

Assessing the Relative Importance of General Physician Attributes and Specific Objective Measures when Selecting a Physician

A Stax analysis of what information is most important to consumers and physicians when choosing a physician best-suited to treat a patient's unique needs

October 2014

Stax

BOSTON | CHICAGO | COLOMBO | NEW YORK

Natalie De Fazio
312.873.3014
ndefazio@stax.com

Context & Objectives

For the last decade, consumerism has become prevalent in the healthcare industry. This trend has accelerated in recent years, fostered by implementation of the Patient Protection and Affordable Care Act. Patients are becoming increasingly involved in their own healthcare decision-making. Leveraging online resources, consumers are seeking to make informed decisions about everything from their choice of a physician and health insurance to understanding their health conditions and care options.

Until recent years, access to information about doctors was sparse. For example, a consumer using the internet to search for a cardiologist may have been able to find basic information—such as the doctor's name, location, contact information, and hospital affiliation—but unable to find important information regarding the doctor's experience, the quality of the hospital at which they practice, or even how they communicate. In contrast to other decisions consumers make every day, consumers have traditionally had limited access to objective metrics when making healthcare-related decisions. As a result, people generally focus on basic information when searching for a physician—insurance coverage, location, and availability—largely because objective data has not been available.

Whether for themselves or a family member, patients want to feel confident in selecting a physician best-suited to meet his or her unique needs and preferences. On behalf of Healthgrades¹, Stax set out to understand the consumer perspective on the value of different dimensions of information when selecting a doctor. *In other words, under ideal circumstances—if they could have all the most important pieces of information accessible when choosing a physician for themselves or a loved one—what would they want to know?*

Further, Stax set out to assess the physician perspective on what data and criteria factor into their decision when referring a patient to a specialist, both when treating a patient with a common condition, and also when treating a patient with a more complex condition. *We sought to find out what information physicians deem most important when referring their patients to another physician.*

Summary of Findings

Key Takeaways

Our research shows that there are commonalities between what consumers deem most valuable when selecting a physician, and what physicians deem most important when referring a patient to a specialist. These three categories of information are experience-related data, quality metrics, and patient satisfaction data—all of which include objective measures.

- Among both consumers and physicians, experience-related information is most important. For example, whether the physician has experience with a particular condition or procedure, or the volume of patients seen with a given condition, or the number of times a physician has performed a specific procedure.
- Experience-related information is particularly important for complex conditions and unique cases.
- After experience, hospital quality measures (e.g., outcomes such as complications rates) are most important in complex cases.
- Patient satisfaction is relatively more important to doctors in common, everyday referral situations, and is relatively more important to consumers in basic, everyday cases (e.g., searching for a PCP for preventative care versus searching for an orthopedic surgeon specializing in hip replacement).

Physician Perspective

According to the research, physicians lack objective data from which to make informed referrals and that access to objective data would be valuable to physicians when making referrals, both in common and complex cases. Referrals today are generally based on qualitative, not quantitative, factors.

¹ Stax was engaged to conduct research on behalf of Healthgrades. All data reported in this white paper is based on random samples of individuals not affiliated with Healthgrades or Stax; refer to "Methodology in Detail" for description of the size and profile of survey samples.

- Traditionally, physicians primarily consider subjective relationship and personality-related information while making referrals.
- Top considerations include past experiences with the physician; the physician's attitude and personality; and the physician's word-of-mouth reputation.

The majority of physicians surveyed—primary care and specialists alike—express a desire for more objective data when making referral decisions, particularly in complex/uncommon cases.

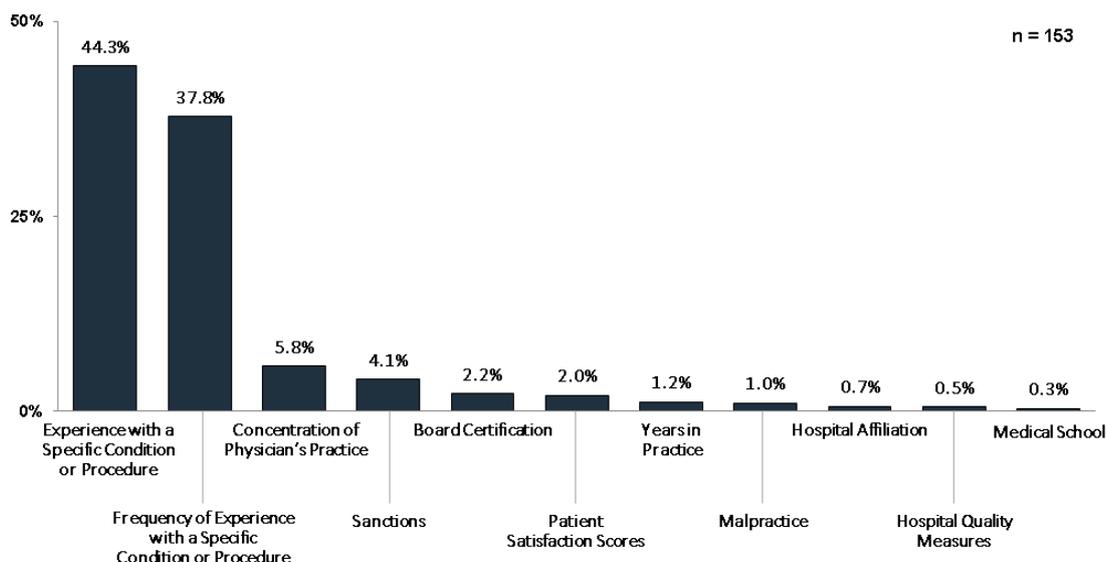
- Across specialty areas, 61% of physicians strongly agree that “ready access to additional information about other physicians would help me make better physician referrals for my patients.”
- Older physicians are slightly more inclined to report they have all the information they need than younger physicians.

