

WHITEPAPER

E-RECRUITING: Using Digital Platforms, Social Media, and Mobile Technologies to Improve Clinical Trial Enrollment

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There's no question that recruiting patients for global clinical trials through traditional means alone is challenging, time-consuming and expensive. To make matters worse, after all the effort, it's just not that effective.

Now, however, there are options that work alongside traditional methods to significantly boost success rates. New digital platforms, social media and mobile technologies allow sponsors to reach patients and caregivers with previously unimaginable speed and precision.

More and more, companies are setting aside myths and misconceptions to embrace e-recruiting and the media and platforms that engage patients and caregivers as never before. These companies are meeting their recruitment targets, doing so fast and efficiently and realizing both significant productivity gains and cost savings.

Patient Recruitment: An Outmoded Model

Patient recruitment for global clinical trials stands out within the life sciences industry as an area ripe for re-engineering. Indeed, the inefficiency of the current methodologies employed is one of the biggest obstacles to ushering new products to market—and therefore a significant drain on corporate profitability. That's a rather harsh indictment, but consider the facts:

- Nearly a third (30 percent) of the time dedicated to clinical trials is spent on patient recruitment and enrollment ¹
- 37 percent of all sites in a given trial fail to meet their enrollment targets, and more than 10 percent never enroll a single patient ²

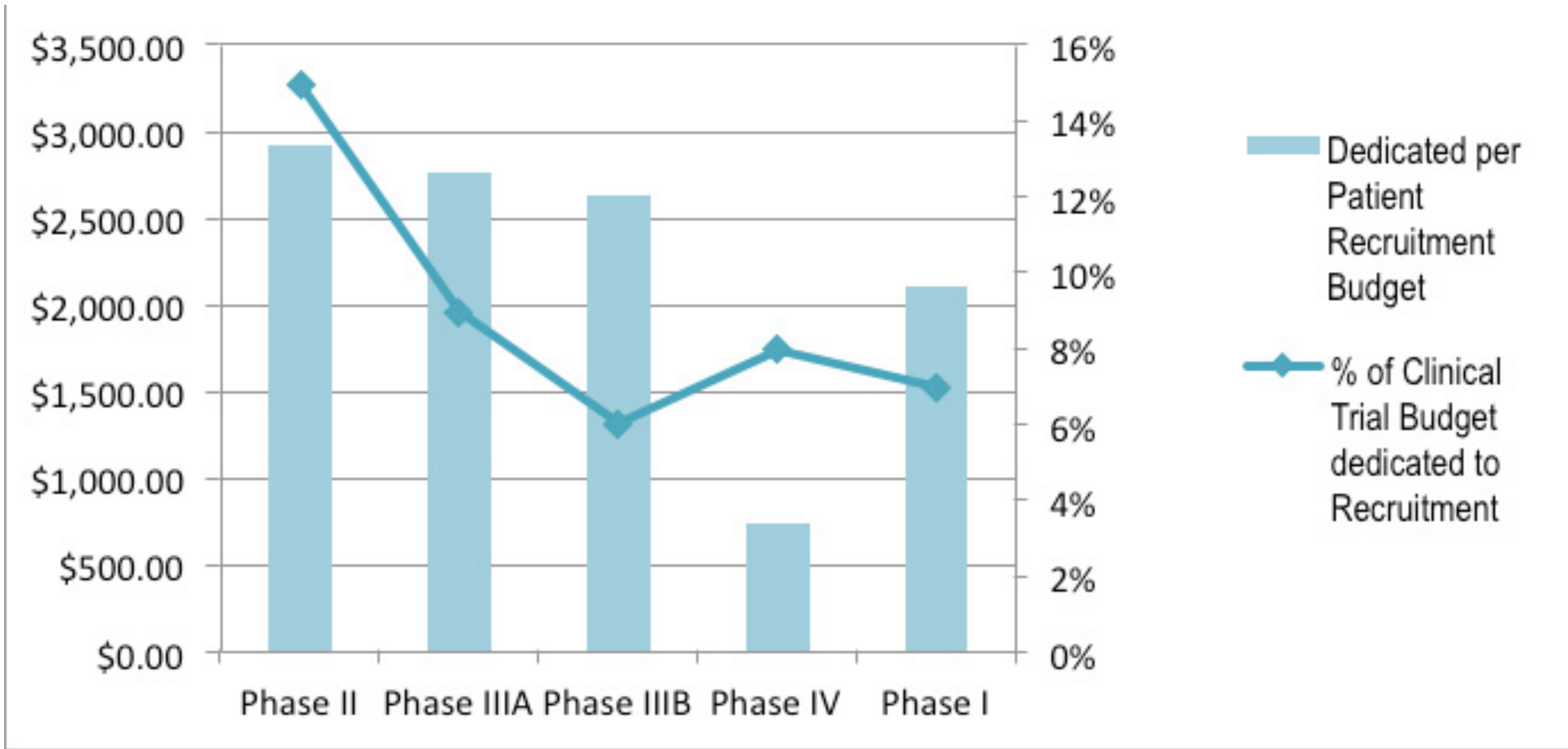
1 "Web-Based Patient Recruitment: Best Opportunity to Accelerate Clinical Trials," Cutting Edge Information, Durham, NC.

