Q&A:
Oversight Committee Member and Clinical Research Awareness & Access Initiative Leader, Paulo Moreira, tells us about one of TransCelerate’s latest initiatives

Can you give us an overview of the Clinical Research Awareness & Access Initiative?
This initiative seeks to make clinical trial information, data and participation more transparent, more accessible and overall, more patient-friendly. As our work progresses, we will look to define and measure the experience of and burden on patients as a result of their participation in clinical trials.

What was the thinking behind TransCelerate launching this initiative?
Execution of successful clinical trials have long struggled with patient recruitment and retention, and efforts focused to address these issues have often overlooked a key objective: bi-directional engagement with patients. A big part of this is the fact that clinical trials have historically been a “black box” of complexity to prospective, current and past participants, and frequently to the general practitioners working with them as well. We want to help answer common questions that arise in the context of a trial, such as: What are clinical trials and what value do they provide? How do I go about learning more about them? After participating in a trial, how do I know it was a success?

Why now?
Patients are the single-most important stakeholder in the clinical development ecosystem, so there is no better time than now for our Member Companies to work together to develop solutions that center around the best interests of the patient. Clinical Research Awareness & Access is a pursuit that our Member Companies are all individually working toward; through TransCelerate, we can now work towards addressing those unmet needs with a collective approach.

Clinical trial recruitment and participation has been a historical struggle in drug development. How will the initiative improve trial participation?

We also considered the public’s evolving expectations around information accessibility and measureable experiences, as well as the digital tools and applications that provide access. Today, these evolving expectations naturally impact patient’s decision making process when it comes to joining or continuing a clinical trial, so we as an industry must be armed with the tools to address these needs.
What we have observed is that patients and the general public are not completely aware of clinical trials or educated about clinical research. Patients who are aware and proactively look for trials of interest are often unable to do so because the information is either not readily available or incomplete. The reality is, only a small fraction of those who could participate in clinical trials actually volunteer to participate.

For patients considering participation, there exists an issue of access. We must ask ourselves: can patients access readily-available information? Is that information presented in an intuitive and friendly manner? Is information available at all stages of clinical trial participation? Are we keeping the patients up to date on their own progress as well as the progress of the trial? It is our duty to ensure that they are making an informed decision when they join, and that they are staying informed throughout the trial lifecycle.

Patients give us an enormous privilege when they participate in our trials and lend their bodies to advancing medical science. They deserve to know the extent and impact of their contribution. Our belief is, if we can make it easier to access trial information, create an environment by which the patient is engaged throughout the entire experience, and create an infrastructure that is attractive and engaging to patients, we are likely to bolster participation, increase trial outcomes and ultimately, deliver quality medicine to patients.

The initiative aims to make clinical trial information and data more transparent and patient-friendly. Can you explain how the team will accomplish this? What will information delivery look like?

Currently, we are evaluating a variety of options to deliver trial information. It is imperative that we understand similar efforts others have made in this area, so that we can build on that progress, as well as avoid duplication of effort. Taking the example of today’s major trial registries: search/navigation to a particular trial is cumbersome, and the resulting details on that trial fail to provide an adequate picture of what it’s actually like to participate in the clinical trial. This is a clear opportunity for improvement. We believe there may be an opportunity to impact the creation of a more accessible interface which returns results to patients based on personal circumstances, priorities and preferences, and with the resulting trial overviews providing measurable details on the patient experience. Taking this a step further, we believe a consistent format by which to portray this information, so that, for example, patients can easily pull it up on their mobile device and review it with their physician during a visit. These are the types of ideas that this Initiative is contemplating.

Can you discuss the outputs/assets that the Initiative plans to release?

This Initiative was approved by the TransCelerate Board of Directors in December of 2015 and as part of our kick-off meeting in early 2016, we collectively discussed areas of greatest need and are focusing on four initial assets that will provide a foundation for influencing Clinical Research Awareness & Access over the long term: (1) a “Trial Awareness Story” that can be distributed across multiple channels and aims to increase awareness of clinical research and associated benefits; (2) a phased approach to improve access to clinical trials with an initial focus on improving existing trial registry tools; (3) a framework for measuring the patient experience in a trial; and (4) a proposed approach for the delivery of information to patients before, during, and after trials, using direct patient input on what is most meaningful to them.
The Latest

RBM Initiative Updates

RBM Update: Detecting Data Quality Issues in Clinical Trials

Reliable study results and quality data are crucial for evaluating products for marketing approval and for the decisions that are made on the use of medicine. The TransCelerate RBM Initiative conducted a survey to collect information on current strategies that participating Member Companies are employing to detect and mitigate risks in clinical trials such as fraud, misconduct, intentional or unintentional noncompliance, and significant carelessness.

