

**SymphonyRM became Actium Health a few years ago and did not carry over my published work to the new site, hence the final draft version below. This is a ghostwritten piece for a former SymphonyRM executive.*

Data Enthusiasm and Precision Marketing in a Post COVID-19 World

“You need to *aim* better, Dad.”

This soundtrack has been on repeat over the past few months at my home in Lafayette, Louisiana. My 11 year old, Merrit, routinely showcases his prowess in the immensely popular cultural phenomenon video game Fortnite, and he consistently provides feedback on my skills (although it feels eerily like a little league coach’s rebuke). Fortnite, for those not familiar, offers players the ability to compete in a battle royale survival game where the ability to properly take aim is a premium skill (and one in which I seem to be lacking).

While I understand that I need to “aim” better, putting my son’s coaching into action has been a wholly different challenge altogether for me during the past two months in quarantine. What I find especially difficult is the constant distractions and moving targets that take my attention off one priority and onto the next. In my efforts to improve my aim, a bevy of tactics have been deployed, including online research, self-help videos on Youtube, and analyzing my game statistics. All of which suggest that this will be harder to master than Super Mario Brothers.

It occurred to me that while I understand what I need to do, I’m not exactly sure how to do it. In healthcare marketing, we are challenged with a similar plight. Competing and changing priorities cause confusion as to what and who to target. In Fortnite, I’m informed of the success or failure of my targeting at the end of each game, but I don’t get the data I need to know how to consistently improve my precision.

In healthcare, however, we have an immense amount of data at our disposal. And just like my videogame plight, the challenge isn’t understanding the necessity of data, but rather the guidance on how to use it.

Where data analysis goes wrong in healthcare marketing

Data-driven marketing isn't new to the healthcare industry. With the rise of Electronic Medical Records (EMR) and Health Information Exchanges (HIE) has come a flood of patient data. Healthcare marketers are now tasked with using this data to determine strategy, service line campaigns, and patient/consumer outreach — all while staying HIPAA compliant.

However, most marketers aren't trained data analysts or data scientists and do not necessarily know how to work with the data at their disposal. That's not their fault — data may be widespread in healthcare, but analytical training for marketers lags behind. As a result, marketers make decisions requiring high data prowess without being aware of critical cognitive biases and data fallacies that might cause poor outcomes in their campaigns and reporting.

Cognitive bias is human. So human, in fact, there are [dozens of them](#) with fun names and psychological studies behind them. Human though they may be, they still have detrimental impacts on healthcare marketing, particularly cherry picking, survivorship bias, and the McNamara fallacy.

Cherry picking

Everyone wants to believe that their marketing efforts are working (why wouldn't you, your job depends on it!). That said, it makes us prone to cherry picking, where we selectively pay attention to data that confirms our position while ignoring data that doesn't. Cherry picking may lead to over emphasis on certain channels or campaigns at the expense of others. It may also lead to inaccurately assessing how well some initiatives work.

Example: Quarterly meetings with a marketing vendor are upbeat and positive, but the bottom line never seems to change. Each quarter, the vendor shows growth in various service lines when compared with previous month, year over year, or quarterly performance. Without consistent reporting, cherry picking runs rampant. It feels great in presentations, but it's awful on the health system balance sheet.

Selection bias

Intuitively, most people would think that the best way to understand who is likely to have an illness is to study traits and characteristics of other people who've had that illness. Such is the basis of most propensity models, but where can this go wrong in a campaign?

The "selection" in this example is skewed toward people who have come in for care and received a diagnosis. This ignores *unobserved* populations who are unable to afford care or have different purchase patterns, but have just as urgent a need for care as the observed population. We saw this play heavily with AI ethics issues in 2019 that could have been avoided.

Example: A data model incorporates many attributes on a patient to identify who is a good fit for a campaign, but the marketing group fails to ask what these attributes are (or the vendor refuses to disclose). The algorithm is then optimized for non-clinical factors such as the insurer, income levels, and psychographic profiles.