2 *Impact Report*, Tufts Center for the Study of Drug Development, Vol. 15, No. 1, Tufts University, 2013.

- The original timelines for Phase II-IV studies usually end up doubling in order to meet desired enrollment levels³
- Each day that a drug development program is delayed costs the sponsor \$37K in operational costs⁴ and \$600K to \$8M in lost opportunity costs

It does not follow, though, that companies devote a large percentage of their trial budget to the effort. During Phase III, companies only spend between seven and nine percent of their trial budgets to attract patients (See Figure 1).

Figure 1: Average Patient Recruitment Budget



For the most part, sponsors and CROs are relying on traditional recruitment tactics, such as physician referrals and mass media advertising, to reach and solicit patients. Given the above track record, it seems time to try something new.

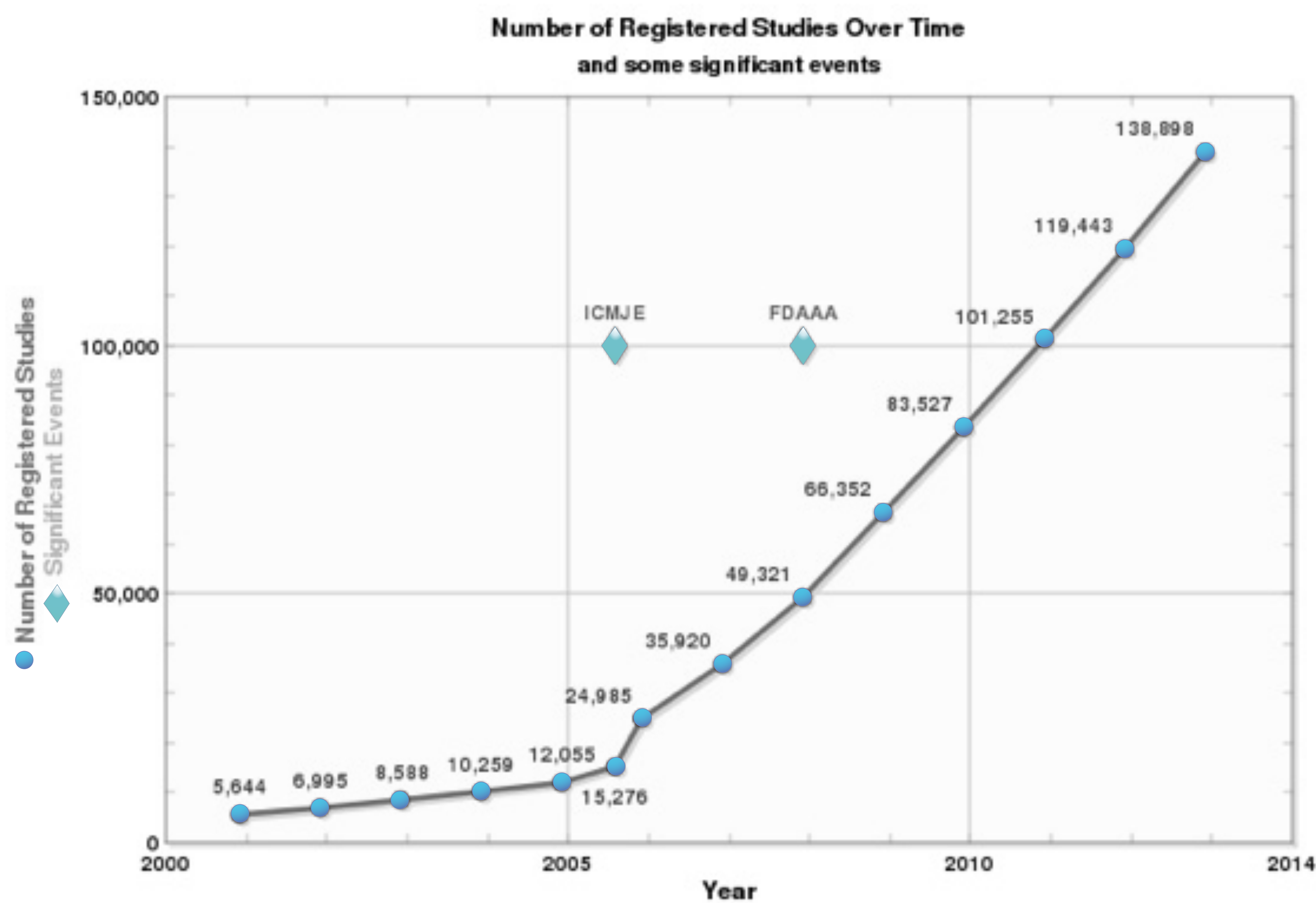
Mounting Demand, Shrinking Supply

Competition for trial subjects is intense. This is the case because regulatory agencies are demanding more, larger, and longer studies and because therapies are increasingly targeting niche populations (See Figure 2). There are only so many potential subjects fitting the target profile for any given study to go around. And when a study calls for treatment naïve patients, the available pool of patients can shrink dramatically.

