



Red Paper

A Series of Hospital Marketing Perspectives



A Mystery No More:
Insights on
Marketing Communications ROI

Historically, it has been difficult to fully quantify healthcare marketing return on investment (ROI). Few broad-ranging studies on healthcare marketing ROI, in particular the impact of mass marketing, have been done.¹ A lack of complex market data commonly available in other industries begins to explain this difficulty.

As a result, healthcare marketers often struggle to accurately demonstrate and quantify attribution—the direct impact of a marketing exposure on a patient’s decision to choose a healthcare provider.² They are then left settling for surrogates, or “stand ins,” for attribution metrics, the most common of which present challenges to demonstrate marketing ROI to their finance counterparts:



Non-financial indicators

(e.g., calls to a call center, hits to the website) where calculating ultimate financial attribution is difficult at best



Direct marketing activities

(e.g., direct mail/email, targeted on-line search campaigns) where direct attribution is more easily calculated but does not fairly capture the influence of any marketing exposures preceding the direct marketing campaign



“New patient” value calculations

(e.g., the financial contribution of new patients attracted to a healthcare organization), either actual or modeled, where there is often disagreement as to how much return can be attributed to marketing activity

In the face of these challenges, it is our observation that healthcare marketers are increasingly focusing on tactics where they perceive the greatest potential for direct attribution.³ Marketers know “in their gut” (sans a lot of data) that fully integrated marketing communications campaigns that include the entire spectrum of traditional, mass marketing, digital, emerging media and targeted tactics will bring the most return. However, insufficient resources, tools and data from which to draw the hard conclusions between communications and behavior leave them at a loss with senior leadership and C-Suite executives.

While healthcare marketers may be investing in mass communications that have little impact, they may also be mistakenly lured into artificially, and possibly dangerously, limiting the campaigns they create.

Generally, marketers know marketing communications influences behavior. We wondered if there were lessons healthcare could learn from other industries where attribution is also difficult to capture, either due to complex purchasing processes and/or the presence of many confounding variables influencing behavior.

Consider the air travel industry, where a consumer’s purchase decision is nearly as convoluted as healthcare. Of course, travelers can buy tickets on an airlines’ website, but they can also skim many carriers through aggregators like Expedia, Orbitz, Travelocity and travel agents. They can shop “blind” by price on websites like Priceline. Prices can vary by day of the week and time of the year. Factors beyond the airlines’ control, such as gasoline prices (making driving more or less appealing) and fears of terrorism, impact the passengers’ willingness to fly. The relative merit of frequent flyer and other reward programs also influence purchasing decisions. The list goes on and on. In the face of this myriad of factors, the world’s airlines settle on a marketing mix that extends beyond just directly attributable tactics and, we can assume, delivers an acceptable ROI.⁴ How do they do it?

A key part of the answer is econometric modeling. Econometric models are “statistical models that specify the statistical relationship that is believed to hold between the various economic quantities pertaining to a particular economic phenomenon under study.”⁵ These models analyze critical data and calculate relationships between variables to inform decision-making.

With this in mind, SPM set out to better understand if econometric modeling could shed light upon the many unanswered questions of healthcare marketing ROI. How does marketing communications affect consumer attitudes and behavior? How do you calculate the long-term investment and return of a comprehensive marketing campaign? And how can you prove the value of marketing communications to senior leadership and executives?

“Marketing had the highest impact when share of voice was higher in the market.”

The Study

As a first step, SPM engaged in a yearlong research study in partnership with a graduate program in Healthcare Administration to build an econometric model that might better illuminate the impact of marketing communications in the healthcare industry. To create as much separation from attributable tactics and impact as possible, we studied variables that were not directly promoted in marketing communications yet *could likely be indirectly influenced* by successful communications.

Using data from an academic medical center, the study assessed the change in volume of new walk-in (that is, self-directed) patients who first entered the hospital through the emergency department and consumer perception survey results (specifically, Best Overall Quality, Best Doctors and Most Preferred for All Health Needs). This data was compared to marketing communications efforts. The study investigated whether or not a positive correlation existed between marketing efforts and a change in attitudes and new patient walk-in volume.

We reviewed data covering a 60-month period between July 2008 and June 2013 for emergency department patient volumes, National Research Corporation (NRC) consumer perception surveys and mass marketing exposures. A retrospective, time series analysis assessed data normality and bivariate analysis was conducted between all independent and dependent variables using Spearman’s Correlation tests. A type 1 error rate of .05 was used for all statistical analyses.

