

Introduction

For device and IVD manufacturers, the potential negative effects that are predicted from the European Union's implementation of the new MDR and IVDR requirements (in 2020 and 2022, respectively) have been widely discussed. The shortage of notified bodies creating bottlenecks in device approvals, the added burden and cost of meeting additional clinical data needs, and the potential for much needed medical devices coming off the European market are just a few of the challenges presented with this shift in requirements. It will no doubt be a difficult and costly change.

But in a broken system that witnessed the Poly Implant Prothèse (PIP) breast implant scandal in the 1990s, wherein approximately 30,000 women were implanted with a PIP breast implant that was fraudulently filled with industrial-grade silicone instead of medical-grade silicone, the changes may be considered long overdue.

In a June 20, 2014 press release, the European Commission stated, "The PIP scandal made it clear that immediate improvements in the oversight of medical devices were needed." More ongoing clinical evidence and transparency may work to rebuild physician and patient trust in a system that is in place to safeguard consumers of medical devices. Dr. Norbert Clemens adds that "One of the key objectives of the new MDR is to ensure a consistently high level of health and safety protection for EU citizens using these products." (Clemens, 2017)

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To navigate the complexities of this new change, companies are understandably turning to outside organizations for guidance and support, and organizations have released helpful resources to decipher the new requirements. So what do companies need from their CRO to ensure a good fit for assisting with the MDR and IVDR transition work?

The following six characteristics should be considered as a minimum set of requirements:

1.	KNOWLEDGEABLE
2.	CONNECTED
3.	CREATIVE
4.	SUPPORTIVE
5.	INNOVATIVE
6.	CALM

1. Be Knowledgeable

A CRO should be well-versed about the true requirements of the new regulations and be able to provide guidance. By keeping a pulse on policy interpretation, evaluating and analyzing industry responses, keeping abreast of the status with each notified body, and determining best practices, a strong CRO will be well-equipped to guide companies through the process.

Even more so, by having a broad understanding of the global landscape, including FDA guidance on the use of real-world evidence and real-world data to support regulatory decisions, a partner CRO can help design a global strategy so that efforts being put forth to meet requirements in one region may be leveraged to meet requirements in other regions as well.



2. Be Connected

If nothing else, the new MDR and IVDR requirements have forced the realization that implementation takes a team effort that includes regulatory, clinical, manufacturing, marketing and executive teams, among others. Development of regulatory, device lifecycle and portfolio management strategies is a complex undertaking, and being able to pull in outside expertise when needed is essential.

With products and product lines needing to be re-prioritized, delayed or pulled off the market completely, expert insight provides clarity in confusing situations. Companies will need to examine their portfolios and pipelines, conduct gap assessments of their existing clinical evidence, and scope out possible strategies to gain approvals after MDR and IVDR go into effect. Marketing claims will be a key area of focus to determine if new data need to be generated or if existing data can be tapped. Strategists leveraging a global understanding of regulatory requirements and clinical options will be crucial to weathering these changes.

3. Be Creative about Clinical

Additional and ongoing clinical evidence requirements are perhaps the most onerous of the new MDR and IVDR stipulations. Reclassifications of devices will now require most devices to produce or generate more clinical evidence to gain approval. Grandfathering is not an option, and establishing equivalency to predicate devices will be more difficult. Devices that did not previously require data now do. Devices that did require data now require more. Post-market clinical follow-up now requires more attention, planning and resources to execute. Data needs to be sufficient to prove ongoing safety and effectiveness for the indications for use specified in the labeling. Everything will be driven by these claims and indications.

Multiple options can be leveraged for data collection such as registries, literature review, retrospective studies and multi-center or single-center prospective studies. A CRO should have full service and flexible service offerings to meet the complex needs of new clinical and post-market follow-up plans. Creativity comes into play in looking at each device in the pipeline to determine the strategy for obtaining “sufficient” data to meet MDR and IVDR requirements. While the expectation for clinical evidence has grown, the intention of these requirements is to improve device quality, safety and transparency for patients. A creative CRO will help manufacturers connect these requirements to their business strategies and clinical research plans.