³ *Impact Report*, Tufts Center for the Study of Drug Development, Vol. 15, No. 1, Tufts University, 2013.

⁴ "Boosting the Predictability of Clinical Trial Performance," Gartner case study, 2007.

Figure 2: Number of Registered Studies over Time



The total number of studies registered on ClinicalTrials.gov since 2000, based on the First Received Date (Data as of September 02, 2013).

Another factor affecting subject availability is that in many parts of the world, the trial process is not generally well understood by the public. Perceptions persist that participating in a clinical trial is risky and/or that it involves a lot of time and effort, although the trend is clearly improving. According to a global study by the Center for Information & Study on Clinical Research Participation, the percentage of respondents who believe trial participants are gambling with their health halved between 2005 and 2013, dropping from 46 percent to 23 percent.⁵

In response to the growing scarcity of patients, life sciences companies have expanded their trials globally; they’ve opened up new geographies and now routinely work with investigators in emerging markets where larger populations of treatment-naïve patients can be found (See Figure 3).

⁵ Center for Information & Study on Clinical Research Participation, News Release, June 18, 2013.

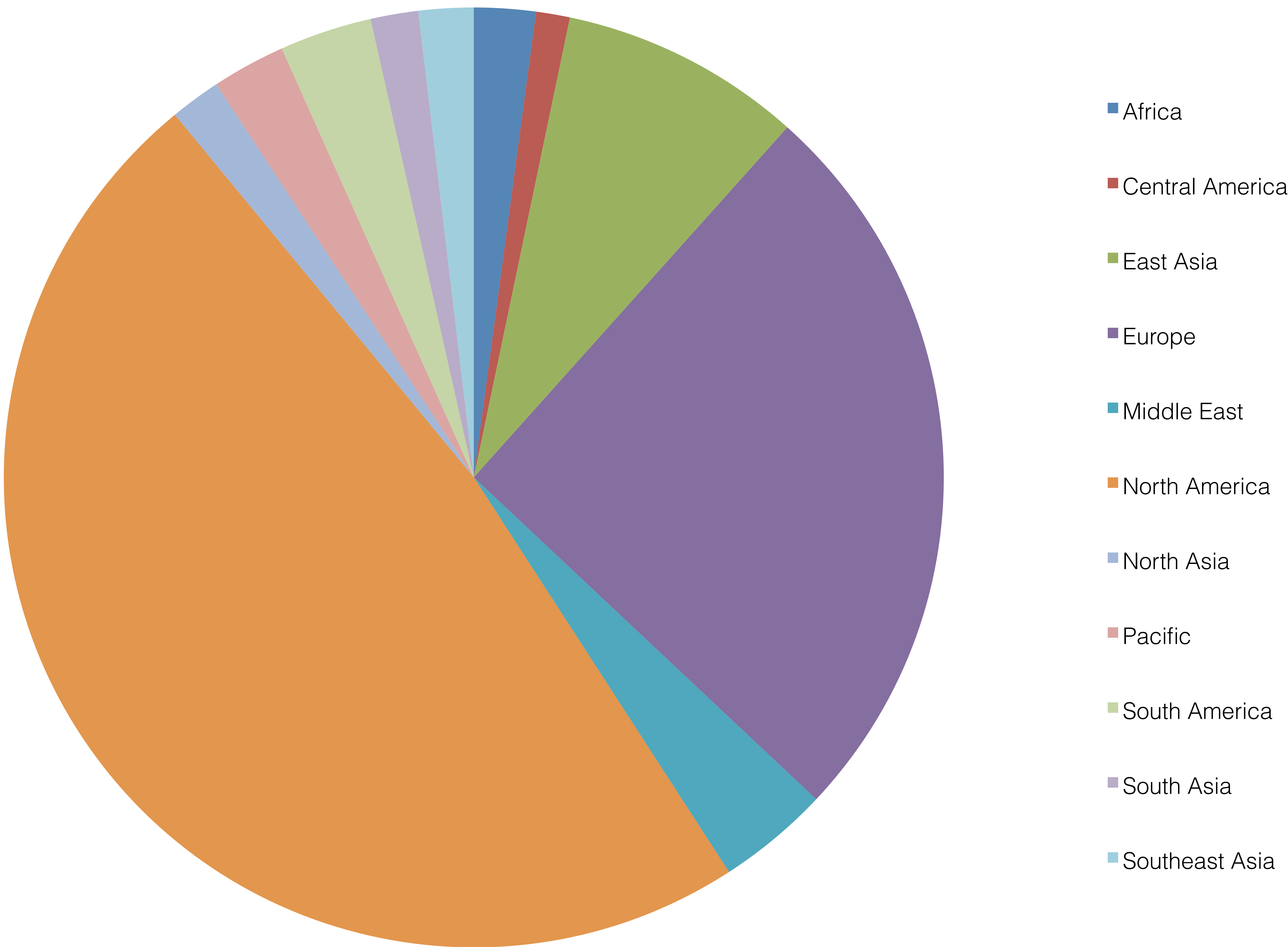


By the Numbers

