Risk-Based Monitoring: How do we get it right?

A Kinapse Position Paper
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“Risk assessment is embedded in GCP and is now a legal requirement, especially in Europe, so you have to do it. If you’re still thinking about how to introduce it, you may be at risk of being non-compliant”

Sherry Merrifield, Senior Director, Clinical Monitoring, Syneos Health

What is happening with RBM?

In November 2016, the International Council for Harmonisation (ICH) published requirements for clinical trial sponsors to develop “systematic, prioritised and risk-based approaches” for clinical trial monitoring or Risk-Based Monitoring (RBM). Clinical trial monitoring safeguards research participant safety, improves data quality and ensures protocol compliance and is a key part of conducting clinical trials.

RBM incorporates centralised monitoring (off-site examination of data collated by the clinical trials’ electronic data capture system and other data sources) and adaptive on-site monitoring (data examination and other activities conducted at the clinical trial site which are proportional to the risks associated with the clinical trial). It’s beneficial because it allows you to interrogate data quality early then take mitigating actions early if data quality is not good enough.

Despite being introduced over a decade ago and gaining favourable, sustained industry attention, RBM adoption appears to be lagging. An MCC survey in 2016 found that:

- 75% of respondents used RBM on a pilot basis or supported by centralised analytics
- 50% used RBM in pivotal trials
- 62% continued to use traditional 100% source data verification (SDV)

Kinapse and Syneos Health experience indicates that these numbers have only changed marginally since then and many organisations still struggle to realise the widely-socialised benefits of RBM.

To address this, the first question to ask ourselves is: “If RBM is required and it’s beneficial, why is it not being implemented effectively?” When we understand the barriers and issues, the next question is: “What can be done to establish RBM?” It is then worth bearing in mind that it will take time to establish RBM as it is a very different way of working and not just a new technology or dashboard. In the following sections, we have laid out the root causes for limited adoptions and some concrete recommendations to address them.

For most Biopharmaceutical companies, the value of a large investment, such as RBM, has been difficult to prove to senior stakeholders. Lawrence Florin, who has led RBM strategy and implementation projects, says “Establishing effective RBM requires cross-functional collaboration and a lot of work. Most people have their day jobs and the implementation of RBM is more work on top of that. The lack of senior management support communicates that the implementation of RBM is ‘not as important’, meaning less effort is put into implementation, making RBM less likely to succeed”.

A lack of investment in effective change management and training in new process and tools are the most common issues facing organisations implementing RBM. Patrick Hughes, CCO of CluePoints, a leading provider of RBM technology, says “RBM is not just about checking tick-boxes to be compliant. It is about understanding that this is actually the best approach to effective monitoring. It requires a fundamental mind-set shift to look at data differently via a new and improved process.”

Without this shift, ways of working do not change and the status quo remains. In other words, if you do what you’ve always done, you’ll get the same result and we know that less than 1% of data changes from traditional monitoring activities and 100% SDV. When done well, RBM should lead to the need for fewer but more skilled resources, and this is again a significant change. In addition, training to staff to develop new skills in data analysis is generally insufficient. Paulo Moreira, an expert in Clinical Operations Innovation, says “Study personnel need the ability to appropriately design risk assessments, mitigate identified risks, use new systems and tools, ask questions of a dataset, understand statistical analysis, work virtually and manage relationships remotely.”

We have identified 3 principle root causes that prevent implementation from happening as quickly as planned or expected:

1. A lack of proactive and visible senior sponsorship

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2. A lack of investment in effective change management and training in new process and tools

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Insufficient timeframes and benefit tracking as well as a reluctance to revisit “less-than-successful” implementations

Compounding this, most implementations suffer from insufficient timeframe and benefit tracking, and a reluctance to revisit “less-than-successful” implementations.

Many benefits of RBM, including data quality improvement, increased cross-functional collaboration, improved insights into patient experience, cost reduction, will only be recognised after RBM becomes “business as usual”, with buy-in from all stakeholders and dedication to continuous improvement. Slow and/or partial implementations won’t lead to the full benefits and further doubts that RBM is a worthwhile investment.

Risk assessment and proactive risk management is now embedded in ICH-GCP. If you are a company that is still thinking about how to introduce it, you may be at risk of being non-compliant. Moreover RBM is the gold standard and the right thing to do from an ethical and patient centricity perspective, thus Clinical Operations executives need to address these issues of adoption as priorities in their clinical execution strategy.
We have identified 6 critical success factors for successfully designing and implementing an RBM program:

1. Secure visible and real senior management sponsorship
2. Recognise that change management and cultural change start at program inception
3. Design fit-for-purpose processes
4. Leverage the right technology solutions and tools
5. Dedicate time and resources to truly build the capabilities needed
6. Reorganise job roles, career paths and organisational structures to simplify the ways of working
Secure visible, real and committed senior management sponsorship

“Program sponsors need to understand that it will take time and investment to get the RBM approach exactly right for their respective organisations,” says Sherry Merrifield, “so be prepared for the long haul.”