From the physicians’ perspective, when selecting a physician for a patient with unique medical needs or a complex/non-endemic condition, the most valuable information are objective measures related to specific experience in sub-specialty areas.

- Experience and hospital quality measures are more important than other attributes.
- On average, about 85% of physicians rate “specialist’s experience in specific condition/procedure” as highly valuable.
- After “specialist’s experience in specific condition/procedure,” the relative order of value of objective information is the following:²
 - Concentration of specialist’s practice focused on specific condition/procedure (83%)
 - Volume of patients specialist has treated with specific condition/procedure (77%)
 - Hospital quality measures, including mortality, complications and patient safety (57%)
- Looking across specialties, cardiologists place higher value on additional objective referral data than other physicians, closely followed by neurologists, then PCPs, and orthopedists.

From the physicians’ perspective, when selecting a specialist for a patient in a more common scenario or an endemic condition, experience-related factors are still paramount. Hospital quality and patient satisfaction scores are less important in these common cases.

Weighted Importance of Information & Attributes for Common Referral



²Percentage in parentheses indicates overall percent of physicians who highly value this type of information—average across all types of scenarios—rating 5, 6, or 7 on 1-7 scale.

Consumer Perspective

While the incremental value of data varies depending on the type of physician consumers are searching for, an aggregate look indicates a clear trend in consumers' opinion on which are the most important³ pieces of information. Experience-related information is most valuable to consumers.

- In a situation where a specific health condition must be treated, or a specific procedure must be performed, consumers say the top-three most important attributes to consider when selecting a specialist are experience, patient satisfaction, and hospital quality:

1. Specialist's experience

- Data on most common conditions treated (72%)
- Data on most common procedures performed (68%)

2. Patient satisfaction

- Percentage of patients who recommend this doctor (58%)

3. Hospital clinical quality

- Complications rates / mortality rates (50%)

When searching for a primary care physician, patient satisfaction is relatively more important than when searching for a specialist, and when searching for a specialist—particularly in unique or complex cases—hospital quality is relatively more important than when searching for a PCP.

Situation	Importance ⁴ of Experience ⁵ Information	Importance ² of Patient Satisfaction ⁶ Information	Importance ² of Clinical Quality ⁷ Information
Selecting a PCP or General Practice Physician	67%	58%	20%
Selecting an Orthopedic Surgeon for a Specific Condition or Procedure	68%	50%	60%

Stax research shows that the addition of dimensional information and objective measures to a basic online physician profile has significant impact on consumers' likelihood to select a given physician.

Refer to "Consumer Study #1" in the "Methodology in Detail" section at the end of this paper for in-depth description of the "base" physician profile versus the "full" physician profile as they were described to respondents in the survey, as well as data elements within each of these categories. In summary:

- **Basic data** is informational; does not differentiate physicians on the basis of experience. E.g., physician name, gender, age, specialty, contact information, insurance plans accepted.
- **Dimensional** information is additive to the basic profile; highly qualitative information. E.g., physician's practice information, personal interests, physician's philosophy of care, description of the practice.
- **Objective measures** are quantified metrics about the physician or his/her affiliated hospital. E.g., experience data, including frequency and concentration of diagnosis of specific conditions, or conducting specific procedures, hospital quality metrics—complication rates, mortality rates—and patient satisfaction metrics.

³ Percentage in parentheses indicates "Average net importance index" which is derived as a sum of top importance ratings minus bottom importance ratings divided by number of respondents.

⁴ Percentage in each cell denotes "Average net importance index" which is derived as a sum of top importance ratings minus bottom importance ratings divided by number of respondents.

⁵ "Experience" refers to most common conditions treated.

⁶ "Patient Satisfaction" refers to percentage of patients who recommend this doctor.