Total of Trials Around the World

151,327

Figure 3: Breakdown of Clinical Trials by Region



Source = www.clinicaltrials.gov

But, what they’ve not yet done is change the methods that they use to recruit those patients. They still rely primarily on investigators to find patients and on direct-to-consumer mass marketing (print, radio, and television) to spread the word. According to The Tufts Center for the Study of Drug Development, nearly 100 percent of the studies conducted outside of North America use these standard approaches. And, even in North America, all but about 14 percent of studies continue to rely on these traditional approaches—the very methods that, as established above, are no longer sufficient.

What most in the industry have not yet adjusted to is the fact that patients and caregivers have changed how and where they seek and find information—especially healthcare information.

“Many companies automatically assume that there are regulations prohibiting the electronic recruitment of patients. In reality, there are no such restrictions. Regulatory guidelines on soliciting trial participants are media agnostic. When our clients realize this, their excitement is palpable. Suddenly their hands are untied and they can seek trial subjects where they ‘live’—in other words, online.”

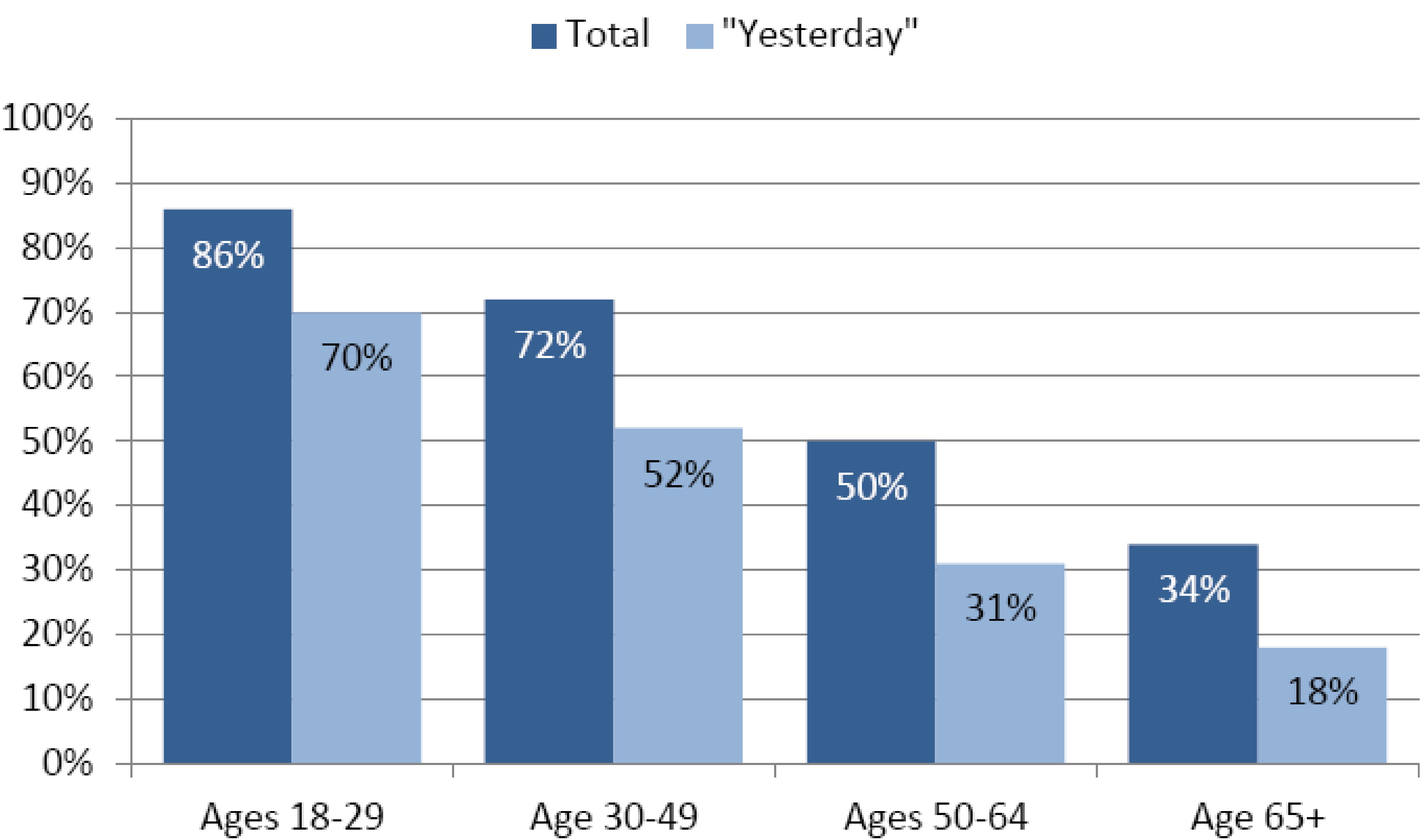
- Ramita Tandon
Senior Vice President and General Manager, iCTRS