The results of the best practices survey suggests that institutions may benefit from integrated, multifaceted approach to proactively detect data quality issues. This risk mitigation plan should be tailored to the specific characteristics of the study to ensure the highest degree of targeted analyses, and may include the use of advance technology to more efficiently review data in real time.

The full methods and conclusions of the research can be reviewed in this paper, which appeared in Therapeutic Innovation & Regulatory Science. The paper asserts that early detection of data quality issues is important so that corrective actions taken can be implemented during the conduct of the trial, recurrence can be prevented, and data quality can be preserved. In addition, the article lays the groundwork for focusing on statistical monitoring of data throughout a clinical trial.

RBM Update: Statistical Monitoring for Risk Mitigation

In the article, “Statistical Monitoring in Clinical Trials: Best Practices for Detecting Data Anomalies Suggestive of Fabrication or Misconduct,” also appearing in Therapeutic Innovation & Regulatory Science, the RBM Initiative focuses on risk mitigation and highlights results from a research project that tested statistical methods used for detecting implanted fabricated data and other signals of noncompliance in clinical trials. The authors outline some approaches that sponsor companies can adopt regarding the use of statistical monitoring to help companies identify data anomalies that may need further investigation or monitoring. You can review the research findings here.

Further research is currently underway to gauge statistical data quality detection methodology in clinical trials, so stay tuned!

RBM Update: Best Practices for Risk Indicators

TransCelerate believes that the identification of Risk Indicators is key to a holistic and successful risk-based monitoring plan. Risk Indicators are metrics used to monitor identified risk exposures over time, which can help clinical trial sponsors understand the assessment and management of risks, and evaluate site performance and data quality. TransCelerate coalesced their research and recommendations around the use of Risk Indicators through the creation of a Risk Indicator Library, which includes more than 140 unique measures of risk in a trial. While TransCelerate Member Companies are continuously working to identify the optimal number of risk indicators, we have observed that the preferred number of risk indicators in any given trial is between 15 and 25.

Further, the value of Risk Indicators in the library has been classified into various categories such as relative value, core vs specific, level of scrutiny and frequency in order to guide sponsor companies. The Library is really a baseline for understanding what TransCelerate Member Companies are currently using to conduct central monitoring, and can serve as a starting point for companies new to RBM.

Future work on Risk Indicators will likely center around common themes such as identification of data integrity and trial misconduct, as well as the ability to aggregate risk at different levels such as country, region and trial. We also hope to identify new Risk Indicators as technologies and risk assessment methodologies evolve.

For more detail on the formation of the Risk Indicator Library, as well as best practices and future application of Risk Indicators, check out our research paper, “Defining a Central Monitoring Capability: Sharing the Experience of TransCelerate BioPharma’s Approach, Part 2.”
Drug development is fraught with uncertainties, not least of which is the likelihood of a successful drug at the end of the process. That said, we are at the cusp of turning some very elegant science into some very amazing drugs. A number of diseases that were untreated or severely life limiting just a few years ago have very viable options for those patients. In some cases, the science has evolved so substantially that it has led to cures in previously hopeless diseases. What has not evolved as rapidly as the science is the process for drug development. It is still lengthy, complex and the costs continue to rise. It is true that any evolution in the drug development process needs to be accompanied by an evolution in regulations, but all too often the regulatory environment has become an excuse to avoid change. Many future innovations will need accompanying changes in regulations but there is still plenty of room for disruptive innovation within the current regulatory boundaries. For us to truly benefit from the science revolution, we have to do more with less. Beyond the indisputable power of well-structured and well-governed industry collaborations such as TransCelerate, here are some additional areas that could significantly impact and disrupt the drug development status quo:

Harnessing the Power of the Engaged Patient

At the very center of every clinical trial is a patient who has volunteered their precious time to participate in a trial. Sometimes they do this despite the trying personal circumstances they may be in. We know that many of these patients volunteer to participate because they want to help advance the science of the disease/condition and help other patients in the future. To date, I am not sure we have truly tapped into that powerful altruistic desire patients have. The modern patient is vastly more engaged in their health care than they have ever been. Much of this change has been driven by availability of information that was previously not accessible. In clinical trials however, we have not fully harnessed the power of an engaged and informed patient. We have so much to learn by simply listening to patients and incorporating their insights. Clinical trials are only now starting to involve the patient from inception to conclusion and beyond. We need to improve patient participation and retention rates, as well as patient compliance. Social and digital tools to truly communicate with patients before, during and after participation in a clinical trial exist today and are improving rapidly. It is only when we proactively bring the engaged patient into the process, increase their awareness and access to clinical trials, involve them early on, and as partners share their individualized study results with them at the end, will we give patients a better clinical trial experience, and break the current low recruitment and retention issues that plague so many clinical trials. The future of clinical trials will be brighter if we can tap into the potential of the ‘engaged patient.’

Embracing Technology Innovations

The drug development industry, and particularly the clinical trials industry, is not the most adaptable and it is significantly risk averse. As such, technological innovations in mobile, social, cloud and massive analytical data that have been readily adopted in other industries are only now getting the attention they deserve within clinical trials operations. Along with some of the technology companies familiar to us in drug development, some of the best known and largest technology companies such as Google, Apple, Samsung and IBM have very specific targeted healthcare and drug development areas to invest in. These companies are innovators who are not encumbered by our self-imposed shackles. They can, and will truly disrupt this space in a very short timeframe. The drug development enterprise can watch it happen around them or become enthusiastic participants, who embrace the inevitable change.

Maximizing Data Collaborations

There is enormous power within data. Biopharmaceutical companies have vast troves of data within their own institutional confines. Generally, no one company has sufficient data to make a substantial difference to its R&D efforts. However, if this data is pooled across companies in smart ways and without compromising intellectual property or patient privacy, it has the potential to transform R&D for preclinical and clinical research. It also has the ability to generate significant benefits for patients in the form of better trial design and increased safety. Data sharing initiatives already exist such as the C-Path Online Data Repository (CODR), the Project Data Sphere platform and various other organizations sharing data around major diseases. TransCelerate has a substantial data sharing project for Placebo/Standard of Care (PSoC) data that has been anonymized, pooled, and shared across its membership and BioCelerate has a similar initiative to share toxicology data among its membership. The TransCelerate PSoC project is already yielding very substantial benefits to its membership by reducing the number of patients in the control arms of some studies and in one case entirely negating the need for a planned observational study. We are just scratching the surface with shareable data and the potential for benefit to patients, sponsors, sites and regulators is going to be a game changer.

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The Holy Grail - EHRs for Clinical Trials

In recent years, the ever-increasing use of electronic health records (EHRs) in patient care has also given rise to a potentially powerful role supporting clinical research. Just last year, the FDA issued a notice expressing interest in EHR demonstrations in streamlining and recording patient data in a clinical research environment. In addition, Allscripts, athenahealth, Cerner, drchrono, Epic and McKesson announced that they will pilot use of open, standardized APIs and other methods to give individuals the ability to contribute their data to research as part of the Precision Medicine Initiative. These “Sync for Science” pilots will demonstrate a new model of patient-enabled research, giving patients’ access to their individual electronic health records through APIs, and diffusing the research data.

Merck has particularly embraced the concepts identified in the Clinical QMS Initiative. This has unleashed a model of more efficient operational processes to support R&D. Merck has observed improved collaboration with sites, as well as faster study start-up times.

While a lack of interoperability and difficulties in user-friendliness have impacted existing EHR technologies, the potential benefits, particularly for patients, are too great to ignore. Just imagine a world where clinical research data within EHRs were directly accessible, without all the expensive middleware of people, systems, and all the other processes in-between. When that happens, we could truly realize the dream of end-to-end data flow. This may take some time and will involve some significant technological, regulatory and process challenges, but the change is inevitable.

Merck is also working to implement TransCelerate’s Risk-Based Monitoring (RBM) methodology in their clinical trial risk assessment process. Lee believes that this Initiative’s aim to more proactively, holistically and digitally approach monitoring will have significant impact on both data quality and patient safety. The Quality Management System is another initiative that is contributing to the quality of work in Merck’s clinical trial enterprise. Merck has embraced many of the concepts identified in the Clinical QMS Conceptual Framework whitepaper (insert link) and implemented them in the GCP Quality and Compliance Council oversight committee that Lee co-chairs at Merck. Risk assessment, senior leader engagement, Training curricula review, SOP oversight, escalation, Issue management and knowledge sharing are all key elements of the Merck GCP Quality and Compliance Council remit.