⁷ "Quality" refers to clinical quality ratings such as mortality and complications rates.

When consumers are exposed to the three objective metrics which matter most—experience, hospital quality, and patient satisfaction—their likelihood to select a given physician increases significantly.

Consumers are twice as likely to select a specialist when they have access to these objective metrics.

- Stax quantified likelihood among consumers to select a specialist based on access to different types of information.
- Specifically, we compared likelihood to select a physician based upon basic data along (e.g., name, gender, specialty) versus likelihood to select a physician based on basic data *plus* objective metrics, including experience, hospital quality, and patient satisfaction.
- Results show significant impact in consumers' likelihood⁸ to select and make an appointment with a physician:
 - **Searching for Specialists:** Total lift in likelihood to select a doctor and make an appointment is +107% among consumers searching for an OBGYN, and +106% among consumers searching for an orthopedic surgeon.
 - **Searching for Primary Care:** Total lift in likelihood to select a doctor and make an appointment is smaller when searching for a primary care physician, but still +26% greater among consumers searching for a PCP.

Summary of Methodology

Over the course of three years, Stax conducted multiple waves of in-depth research using web-based survey instruments to better understand consumer and physician perspectives regarding the physician selection decision. The first wave of research was conducted in April, 2011 among consumers, and the final wave was conducted in October, 2014 among both consumers and physicians.

Consumer-facing surveys were designed to collect a random sample of consumers nationwide who have used online resources to research doctors for themselves or on behalf of a loved one. Physician-facing surveys were designed to collect a random sample of physicians across a variety of specialty areas who have referred patients to other physicians. (See Methodology in Detail section for further explanation of data-collection methodology and consumer and physician samples).

⁸ Percentages indicated (i.e., the “lift in likelihood to select a doctor”) represent the collective percentage increase in likelihood for consumers to select a doctor when given access to the full spectrum of objective data— including experience, hospital quality, and patient satisfaction—compared to the “base case” where consumers were given access only to basic data.

Methodology in Detail

Physician Study #1 (April 2014)

In order to quantitatively understand how physicians think about making referral decisions, Stax conducted an online survey of 411 general practice and specialized physicians. Specifically, the physician sample is dispersed across the following specialties:

<i>Specialty Service Area</i>	<i>Completed Surveys</i>
Primary Care / General Practice	108
Cardiology	103
Orthopedics	92
Neurology	108
Total	411

Key topics addressed among physicians include the following:

- How primary care physicians and specialists traditionally make referral decisions (i.e., what information or considerations factor into their referral selection decision).
- The extent to which new, value-add objective data would be valuable to PCPs and specialists when making referral decisions, and what information would be most valuable to make more informed decisions.
- The variation in perceived value of objective information across different scenarios—endemic versus non-endemic and common/everyday versus rare/complicated cases.

Physician Study #2 (October 2014)

In order to gain further perspective on the relative importance of various pieces of information when making a referral, Stax conducted a survey among 153 physicians across nine specialty areas. The physician sample is dispersed across the following specialties:

<i>Specialty Service Area</i>	<i>Completed Surveys</i>
Primary Care / General Practice	16
Cardiology	20
Orthopedics	13
Neurology	14
OB-GYN	23
Rheumatology	19
Oncology	14
Pediatrics	16
General Surgeon	18
Total	153

For this survey, physicians were first asked to indicate the most important information they consider when selecting a specialist for one of their patients. Physicians could select from a list of attributes, as well as indicate up to five open-ended responses. Then, physicians were shown various attributes at once and asked to choose the “most important” and “least important.” Stax used a methodology called Maximum difference scaling (MaxDiff).

- Maximum difference scaling (MaxDiff) is a trade-off analysis technique that allows us to perform multiple paired comparisons in an effective way by asking respondents to select the most and the least preferred items to test the greatest differences among items.
- Respondents are typically shown a screen with 4 randomly selected items at a time and asked to indicate which is most preferred and which is least preferred.
- In a survey, a respondent will see 8–10 similar screens with different combinations of options; the survey is designed in a way so that each attribute is seen by the respondent 3-4 times in different combinations.
- The resulting model provides ratio-scaled importance scores for each item.