e-Patients and Caregivers

E-patients and e-caregivers represent a new breed of informed health consumers using the Internet to gather information about a medical condition and engage in online patient communities (such as PatientsLikeMe® and Ben’s Friends). Likeminded individuals use these forums to seek advice from one another, share their experiences, and cope with the stress of illness or caregiving. Interesting, although the use of social media is strongest among young adults, half of people over 50 and more than a third of people over 65 frequent social networking sites (See Figure 4).

Figure 4: Social Networking Site Use by Age Group

% of adult internet users in each age group who use social networking sites



Source = “Older Adults and Internet Use,” Pew Internet & American Life Project, 2012

Recent polls reveal just how ubiquitous the practice of consulting the Internet on health matters is:

- 80 percent of those on the Web are seeking healthcare information⁶
- Half of health information searches within the U.S. are on behalf of someone else⁶
- 62 percent of U.S. adults living with one or more chronic conditions go online⁷
- 41 percent of U.S. Internet users read about others’ medical experiences on social websites or blogs⁸

And, people are using the Internet to converse with others about health as never before:

- Facebook boasts 1.11 billion members in 2013, globally⁹
- 33 percent of U.S. adults use social media to gather medical information, share symptoms and experiences, or rate drugs, providers, and health plans
- One third of U.S. caregivers participate in online social activities¹⁰
- One in three online seniors in the U.S. uses social networking sites such as Facebook¹¹

And, increasingly, patients and caregivers are using mobile devices to retrieve healthcare information anytime, anywhere. All indications are that digital communication formats should accommodate mobile use as a matter of course:

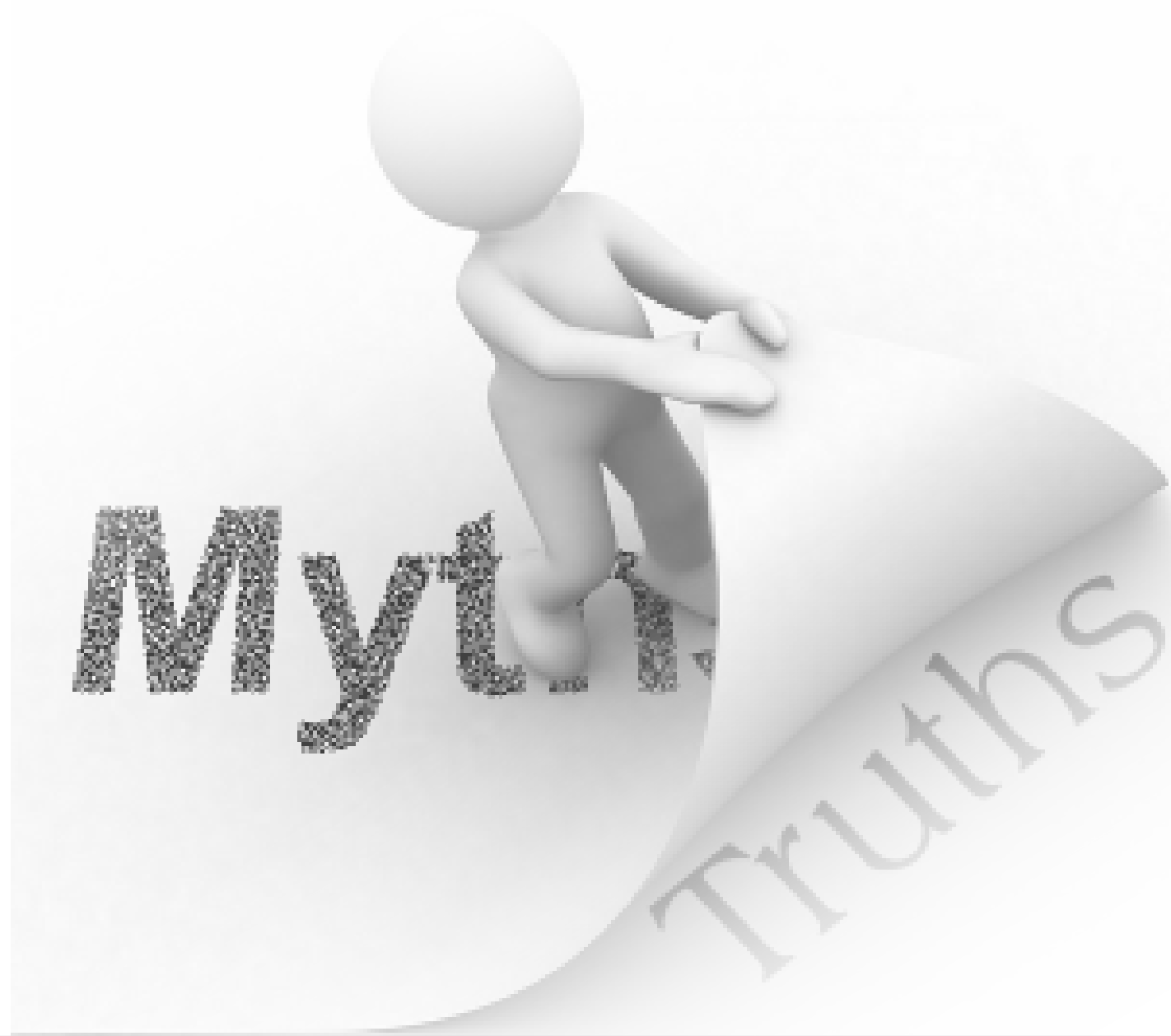
- By 2014, mobile devices will become the most common means of accessing the Internet¹²
- 88 percent of all U.S. adults own a cell phone (and about half of them are smart phones¹³), including seven in ten seniors¹⁴
- Healthcare is the fastest growing content category for mobile device users
- The Apple iTunes store offers over 1,000 medical applications designed for patients

