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UNDERSTANDING INDIVIDUALS AND  
POPULATIONS  
NASCATE PERSONAS™



A New Perspective in Healthcare™

In the vast sea of available healthcare data, possessing tools to quickly and effectively stratify individual member/patient profiles is essential. Nascate developed nine Personas that do just that. Personas allow for

- (a) large scale understanding of clinical populations
- (b) insight regarding individuals' clinical characteristics
- (c) tailored intervention strategies
- (d) improvements in predictive modeling

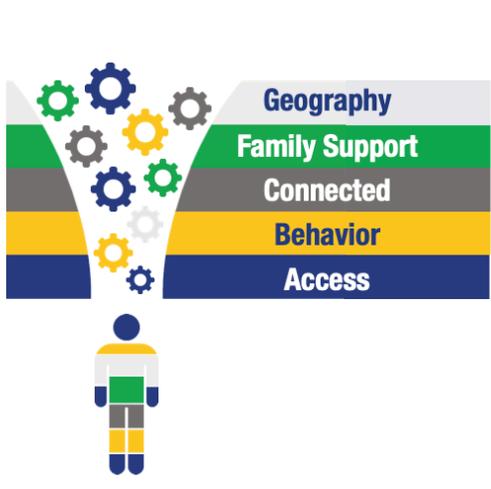
## What are Nascate Personas™

Personas consist of nine all-encompassing groups that represent different types of healthcare users. They are based on patient demographics, diagnoses, and locations of services and are built longitudinally using a meaningful past history and tagged every month so important changes can be detected earlier. Personas can be accurately determined even with limited claims data. In addition, they do not rely on cost data which helps to make them resilient and stable over time. Personas represent simple to understand groups that serve several healthcare analytics needs.

## Nascate Personas™

Longitudinal • Timely • Person-Centric • Local • Actionable • Measurable

**Our person-centric way of understanding and grouping members based on the complexity of a person's treatment burden and his/her interaction with the healthcare system.**



- + Include social physics and the focus on individual**
- + Group members based on your ability to impact and potential interventions**
- + Every member is assigned only one Nascate Persona™**

Active Treatment
Frail
Aging Complex
Aging Complex Behavioral
Complex
Complex Behavioral
Simple Chronic
Healthy User
Non-User

- Do not rely only on clinical classifiers**
- Do not require perfect data**
- Are not optimizing for cost**



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## Understanding Individuals and Populations

A Nascate Persona™ tag allows for quick and intuitive insights about an individual. Rather than having to conduct a thorough review of an individual's medical history, simply knowing their Persona allows meaningful understanding. Personas also allow for insights at the population level. Aware, the Nascate App allows easy filtering by Persona and other characteristics. For instance, you may want to identify poorly performing providers. Simply comparing providers in terms of utilization is not informative because “provider A” may treat healthier patients than “provider B”. You can make a fair apples-to-apples comparison by stratifying on Personas. For example, how do outcomes look when examining just the Healthy User Persona? Similarly, Personas are useful in understanding broad population characteristics. In looking at the distribution of Personas across regions, you can quickly understand population-level differences.

## Tailored Intervention Strategies

The nature of Persona driven interventions can take many forms and is entirely customizable. For example, a health plan may simply want to target a frail population as part of a program of home visits to remove falling hazards. They could simply query the Frail Persona in the desired locations and begin outreach. Or a health plan may wish to identify members who are underutilizing (e.g. not seeking regular checkups/care). They could tailor an engagement campaign for non-user Personas who are fifty years or older. As a final example, a health plan may wish to identify a population who is the most ‘intervenable’. For instance, identifying individuals who are in transitory states – where with proper care their health concerns can normalize or with improper care they could balloon. It might make sense to focus on the Complex Persona as these are individuals with some serious medical concerns, while omitting others who require different types of interventions (such as Frail members who require more palliative care). Thus, a health plan can devote focused interventions to those who will benefit the most.

## Improvements in Predictive Modeling

We have found that Personas provide an edge in predictive modeling in two ways. The first is that it is an effective feature (independent variable) to include when predicting an outcome. In other words, knowing which Persona a person is in year one is highly predictive of many year-two conditions. In addition, Personas are useful in segmenting populations prior to developing a model. For instance, most models are biased towards predicting the most common outcome. In healthcare, this tends to be healthy utilizers; thus, it is easy to predict which members will be healthy but more challenging to predict rare conditions. By segmenting the population by Persona, we can generate powerful models, even when the outcome is rare.



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## Conclusions

Nascate Personas™ are an intuitive, easy to understand tool that provides rapid insight into complex medical histories. Personas serve many purposes, including improved individual and population level understanding, focused interventions, and improved predictive modeling. The utility of Personas is demonstrated across all of our clients and lines of business and is a central component of Nascate's offerings.

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### *About the Author and Nascate*

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Jason Piccone, Ph.D. is a data scientist with over twenty years of research experience and several years of healthcare modeling. He joined Nascate in 2018.

Nascate is a healthcare technology company that matches people and providers for better healthcare. For more information, please contact us at [info@nascate.com](mailto:info@nascate.com).



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