Ideally the sponsor should:

- Be the Head of Clinical Operations, Clinical Development or R&D
- Aim to implement RBM as one of their annual objectives
- Dedicate sufficient time every month to champion the program, troubleshoot issues, maintain momentum and ultimately help drive the program home.

A significant change management and cultural change programme starts at inception

RBM challenges the traditional view that the CRA is the monitor. It is now broader than this and the competencies needed have changed. Practically this means it is fundamental to:

- Select the right people to lead and work on the RBM program. They will need to be high-performers, who have the ability to influence the organisation through formal and informal channels. Ideally there will be a mix of early adopters, who desire the change, and a few “die-hard resisters” to ensure the design is thoroughly tested and realistic.
- Be unafraid of a longer than desired design phase to help smooth the implementation
- Utilise external expertise from outside the organisation to provide insight
- Articulate a truly compelling story for RBM

Design fit-for-purpose processes.

Organisations must ensure that the new ways of working should make it easier for staff to do their jobs, not harder. Use workflows to help staff understand what they need to do and when, analytics to help them gain insights and therefore understand what actions need to be taken, and a systematic approach to tracking actions to ensure they are completed. Processes should be integrated, driving the ability to get faster access to meaningful data. SOPs that are clear and minimised in length and overlap help drive easier adoption of RBM as they minimise process errors and inefficiencies. RBM is not simply another checklist or dashboard, it is about enabling critical decisions based on the data regarding the right course of action to follow.
It is critical to select the best tools that support new processes and not the other way around. Installing technology is not itself difficult. The key challenge is making sure the solutions selected properly align with the way you want to work, can be upgraded and improved and integrate with new systems in the future. Technology now allows access to trial data at least every day (as opposed to every 4-6 weeks) with capabilities in statistical analysis to help detect trends when they are “pre-risk”. Patrick Hughes paints a vision of what's possible right now:

“A lot of companies are doing RBM in some way, but it might just be on excel tracking so they can be compliant. Instead of pulling data in excel sheets, that will eventually be stored away, let the data live in a system that can learn from it. As the data continues to live in the system, the system uses machine learning to continue to evolve, making every iteration of the software’s functions better. As a result, data can continuously be used to develop more focused, more specific, more correct decisions.”

These will enable:

- Reading, prioritising and analysing complex data
- Identifying appropriate key risk indicators, their thresholds, and mitigating actions
- Building and maintaining relationships, influencing and resolving issues with stakeholders / partners.

Organisations must recognise that building capabilities requires significant time and investment. There needs to be a sustained training program with different competency levels, testing and a plan to recruit the required skills.

Organisations need to determine how activities can be collapsed down into a smaller number of job roles. This will depend on the capability gap in the current organisation and how fungible the workforce is. Special consideration will need to be made for the geographical footprint and operational logistics of the centralised monitoring group, for example, one co-located centre or regional hubs.
Many Biopharmaceutical companies have either not committed to RBM or are not getting the best value from their RBM investments. Now that RBM is a regulatory requirement, there is an imperative for organisations to make better progress in the adoption of RBM. The challenge is not conceptual or technology-related but one of will and process definition. Clinical Operations leadership need to sponsor, invest and drive change through their organisations in order to make RBM work to its fullest potential. For organisations that already have their RBM program/ways of working underway, Kinapse provides a health check assessment looking across three dimensions:

- RBM Processes, Systems and Tools: are they fit-for-purpose, comprehensive and user-friendly?
- Change readiness: are stakeholders ready to adopt and support RBM?
- Deployment: is the organisation prepared to effectively introduce RBM across the portfolio?
About Kinapse

Kinapse, a Syneos Health™ company, is recognised as a leading advisory and operational services provider to the global Life Sciences industry. Founded by professionals from the biopharmaceutical sector, the company provides its services across the full R&D and commercialisation life-cycle, collaborating with its clients to improve the lives of patients, through a unique Advise – Build – Operate delivery model.

19 of the global top 25 Life Sciences companies rely on the breadth of Kinapse’s world class advisory and operational services to analyse, implement and perform a wide range of projects and programs across global markets, delivering quantifiable business benefits and operational success.

Head-quartered in the UK, Kinapse has over 700 staff located in Europe, India and USA.

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