6 Pew Internet & American Life Project, 2010.
7 Pew Internet & American Life Project, 2010.
8 The Social Life of Health Information, Pew Internet & American Life Project, 2009.
9 Facebook, Inc.
10 "Family Caregivers are Wired for Health," Pew Internet & American Life Project, June 2013.
11 "Older Adults and Internet Use," Pew Internet & American Life Project, 2012.
12 Ingram, Mathew. "Mary Meeker: Mobile Internet Will Soon Overtake Fixed Internet," GIGAOM, 2013.
13 "Health Online 2013, Pew Internet & American Life Project, January 2013.
14 "Older Adults and Internet Use," Pew Internet & American Life Project, 2012.

These statistics suggest overwhelmingly that patients and caregivers can be found digitally. Indeed, progressive companies have begun to use e-recruitment strategies quite successfully.



Myth-Busting



Why might the life sciences industry be slow to adopt new media and technology platforms to recruit patients and caregivers? It appears that a number of misconceptions about the options abound.

Myth	Industry Reality
Regulations prohibit the use of social media.	There are no regulations or case laws that govern what media may be used to reach prospective subjects.
The target demographic needs to be under the age of 50 for digital media to be effective.	Digital media reach all age groups. The Pew Research Center found that 71 percent of U.S. adults between the ages of 50-64 look online for health information and that 58 percent of those over age 65 do so ¹⁵ .
The new digital and social media are expensive.	Digital media and social platforms are actually quite cost effective compared to mass media. There are an array of options available, and they can target groups very precisely.
The new media are only appropriate for North America.	The world is online, and the only prohibition is that some countries do not allow direct-to-patient solicitation via any medium. (These include Russia, Poland, and Hungary.)
Digital media can't be contextually or geographically targeted.	Digital media are among the most targeted types of media available. One could, for instance, use Facebook to target all females over 55 living in Boston who have experienced back pain in the last month.
Online patient communities are not representative of disease sufferers.	Studies have shown that that member demographics in online patient communities are representative of patients in general ¹⁶ .
Using digital media only extends to banner advertising tied to key word searches.	Any initiative that can be managed via traditional media can be accomplished online.

15 "Health Online 2013," Pew Internet & American Life Project.

