Patient engagement is a ubiquitous concept in the orphan disease space, yet researchers are still vetting methods to implement more broadly based, efficient, and innovative interactions with patients and caregivers across the R&D spectrum. A wealth of potential engagement mechanisms have been suggested throughout the lifecycle of a potential therapeutic, highlighting both opportunities and challenges that can transform the R&D process (1-2).

Changing the Conversation

What motivates someone to participate in a clinical trial? Enabling trial participation may require a fundamental shift in the way the pharmaceutical industry traditionally views the clinical trial process, changing the language commonly used to describe concepts such as patient recruitment and retention by adjusting the frame of reference to emphasise patient engagement. It is the patient’s journey, not the destination, that must take centre stage when a more strategic, rather than transactional, mandate is needed.

Inspiring patients to take action starts with understanding how they make sense of their illness. This is not the same as knowledge of a clinical disease presentation; rather, it is recognition of how patients and their families live and experience an illness in their daily lives. It is discovering how their illness influences their social and emotional needs, intersects with their values, and affects their quality of life, goals, and expectations for the future. To truly engage patients in a participatory research model, they must be fully appreciated and supported throughout all phases of the clinical trial journey – from program design through execution and into commercialisation.

Investing in Patient-Focused Relationships

Acknowledging the tremendous impact that providers, families, and advocacy groups have on clinical trial participants is important. Each stakeholder views clinical trial study participation and the resulting data through remarkably different prisms. If engaged properly, these groups can become key allies in the efforts of researchers, sponsors, and CROs. The following are a few ways to foster beneficial relationships with each.

Providers
Trust is a crucial factor in the patient/provider relationship. In fact, some studies show patients are more likely to engage in a clinical trial when treating physicians advocate it, accentuating a common concern regarding therapeutic misconception (which is a ubiquitous problem in oncology research and in other life-threatening diseases) when the patient’s physician is also the patient’s investigator. For example, the 2017 Public and Patient Perceptions & Insights survey conducted by the Center for Information and Study on Clinical Research Participation revealed that 84% of respondents would consider participating in a clinical trial if their physician recommended that they do so, and, therefore, appropriate messaging in the process of acquiring an informed consent becomes mandatory (3).

To enable a more effective interaction between patients and providers, further education and training that is specifically tailored to each study for site staff has proven to be advantageous. Site communication, particularly through key opinion leader interface, is especially important when study conduct is enmeshed in an environment of rapidly changing standards of care, which present a mosaic of confusing possibilities for patients and their caregivers. Communication should include working with staff at study sites to identify and pre-emptively navigate through potential trial encumbrances such as organisational or staff changes, the adoption of new standards of care, or the launch of additional studies with novel therapeutic entities, which present patients with a confusing array of new therapeutic concepts.

Family/Community
The influence of immediate family, extended family, and other social networks on clinical trial participation is significantly modified by culture, language, and commonly accepted perceptions regarding standards of care. Within some cultures and ethnic populations, the viewpoints of the patient’s family factor heavily in life assessments, and obtaining a patient’s perspective independent of the immediate family might prove difficult.
Creating an effective engagement strategy depends on building relationships that lead to a better comprehension of patient motivators.

For example, during one diabetes clinical study, the productive distribution of materials among members of a Hispanic community primarily occurred because outreach happened through churches, hair salons, drug stores, and other locations where family and friends socialised. In instances where treating physicians did not speak Spanish, these family and community advocates often played a more influential role in patient engagement than the physicians. Conversely, cultural dynamics challenged one breast cancer study in India, where women traditionally need the permission of men in their families to make healthcare decisions.

If the disease being studied has a known genetic component, a patient’s family sensitivities may become more immediate in the process of confirming a diagnosis. The impact of genetic testing on enthusiasm for study participation by patients and family members has been thoroughly examined in conditions such as Alzheimer’s disease. Altruistic motivators may spur family members’ participation in a trial if they believe it might one day benefit their children and grandchildren, and this phenomenon is frequently encountered with elderly patients, who additionally perceive the possibility for camaraderie with other individuals with similar disorders as a motivation. For many, the opportunity to become part of a study is embraced as a path to turn hard personal circumstances into a widespread advantage through the advancement of medicine.

