution that aligns Healthcare Economics & Outcomes Research (HEOR), Commercial and Market Access teams with realistic opportunities and diversified strategy.

Here's how:



HEOR teams can inform providers about viable patient profiles, demonstrating that there's not a single road to diagnosis. It reveals to providers how patient profiles vary, and how some require a diagnosis before being prescribed treatment.



Commercialization teams can prioritize, optimize, and streamline a sales strategy, equipping their salesforce with lists of viable, prospective providers and patients. It may uncover that a particular hospital or health system doesn't see patients with profiles that meet certain treatment needs, redirecting the sales team's focus.



Market Access teams can connect the treatment to payers, revealing the segment that is clinically eligible for a drug to prepare strategies.

Proven Approach

Patient segmentation leverages real-world data (RWD), therapeutic expertise, business logic, and machine learning to identify ideal candidates for treatment.

Why STATinMED?

- ✓ Use of Real-World Data
- ✓ Deep Advisory Perspective
- ✓ Access to Full Analytics
- ✓ Rigorous and Defendable
- Efficient and Economical

Unlike traditional statistics that require manual mining of model inputs, machine learning automatically runs every data permutation to quickly identify the most important variables and insights.

Our 5-Step Process

- 1. Define patient population and identify key variables
- 2. Determine optimal number of patient segments
- 3. Run algorithms to categorize segments by variables
- 4. Compare and contrast patient segments by input metrics

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5. Identify ideal segments and candidates for treatment

A Look Inside: Patients with Rare Disease

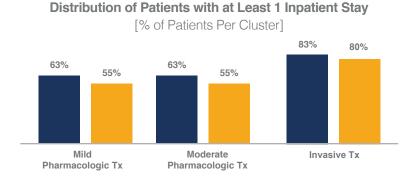
STATinMED used patient segmentation to help a global pharmaceutical company explore treatment segments of those diagnosed with a rare immune condition with high healthcare utilization costs.

Because the use of pharmacological treatments and invasive surgery were included, with several potential classes for each, traditional methods that manually identified segments were not feasible. Advanced algorithms were required.

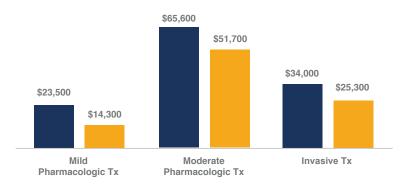
This analysis was based on a study of approximately 4,000 patients divided into four segments: no treatment, mild pharmacological treatment, moderate pharmacological treatment and invasive treatment (surgery).

No Treatment (Tx)	26 %
Mild Pharmacologic Tx	16 %
Moderate Pharmacologic Tx	27 %
Invasive Tx	32 %

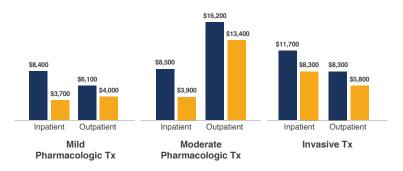
Healthcare Resource Utilization Costs for All Segments



Mean Annual Total Healthcare Costs Per Person



Mean Annual Healthcare Costs Per Person



Key Takeaways

- Higher proportion of patients with at least 1 inpatient stay had invasive treatment
- Higher total all-cause and GI-specific costs for patients with moderate treatment
- Patients with moderate pharmacological treatment may have higher disease burden requiring more inpatient stays, demonstrating that current treatment is insufficient, providing ideal candidates for new therapy
- New options that exceed performance of mild treatment may be incorporated into guidelines for initial use, prior to costly therapies that poorly manage disease

All-cause Gl-related

Unsure of the market? Can't get teams on the same page? Tired of struggling to find the right patients within a competitive market?

Patient segmentation may be the right solution.

Let's Get Started

- Collaborate to develop and confirm objectives and methodology
- Build and optimize a model using RWD to identify and determine the significance of key factors of differentiation between segments
- Receive insights complete with a full report of strategic recommendations

About STATinMED

✓ Discover data ✓ Develop insights ✓ Deliver optimal solutions

Our approach and data offerings are foremost in the industry based on hundreds of combined experience years and >1000 peer-reviewed publications in dozens of therapeutic areas.

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Sources

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