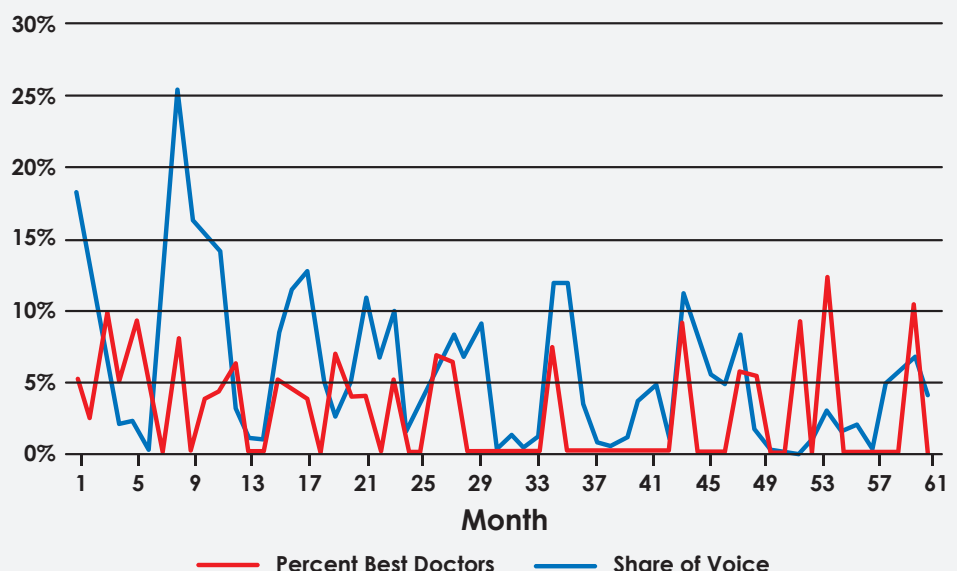
The Results

The study uncovered a statistically significant relationship (at a 95% confidence level) between weighted market exposures and the two dependent variables,

consumer attitudes and percent of walk-ins to the emergency department that were new patients (figure 1 and 2). When marketing exposures relative to share of voice (i.e., how much of the healthcare advertising in the market was “owned” by the hospital we studied) were highest, data showed an improvement in both consumer perceptions and new walk-in volume. Simply put, marketing had the highest impact when share of voice was higher in the market. Conversely, when marketing exposures and share of voice were lower (in some cases, non-existent), new walk-in volume and consumer perceptions moved in a negative direction.

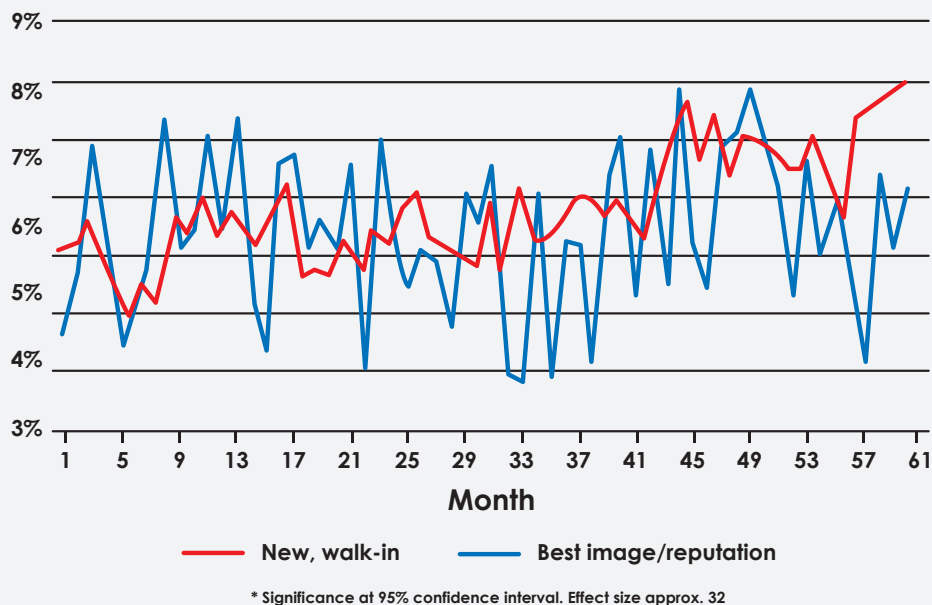
In a second phase of the study, SPM attempted to validate the results of the previous analysis by replicating the research

Figure 1
Share of Voice vs. Selected NRC Measures
(60 Month Timeframe)*



* Significance at 95% confidence interval. Effect size approx. .32

Figure 2
New Patients (Count) vs. % Best Image/Reputation
(60 Month Timeframe)*



influenced the subject healthcare organization’s understanding of marketing communications impact on subsequent strategies. Below are four key takeaways from the research we believe can be applied to healthcare marketing across the board.