However, even altruistic drivers are fraught with subtle variation. For example, one particular study revealed that altruism was the most common reason for clinical trial engagement among cognitively normal or mildly impaired Alzheimer’s disease patients. However, this finding did not hold for those Alzheimer’s disease patients with dementia. Among that population, ‘personal benefit’ was the most common reason stated for participation. Such revelations illustrate the detailed degrees to which engagement strategies must be refined and how patient demography, family dynamics, and disease severity can shape motivation for participation in research.

Advocacy Groups

No single sponsor, CRO, or provider organisation possesses deep methodological expertise in all diseases. Recognition of the limitations and unique insights that exist across all participating parties has served as a genesis for the creation of ‘matrix’ teams composed of stakeholders with varying levels of expertise, each providing singularly unique contributions. That is why collaboration with advocacy groups is imperative at the earliest stages of strategic program design to acquire insights that are material to study efficiency and sensitivity.

Patient advocacy groups exist for almost every indication and can provide extensive support for a clinical program they believe may potentially benefit their members. They offer not only a means to disseminate information throughout close-knit physical and online communities, but also deep insight into their members’ daily lives with the type of data that would materially affect study participation. This insight enhances compliance with innovative therapy and facilitates collection of diverse measures required to define the overall impact of therapy. Patient advocacy groups can teach sponsors how to ‘talk the talk’ with their members in relevant, relatable ways. Their participation can enhance the visibility of commonly cited activities, such as walks and conferences, and ultimately contribute to an assessment of benefits and risks from the perspective of the end-user.

Not all advocacy groups within the same indication share a common business stratagem, and participation for an individual organisation might be best in one phase of development, as opposed to another. When multiple organisations that represent a particular clinical indication exist, sponsors must perform due diligence to identify which of those groups possess appropriate leverage and alignment of purpose. Conversations and outreach must then work in concert to build genuine, trusted relationships across the development continuum. In a participatory research model, that might include enlisting the help of different organisations at different stages of development.

Engaging Through Every Phase

Creating an effective engagement strategy depends on building relationships that lead to a better comprehension of patient motivators across the development spectrum. Participatory research models begin with the investigational new drug application, extend through the development process in terms of enhancing patient awareness, patient accrual, and study retention, and assume a differentiating role as investigational products transition into commercial use. For example, advocacy relationships can create opportunities to conduct focus groups for protocol development, including the identification of end points that are appropriately tailored to how a patient feels and functions. Patient engagement strategies can be tested against the opinions of patients through a Delphi process.
in which different options regarding an overall strategy are vetted prior to implementation. The benefit this brings is an early assessment – and proactive reduction – of strategic and operational risk factors.

What are patient advocacy perspectives on protocol design and assessments, particularly visit structure (the number of visits in the planned study), visit density (the number of assessments per visit), and the proposed sequence of measures within visits? Advocacy groups are typically quick to point out when clinical studies are incomprehensibly written from a patient’s perspective, advance unrealistic expectations of patients affecting compliance, or include other design elements likely to be associated with study failure.

Ultimately, a successful protocol is built pragmatically around study participants. It affirms what patients and families deal with day in and day out, and its design is attractive enough that patients are enticed to volunteer their time for the study duration, particularly in a complex R&D environment characterised by access to multiple conflicting innovative therapies. In fact, a design that accommodates support services increases the likelihood of long-term patient and family engagement. Some ideas include:

- Reducing site visit requirements: the travel demands posed by a clinical trial could prove overly burdensome to patients and their families, especially if site visit travel is frequent or long distance or if patients’ mobility is limited. One avenue for sponsors to ease this burden is by enabling home nursing assessments whenever possible. Increasingly, industry conversations have begun to highlight the potential value of appropriately constructed ‘at home’ versus ‘within clinic’ assessments, acknowledging that some assessments by the virtue of their complexity and specialised training required for administration must be completed within clinic.

- Leveraging technology: wearable, clinical trial-grade devices may be used in some instances to monitor patients’ vital signs, such as respiration, oxygen saturation or heartbeat, spontaneous movement throughout the day, or aspects of sleep architecture. Relevant to all device usage, either within home or within clinic, common considerations include data collection procedures and parameters, data processing and analysis, and the overall placement of the data in the context of other information that would be collected.

- Managing visit complexity: when site visits are necessary, the number of assessments and the sequence throughout the clinic visit become key determinants of patient compliance and data validity. Some tasks are more physically or cognitively demanding, while others are less so. However, all tasks are important, so multidisciplinary team involvement should be calibrated throughout the day to create a meaningful patient/family experience rather than an arduous physician visit.