There are two possible outcomes: People with clinical need are left out of important communications, or these same people are targeted by competitors who are using a better data strategy!

McNamara fallacy

Metrics aren't everything. No, that isn't a typo. Also known as quantitative fallacy, the McNamara fallacy refers to measuring only what can easily be measured and disregarding what can't. Falling into this trap leaves organizations prone to using ineffective proxies and vanity metrics to measure more conceptual or qualitative goals.

Example: A hospital marketing team wants to report on how much their new email content resonates with recipients. Within two weeks, they report a 26% open rate. Great, right? Not necessarily. Though the vanity metrics available looked great, this group of patients booked appointments at a *lower* rate than others, and they unsubscribed at 17%. The high open rate could have been an urgency to unsubscribe!

Data Enthusiasm: Why it matters and how to embody it

Data is crucial for healthcare marketers. It tells you who you are talking to. It lets you have conversations with people without even speaking to them. By understanding heuristics and creating algorithms and models, you get more explainability than human decisions can offer. With machine learning in particular, you can make more accurate decisions that are less prone to bias.

And yet, our organizational approaches oftentimes do not enable this use of data. Marketers aren't trained enough in data analytics to use it effectively on their own. Data scientists are highly trained, but work in such a technical field that marketers and executives alike may struggle to understand what they're talking about. Executives are briefed on data reports but may lack the data science knowledge to look at those reports critically and truly engage with the health of their business.

With Data Enthusiasm, data becomes a mentality. It's an organizational approach wherein we see the value of individuals knowing how to fight bias and make data-driven decisions, even if they never learn how to implement machine learning in Python. Marketers can speak data science fluently enough to infuse it into their strategies, data scientists speak marketing enough to give marketers the deeper insights they need in plain English, and executives speak both so they can more deeply engage with the insights presented to them.

[Healthcare has a higher calling](#) than other companies. You may ignore constant sale emails from big box stores, but still shop there when you need something. If your doctor spams you with disingenuous emails, however, you may lose trust in them and take your healthcare elsewhere. It's not about getting patients to buy more things, it's about helping them invest in their health. This means that the same accuracy metrics that are so critical to medicine — precision, recall, false negatives, etc. — are also critical to healthcare marketing. In order to achieve these metrics at scale, it requires Data Enthusiasm across the organization.

The right technology can help, too. [AI-powered CRMs](#) make it easier for marketers to practice Data Enthusiasm and make better decisions. At SymphonyRM, we call those decisions [Next Best Actions](#). The example in the link shows the business intelligence needed to prioritize vaccinations, annual wellness visits, and patient portal enrollment. In addition to services like these, Next Best Actions use data science and algorithms to prioritize most interactions and outreach you'd have with patients and providers.

Data Enthusiasm in a post COVID-19 world

I, like many of you reading this, have looked for the silver lining that this COVID-19 disruption has caused and the “new normal” that we have come to realize. Distance provides perspective and insight, and so does data. While it may take many more months for me to gain my son’s approval regarding my ability to aim and succeed in targeting, we as an industry need not wait. We have the ability to embrace the data that informs our decisions, the data that directs our focus, and the data that confirms our success and impact.

As the pandemic continues to unfold, most everyone in healthcare is impacted in one way or another. In a post COVID-19 world, organizations will need Data Enthusiasm to effectively reschedule and schedule lost revenue, engage in strategic service lines, and build and affirm trust with both providers and patients. In doing so, they can structure outreach based on service line capacity, patient need and risk, and CMS prioritization factors. If you’re not sure where to start, our [Post COVID-19 Playbook](#) can help you implement this in your organization.

Our communities need us to use every tool at our disposal in this new normal to engage them in proactive, personalized, and precise communication. Data is the most powerful tool we have to accomplish that.

Ok, time play a quick Fortnite match before my son wakes up and starts his rebuke...