1. Media Strategy: Timing and Behavioral Targeting > Volume

Based on the insights uncovered, SPM found that the number of marketing exposures relative to overall market noise matters—that is, the impact of an organization’s media spend, relative to the total of all healthcare advertising spent in the market, will influence the impact of marketing efforts. If a message is delivered in a “less cluttered” advertising


environment, where the advertiser’s share of voice is higher, the advertising leads to more positive results. If dealing in a noisy advertising market where an organization has a lower share of voice, strategizing media spend based on relative exposures is critical.

It is important to note (and this situation informed a subsequent conclusion) that, for the particular market area in which this study took place, advertising noise and overall spend in the market over the last several years increased tremendously. During this time, the observed healthcare organization’s advertising spend remained steady. Thus, they experienced a sharp decline in share of voice, nearly cutting it in half. As the competition began to spend more in the market, the marketing efforts of the studied organization needed to work twice as hard. The statistical analysis confirmed our belief that simply being present or spending the most in the market is not enough. How you spend your media dollars, not just how much, matters. Media strategies that maximize the relative potency of an advertiser’s share of voice lead to higher marketing impact than just being on the air or the loudest voice in the market.

in two ways: once for other healthcare organizations in the same market and again for another healthcare organization in a different market. It was in this phase that it became clear how econometric models for similarly complex industries are able to calculate relationships and inform the marketing mix in ways healthcare has not been able—access to crucial market and business data. In both of the above cases, SPM could not access this necessary competitive data, data we received from the first subject organization. This made the research difficult to independently replicate. Without this information, results were random and no correlations could be meaningfully calculated. In “public” categories, including air travel, much more granular sales and market data is cost-effectively collected and shared, enabling robust econometric modeling. Similar data is not presently available in healthcare without considerable additional financial investment.

Key Takeaways

In most cases, the complex healthcare market data needed to comprehensively analyze and extrapolate ROI is unavailable. Fortunately, in this instance, we were able to collect sufficient data to draw important conclusions that



"Being present or spending the most in the market is not enough. How you spend your media dollars, not just how much, matters."

2. Continuity is key.

Another dimension of this research study was a 1-, 2- and 3-month lag analysis. We hypothesized that a residual effect exists for at least a month once advertising has been off the air in the market. The analysis showed that once marketing efforts were pulled from the market, both variables measured (consumer attitudes and percent change in walk-in emergency department volume) dropped significantly, in some cases to zero. Advertising had no lag effect on the variables studied.

The implication from this finding is significant for media strategy. The healthcare organization studied was using a flighting media schedule to their detriment—that is, periodic “bursts” of sustained advertising presence (e.g., 4-6 weeks) followed by long periods in which they did not advertise at all. Immediately following the end of an advertising flight, consumer perceptions and new walk-in volume to the emergency department suffered. This suggests that continuity—advertising continuously, as opposed to taking periodic breaks where no ads are present in the market—has the highest return on marketing investment. A continuous media strategy is as important as how much is spent.

From this finding, we theorized the healthcare organization was sacrificing new patient volume and revenue just to save money. Budget constraints forced them to employ a flighting strategy, quite likely at a cost far greater than the one-time budget savings. As a result, they are currently evaluating a more continuous media schedule and using typical new patient revenue projections to justify the increased investment.

3. Halo matters.

A noteworthy point about the creative content of the campaigns running throughout the duration of this study is that not one advertisement marketed the emergency department. Consumers were given no direct message to come to this particular ER, and yet they did. Arguably, this is because of the halo effect of

marketing efforts. Even though the ER was not promoted, the statistical correlation suggests increased brand perceptions and awareness brought a higher volume of new walk-in patients into the emergency department.