- Offering transportation assistance: sometimes patients lack the means to travel, an impediment that is accentuated if the patient is experiencing physical and cognitive limitations. This barrier to study participation can often be overcome by arranging the use of convenient transportation services (such as Uber or Lyft), reimbursing some travel expenses, or, increasingly, using concierge services that provide a unique overall patient experience by managing all aspects of logistical demands associated with study participation.

- Addressing employment/school concerns: clinical trials may require time away from work or school, either because of personal involvement in the study or because a friend or family member that is instrumental to patient care and study participation needs assistance. Investigative sites reduce the burden of absences from school or employment by adhering to a rigid discipline regarding the timing of visits, duration of visits, flexibility of appointment times, and assistance with employers and school officials regarding notification for absences (consistent with privacy requirements).

- Arranging for dependent care: most frequently, patients exist in a family unit where there are other members or pets who are dependent on caregivers. Providing a service that attends to the needs of other family members and pets during the patient’s study participation can be a differentiating variable.

**What Is in a Word?**

At every step of the clinical trial process, from education and awareness to engagement and retention, all communication must accurately echo the patient voice. Words and imagery should be carefully chosen to resonate with the population, remaining consistent with ethics committee and investigational review guidance, which is applicable for all patient-facing information.

This starts by creating a ‘language of engagement’ and a visual identity for each study that evokes a positive emotional response. Giving a study a name, logo, and visual identity not only makes it easier for patients to remember and recognise, but also helps ensure all education and communication is consistent and familiar. The use of patient-centric language customised to the local culture further supports patient preferences and engagement.

The informed consent conversation should be especially patient-focused. Rather than approach consent as a check-the-box legal document, it should be viewed as an opportunity to help patients and families truly understand what will happen and what will be expected of them during a study, including regulatory-mandated parameters that must be explicitly presented. Consider creating a short video or...
flip-chart that explains everything in lay terms, using familiar language consistent with the terms the sites are using to educate and speak with patients.

Once patients have enrolled in a study, ongoing communication remains vital for keeping them informed and engaged. Tailored interactions with study site staff in particular are highlighted as one of the most critical factors in ensuring an overall positive study experience. For example, researchers may be able to improve retention rates by supplying both provider sites and patients with educational guides replete with study details. Sponsors and CROs may want to work with advocacy groups to decide the most appropriate data to disseminate across social media, which can facilitate, rather than encumber, the clinical trial process. This is well within the framework of regulatory guidance that exists for that level of engagement.

A similar collaborative effort can also be used to determine how to translate study data into meaningful information at the time of study conclusion. This process can enable effective and clinically responsible messaging and patient access, placing potential benefit in the context of known risk. Additionally, as an investigational product transitions into commercial use, advocacy groups and families who are aware of a drug’s potential opportunities may use their voices at the regulatory level to promote access to the drug after approval.

Tactically speaking, digital technology can operationalise and centralise these communications. Websites and online portals can convey study updates and FAQs, offer newsletters describing R&D or commercialisation activities, and distribute other information to patients and sites. The use of online tools, such as social media, forums, and blogs can be paired with geotargeting capabilities to increase study awareness. Referrals attracted through such digital outreach can then be prescreened via a study-specific website.

Reminders and other information sent to patients by email or text message can help them keep track of appointments and know what to expect. Some studies even build communication ties with patients by leveraging tablet computers preloaded with information and entertainment that can be used while at home or during travel to sites.

No matter what technology is used to communicate, one measure of the success of a patient engagement initiative is that it accurately and empathetically connects with those who are on the receiving end of the process.

**Transform the Study Experience**

‘Patient-centred’ and ‘consumer-driven’ is the language of healthcare today, and it reflects an increasingly knowledgeable, collaborative responsibility that patients are assuming to manage a wide range of conditions and diseases. To win patient participation and the invaluable contributions that will inevitably accrue, clinical trial stakeholders must be prepared to engage them fully.

Protocol development, facilitation of research networks for patient accrual, advocating and influencing changes in regulatory guidance, and assistance in the interpretation of clinical trial data are all part of the mosaic of patient engagement activity. Partnering with advocacy groups, providers, and a CRO experienced in innovative approaches to patient and family engagement can help achieve timely, effective results. Now, more than ever, successful R&D starts with the voice of the patient.

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