“I could go through each one of TransCelerate’s initiatives and say how each one has potential to improve operational efficiency, improve the quality of our work, and most importantly, improve safety of patients in the field,” said Andy Lee. “Merck’s R&D strategy is enhanced by the work we do with TransCelerate.”
What efforts have been made to improve the investigator site experience?

Since we initiated our work in 2012, a core strategic objective of TransCelerate has been reducing administrative burden historically felt by investigator sites during a clinical trial. Our thinking was, once these burdens are reduced, study start-up times are shorter, and site investigators can focus on what matters most – treating patients. We believe one of the keys to improving clinical development is streamlining the way that sites and sponsors interact during a clinical trial. To enhance that interaction, we have created solutions such as a framework for mutually recognized Good Clinical Practice (GCP) training, as well as the Shared Investigator Platform (SIP) and Investigator Registry.

How will the Shared Investigator Platform improve communication between sites and sponsors?

In the past, communication between sites and sponsors are often lost in redundant loops as multiple sponsors will ask investigator sites for information that mandates the creation of new forms and content each time. This can drain precious time and resources that could instead be allocated toward patient care and research. To address this inefficiency, TransCelerate, in partnership with several key stakeholders, developed the Shared Investigator Platform (SIP), a platform that allows clinical trial sites to interact with multiple participating clinical trial sponsors through a single access point. Sites create user and facility profiles, and that information can be reused everywhere within the platform, which decreases redundant requests by various sponsors for the same information. For example, sites can enter data such as credentials and training history and it is made available to all participating clinical trial sponsors at that time, and for reuse in future studies. SIP’s initial release enables sponsors and sites to interact in a more seamless, simplified way, and our team is now working on additional functions for future releases that will further encourage efficiency in clinical trials.

Have something you want to ask us? Submit it here! We will continue answering your questions in future newsletters.

How does TransCelerate’s collaboration with CROs benefit the investigator site experience?

Contract Research Organizations (CROs) often play a prominent role in clinical trial operations, working with sponsors and sites to move the needle on drug development. Through collaboration with the Association of Clinical Research Organizations (ACRO), a CRO Forum has been established to provide a formal mechanism for the CRO industry to deliver input into TransCelerate efforts. The CRO Forum operates with three objectives in mind:

Knowledge Sharing:
• Create a mechanism to share TransCelerate content with CRO Forum members
• Solicit CRO feedback to improve TransCelerate materials

Pilot / Flexible Implementation:
• Share TransCelerate pilot learnings with CROs

Design:
• Solicit CRO Forum input to the design of upcoming TransCelerate educational materials

The information gained through these efforts are then shared with the TransCelerate Initiatives that would most benefit from CRO input. This list of initiatives includes:

- Common Protocol Template
- eConsent
- Quality Management Systems (QMS)
- Risk-Based Monitoring (RBM)
- Shared Investigator Platform (SIP)
- Site Qualification & Training (SQT)
TransCelerate leaders and Member Companies are invited to participate and present at many biopharmaceutical research industry conferences and meetings across the globe to provide a perspective on industry challenges and clinical trial issues. Take a peek at a few places we will be presenting this year. For detailed information on speaker presentations, visit the events page on the TransCelerate website.

**DIA China 8th Meeting**  
**May 15, 2016**  
Beijing China

**DIA 52nd Annual Meeting**  
**June 26, 2016**  
Philadelphia, PA

**Asia-Pac Site Solutions Summit**  
**July 14, 2016**  
Melbourne, Australia  
The Melbourne  
Cricket Ground

Check Out Our Greatest Hits from Q1 2016

@TransCelerate: “Checkout coverage of our #SharedInvestigatorPlatform launch from @NickPaulTaylor @ FierceBiotech: [http://bit.ly/1nw0DBV](http://bit.ly/1nw0DBV)


@BioWorld: “TransCelerate Biopharma starts newco to explore preclinical toxicology data [http://bit.ly/1SKc3z3](http://bit.ly/1SKc3z3)

@HealthBizBlog Collaboration in pre-clinical & clinical development: interview w Dalvir Gill @TransCelerate [http://buff.ly/1U71si3](http://buff.ly/1U71si3)

@pharmaphorum: “‘Data sharing is challenging the traditional #clinicaltrial model to bring about real change’ [http://bit.ly/1QtfEuq](http://bit.ly/1QtfEuq) @TransCelerate #pharma"

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