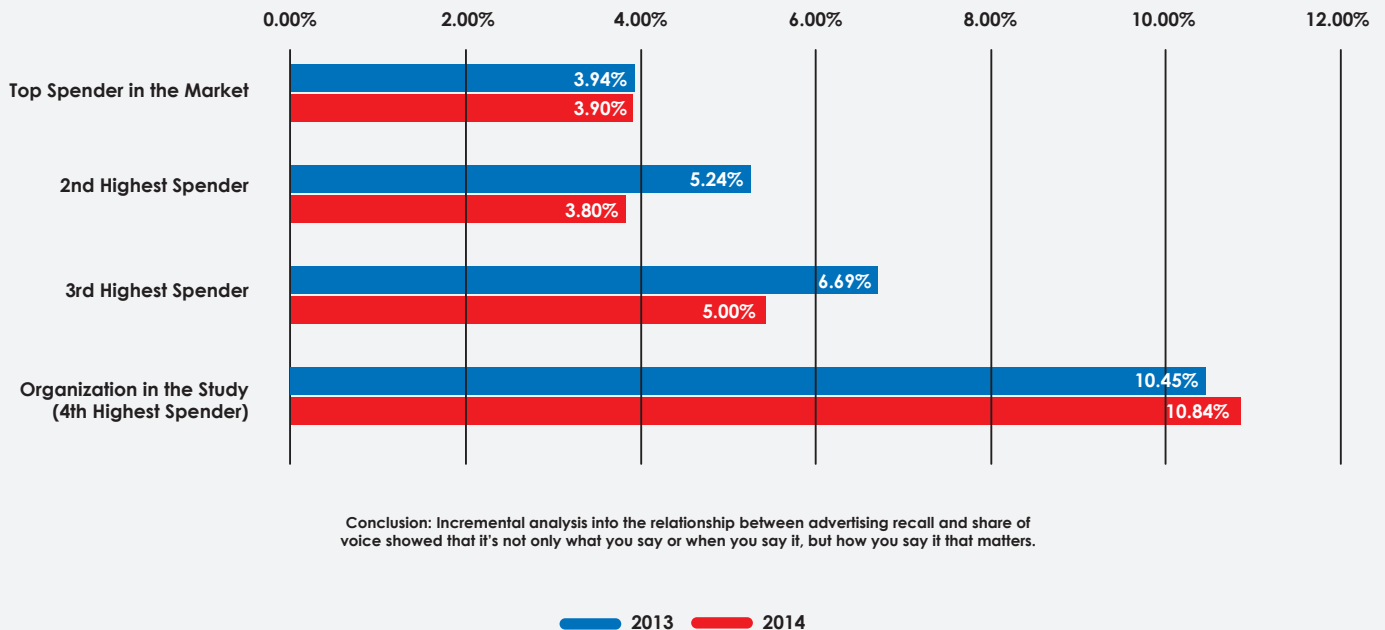
While this reinforces the importance of continuity, it also shows what we have long believed to be true—that the benefits of a strong brand and strong service line perceptions positively impact every other area of business.

Anecdotally, the study did assess connections between marketing communications and the specific programs and services featured in the advertising. While we did observe some important, statistically significant correlations with consumer perception of the promoted organization’s service lines, service line volume metrics were not evaluated in this research phase.

4. More exposure to bad advertising won’t make it good advertising.

As noted in Finding 1, during the observed timeframe, the studied healthcare organization experienced declining share of voice and fewer total impressions compared to their competition. Further analysis into NRC consumer perception data uncovered that unaided advertising recall for this particular organization over that time outscored competitors by 150-200% (figure 3). This finding introduced an additional dimension into the analysis that is not easily statistically measured—relative advertising “quality.” While statistical analysis uncovered a significant connection between communications, perceptions and behavior, incremental analysis showed this organization’s advertising stuck most in the minds of consumers.

**Figure 3
Ad Recall**



Simply put, it's not just what you say (or where/when you say "it"), but how you say "it" that matters. The combination of smart media strategy and strong creative execution can counteract increasing market noise and reduced share of voice.

Even with a lot of exposures, poorly executed marketing with little to no strategic foundation isn't memorable. Quality creative, backed by well-thought-out strategy and a good media plan, will succeed and get results. In the long-term, this leads to higher volumes, increased perceptions and, ultimately, higher marketing communications ROI.

Conclusion

Our research and findings only begin to scratch the surface of healthcare marketing ROI. While we could have gone further to calculate an attributable dollar amount, the partner organization of the study was satisfied with the results—that their integrated marketing communications program has demonstrable impact.

By uncovering a significant correlation between the variables measured and marketing activities, this study suggests that artificially limiting your campaign to only directly attributable tactics is a mistake. Equally critical are media strategy, how you spend in the market and the quality of work you put out. In a world where patients are becoming more actively engaged in choosing a healthcare provider, maximizing the impact of your marketing efforts by taking into account these findings can mean the difference between success and failure.

Though we didn't follow it to its ultimate end, we did find the trail leading to proven, concrete ROI via econometric modeling. And even though marketing ROI in the healthcare industry may still be far from being standardized, we are using this data to direct marketing and media strategy, and to demonstrate the impact of marketing communications to executives and senior leadership.

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