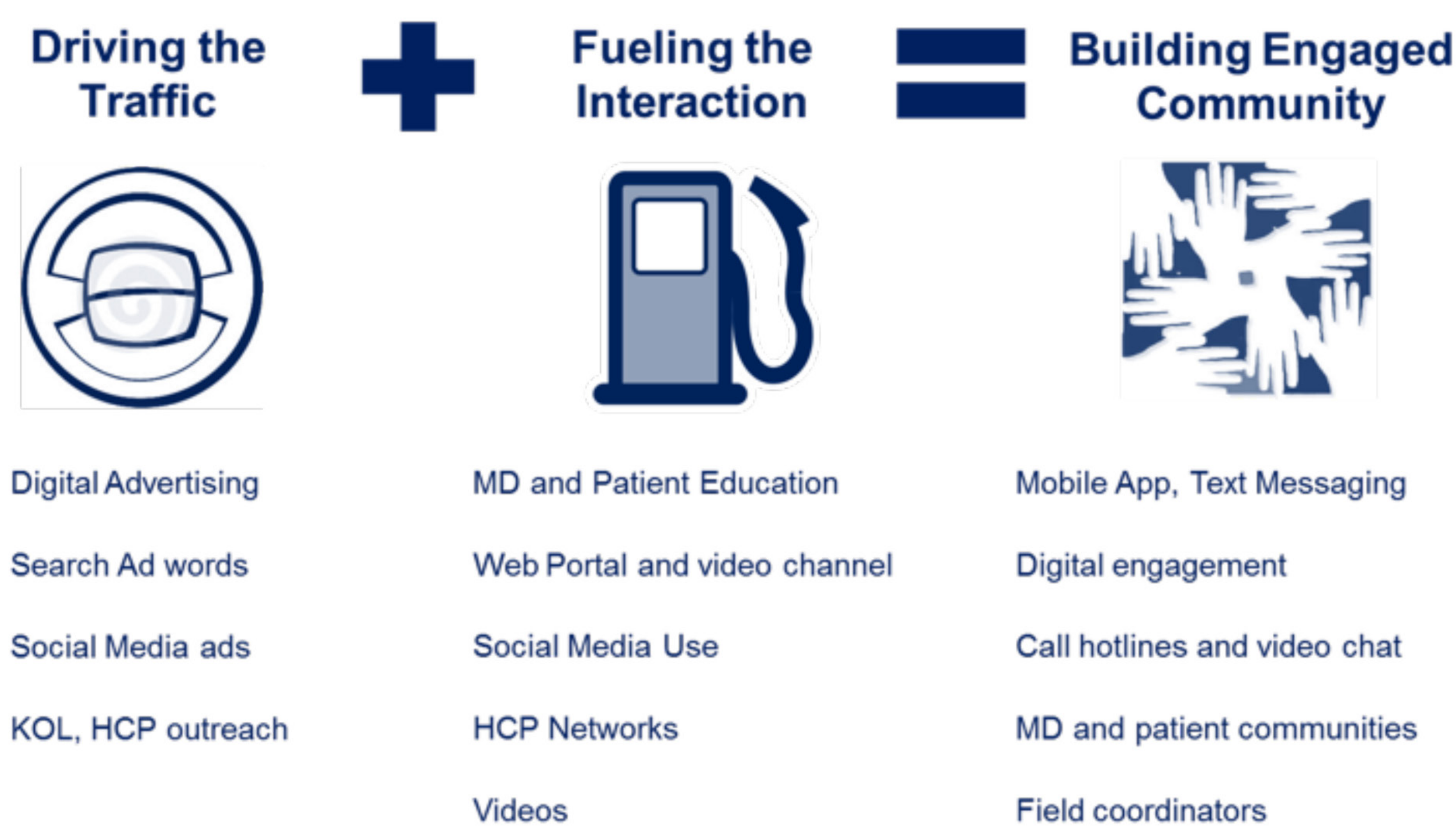
Add to these commonly held, albeit misguided, beliefs a natural inclination to “stick with what we know,” and it is easy to understand why the industry as a whole has been reluctant to make the transition to new media.



Approaches That Work

The most successful digital recruitment strategies create a “surround sound” system of outreach to patients, caregivers, and physicians that extends from the study start up, through the duration of the study, and on to post trial follow up. (See Figure 5.) Here, we will limit our discussion to the first stage of the process: recruiting trial subjects via communications to patients and caregivers.

Figure 5: An Integrated Approach to Patient Outreach, Support and Engagement



16 Scher, David Lee, "Five advantages of online patient communities," August 2, 2013.

The basic communication and change management principles to bear in mind when designing a recruitment strategy using the new media are that:

- Personalized communication increases motivation
- Inviting design elements can compel change
- A supportive environment reduces barriers
- Multiple modes of communication reinforce a message

“e-recruitment is a bit of an art—an art that is still developing and that not everyone has mastered. It, like outreach in other media, requires solid research, a well-conceived strategy, and properly tested creative. Get it right and you’ll be a convert.”

- Ritesh Patel
Global Head of Digital & Innovation, inVentiv Health, Inc.

Strategy Development

As with any communications campaign, much of the success hinges on how thoroughly the strategy is researched and planned. The essential steps to planning a digital recruitment strategy mirror the type of pre-work performed in advance of deploying traditional mass media campaigns:

- Audit digital channels and social media sites to discover where target patients and caregivers can be found online.
- Monitor existing online discussions on the disease area of interest to understand the issues of interest and concern to patients and caregivers. (This process will also reveal to what degree caregivers should be the primary audience versus patients themselves.) Beyond identifying what the target audience is talking about, study their language—down to the specific words and phrases that they use in describing their symptoms. It will be important to adopt “patient speak”—as opposed to medical jargon—in search engines and message platforms
- As with other media strategies, map the trial recruitment messages to the target audience and the appropriate channels.