4. Be Supportive of Sites

Inevitably, the increased demand for clinical data will have a downstream effect on already overworked and under-resourced clinical research sites or alternatively, will require tapping medical practices that have never conducted formal clinical research in the past. Collecting clinical data is a complex process, so thoughtful planning with a CRO partner that understands how to support sites of all abilities is important. Being able to discern the needs of the different sites and support them accordingly will be critical to forging a successful long-term relationship that support companies' clinical evidence needs while protecting the well-being of human subjects.

For experienced sites that simply lack resources, remote data collection and entry support coupled with risk-based monitoring could be a strategy that leads to the acquisition of cleaner data faster. Leveraging electronic medical records for the collection of post-market data and real-world evidence, for example, is an efficient way to quickly collate the needed data. For the research-naïve sites, guiding them through compliant processes that meet regulatory authority expectations and follow good clinical practice may require more hands-on training, support and closer monitoring to yield similar results. A CRO partner must be flexible and able to provide customized solutions to support sites that have the needed data.

5. Be Innovative in the Integration

Managing the collection of data that enters a company through various departments can be daunting, but with these new MDR and IVDR requirements for ongoing collection of clinical data (and making decisions based on risks, safety and use data), having a streamlined process is essential. Clinical, regulatory, marketing and quality teams must readily share information according to well-designed risk management and quality management systems.

Integrating the communication flow and processing of safety information could help inform future strategy for ongoing clinical data collection and could be used solely as, or augment existing, clinical data. Understanding how care providers use devices in their practices can inform pursuit of future claims approvals. A partner CRO should have an understanding of the company's processes and systems and be thinking of how their role may influence others. The CRO must be prepared to share updates at any time, request to be part of updates from other departments, and keep teams informed across functions.



6. Be the Calm

This change has not been easy, and for the foreseeable future it will continue to elicit negative emotions from most, if not all stakeholders in the medical device and clinical research spheres. The budget is being squeezed, internal tensions are high, and futures of companies are uncertain, so a CRO needs to be the coach that helps focus the team on the end goal and helps channel the emotions toward the positive. After all, the end result of these additional requirements is to better protect and serve patients. Having a partner that can be the calming force amid the chaos can steady the team to reach the finish line faster.

There is no magic wand to get companies to the other side of the new MDR and IVDR requirements without any bumps or bruises. This is and will continue to be painful in the near term. The looming uncertainty of Brexit and the shortage of notified bodies certified to the new standards means that no one has a perfect crystal ball, and these issues could complicate matters further. Partnering with a CRO that can draw on their knowledge of this process, pull others in when needed, think strategically about cost-effective ways to gather sufficient clinical data, support sites, work on high-level interdepartment integrations, and be the calm through all of the chaos, can help situate companies for success in this new and evolving landscape.

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Sandra Maddock, CEO

Under Sandra Maddock's leadership, IMARC Research was founded in 1999 to deliver high quality clinical research support services. From its infancy as a monitoring company to its position today as a leading full service medical device CRO, IMARC has grown significantly under Sandra's watch. Drawing on her experiences with coronary and peripheral stents, angioplasty balloons, combination products, orthopedic devices, endovascular grafts for the treatment of thoracic and abdominal aneurysms, wound care, neurovascular devices, and other types of investigational products, Sandra's "hands on" approach has become her trademark. While involved in all aspects of running a clinical research trial, she most recently lends executive-level coaching and guidance to study teams worldwide. She has served as a global auditor on large pivotal trials and has coached numerous study teams of all experience levels through the process of readying themselves for a regulatory inspection.

Prior to starting IMARC, Sandra gained valuable experience as a critical care nurse and cardiac research coordinator and has never lost her focus on the patients. She is a sought after speaker, founding member of the Northeastern Ohio Chapter of ACRP, and an approved provider of Continuing Education through the California Board of Registered Nursing. Sandra received her Bachelor of Science Degree in Nursing from Kent State University and her Masters Degree in Clinical Research Administration from George Washington University.



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