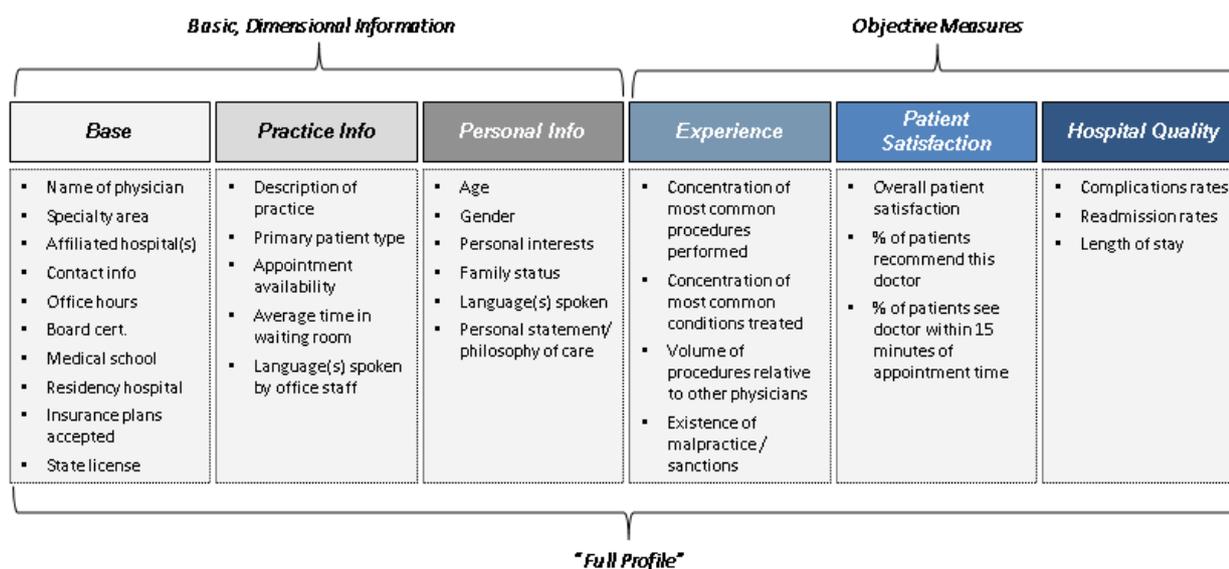
Consumer Study #1 (April 2011)

In order to quantify the incremental value of various types of information about doctors, Stax conducted a survey among 635 consumers who have used the internet to search for a doctor in one of three specialty areas: primary care, OBGYN, and orthopedics. The sample consists of male and female consumers representing a range of ages and insurance types.

During the online survey, consumers were shown a number of different physician profiles, each containing various types of information about the doctor and his or her practice. The first profile presented to each respondent consisted only of basic information. (See “base” information in the figure below).

Throughout the survey, respondents were shown profiles with incremental information in addition to the basic data. As the survey instrument incrementally added different types of data and information for the consumer to view, we assessed consumers’ reaction in terms of their likelihood to select a given physician and make an appointment. Using this approach, we could determine which exact attributes, data, and/or measures have the most impact on consumers’ decision to select a doctor.

Collectively, all data—including the basic and dimensional information plus the objective measures—formed the complete “full profile.” (See the figure below for description of individual attributes, data, and measures shown to consumers in various configurations.) As discussed in the “Summary of Findings,” survey results indicate that the experience, hospital quality, and patient satisfaction (i.e., the objective measures) have the greatest impact on consumer behavior.



Consumer Study #2 (October 2014)

In order to gain further perspective on the relative importance of various pieces of information when selecting a specialist, Stax conducted a survey among 214 consumers who have used the internet to search for healthcare-related information. Consumers were selected randomly nationwide across a range of demographics to align with the profile of Healthgrades user base. The sample for this research is distributed as follows:

Consumer Age Group	Completed Surveys
20-29 years old	15
30-39 years old	31
40-49 years old	46
50-59 years old	46
60-64 years old	36
More than 64 years old	40
Total	214

For this survey, consumers were first asked to indicate the most important information they consider when selecting a physician. In the survey, consumers could select from a list of attributes, as well as indicate up to five open-ended responses.

Then, consumers were shown various attributes at once and asked to choose the “most important” and “least important.” Stax used a methodology called Maximum difference scaling (MaxDiff).

- Maximum difference scaling (MaxDiff) is a trade-off analysis technique that allows us to perform multiple paired comparisons in an effective way by asking respondents to select the most and the least preferred items to test the greatest differences among items.
- Respondents are typically shown a screen with 4 randomly selected items at a time and asked to indicate which is most preferred and which is least preferred.
- In a survey, a respondent will see 8–10 similar screens with different combinations of options; the survey is designed in a way so that each attribute is seen by the respondent 3-4 times in different combinations.
- The resulting model provides ratio-scaled importance scores for each item.

About Stax

Stax Inc. is a global strategy consulting and research firm with offices in Boston, Chicago, New York, and Colombo, Sri Lanka. Founded in 1994, Stax works with clients ranging from the Fortune 500 and 14 of the 20 largest LBO firms in the world, to middle-market private equity firms and their portfolio companies, to provide a range of services that help management grow organically and make better M&A decisions. Stax applies a nimble, collaborative approach to drive well-informed and actionable results—specific steps the client can take to enhance profits or increase value. For more information, visit www.stax.com.