- Identify key opinion leaders, such as bloggers, who could become influential in raising awareness and supporting trial participation.
- Develop the creative concepts that will be used in advertising and then test the messaging and imagery for effectiveness.

In general, listening in to social media for about a month is sufficient time to gain a solid understanding of where to find patients and caregivers for a specific trial and how to appeal to them.

Campaign Implementation

Having established where patients and caregivers can be found online, what appeals will resonate with them, and which creative approaches will be most compelling, companies can then implement the strategy using a variety of digital tactics:

- Drive traffic to a trial website (or landing page) by placing ads on the sites and social media platforms that the target audience frequents. These ads could either be ads designed to create awareness of a condition without a specific treatment identified, or they could be very specific to the study in question. Ads should, of course, convey the key messages and include a call to action.
- Link banner or pop-up advertising to search engine results such that ads appear as appropriate on sites that arise following patient/caregiver searches. For instance, an ad for a clinical trial of a product to treat arthritis might appear next to an article on staying fit at age 60 in the online edition of a popular women's magazine.
- Partner with advocacy groups and patient communities for the condition being studied so that ads for the trial appear on the groups' web sites, Facebook pages and other online resources.
- Engage key opinion leaders as online ambassadors to raise awareness of studies.



Proof That It Works

Driving Online Traffic

One manufacturer planning a clinical trial for a cancer therapy needed to recruit a large number of study participants in a short period of time. Based on inVentiv's analysis of web searches for that disease, we learned that the majority of information seekers were caregivers, rather than patients. We therefore set out to address caregivers' questions and needs in the clinical study website. The site provided balanced information about the study, including the risks and benefits—all described in straightforward language and with friendly, hopeful imagery.

We also wrapped online advertising around that site via Google and Facebook ad placements to direct traffic to the main trial website. A YouTube video introduced the trial drug and graphically demonstrated the science behind the disease and the treatment.

By the third month of the digital ad campaign, traffic to the trial website increased 6,474 percent. The Facebook ad campaign, which ran for three months, provided 64 percent of the site's visitors. Within three months, the website received nearly 70,000 visitors who reviewed one or two pages of content, and the trial was completely enrolled in four months.

A Mid-Stream Fix

In another engagement, inVentiv inherited a recruitment program that was well underway—again for cancer, but of a different tumor type. The existing campaign was underperforming, in spite of an online budget of \$21k per month. After changing the messaging, altering the digital media mix and optimizing the search engine linkages, we succeeded in tripling the number of patients recruited per month, while actually reducing the monthly expenditure by five percent.



Keys to Success

Today, innumerable ventures into digital recruiting have proven that the strategy can dramatically improve results over traditional methods. As with any new approach, however, it is best to work with professionals who have gained experience with e-media and can apply a best-practice approach. The following pointers are a few such lessons learned:

- **Incorporate patient research into the overall recruitment plan.** Build upon the learnings from preliminary media audit, conversation monitoring, and message testing.
- **Strive for relevancy.** Place online trial ads where they will make sense to the viewer and support a logical or emotional connection.
- **Mix it up.** Just as with any campaign in traditional media, it is best to rely on a number of different channels to carry the message.
- **Don't scrimp on creative development.** Both the messaging and the imagery of online communiqués must be compelling and generate the desired response from the viewer. Incorporate unique patient motivators into the creative concept.
- **Use “patient speak”.** Select words according to what the audience understands and uses. Copy should reflect the results of the early research into not just what the audience is saying, but also how people are saying it. In general, strive to show empathy and achieve clarity through simplicity.
- **Make it easy for interested parties to respond and learn more.** Take advantage of the immediacy of the medium to do this. For example, a “Call Now” feature can be build into an ad via Google Voice, or websites can include an interactive screening tool to allow patients to instantly see if they might be eligible for participation.
- **Employ responsive design.** Ensure that the format of all communications is geared to the device on which they will be accessed so that material displays quickly and cleanly.



Conclusion

Given the regulated nature of clinical trials and companies’ investment in seeing that they are successful, sponsors and CROs have naturally tended to “stick with what works” in recruiting patients. Unfortunately, what used to work no longer does. Recruitment rates are slipping, and the associated delays in enrolling patients cost companies millions. However, new approaches are available to recruit patients and caregivers online—where they can be found quickly, easily, and globally. While e-recruiting may be new, it is not unproven; ample success stories already exist, demonstrating that with the right strategy, enrollment targets can be met cost effectively.

Social Media Explained

With a nod to the creators of the “Social Media Explained, Donut Style” list, we offer a health-related version:



For more information, please visit inventivhealth-ict.rs.com.