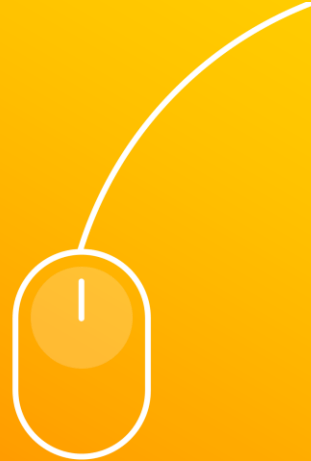hfma

NHS IT projects: common pitfalls and how to avoid them

May 2017

Background

The HFMA's Governance and Audit Committee has been considering governance issues relating to major IT projects in the NHS with a focus on how to avoid common pitfalls.

This briefing runs through some of the key 'pinch points' and is based on a presentation given to the committee by Geoff Mendelsohn, a partner at Philip Ross Solicitors. Geoff has been involved with a number of major IT projects where difficulties have been encountered and is keen to share his experiences with NHS practitioners.

The Group is extremely grateful to Geoff and his colleague, Nusrat Karmal, for making this briefing possible.

Introduction

NHS IT projects are regularly beset by problems at all stages in their development – from specification through to 'go live' and beyond. This briefing looks at common examples of the difficulties faced but is not designed to be comprehensive. For each issue covered, there is a brief explanatory note followed by a series of bullet points. We hope you find it helpful and informative.

External expertise

Organisations need to think about whether they have the necessary in-house expertise to let the contract themselves or if they need to bring in consultants. If they opt for buying in external advisers, they need to be qualified, experienced and suited to the project. If this is not the case, problems are bound to follow. Issues to consider include:

- Do we need to engage external experts/ support to advise us on a suitable system/ the implementation?
- If so, how do we go about appointing them?
- Do the advisers have sufficient knowledge of our service and relevant expertise to be able to advise on the proposed system/ project?
- Do the advisers understand our existing data and how it will 'map across' to the new system?

Buy in from stakeholders

The time allowed for developing tender documents is often too short to evaluate fully what stakeholders require. As a result, user issues are not identified until the testing phase by which point the project is well underway and difficult to adjust. Time invested at the 'front end' of a project is time well spent. Issues to consider include:

- Have we identified and engaged effectively with all stakeholders affected by the project?
- Does the project have the buy in from the necessary stakeholders so that change will be embraced and applied throughout the organisation?
- Will the project work for everyone affected by it? Without buy in, there is a risk that users are not going to accept the change.

The time allowed for the bid/ tender process

It is important to be aware of approval timescales and their impact on the contracting process. For example, if the contract requires Government approval, the process is lengthy. In some circumstances, a contract may be approved only shortly before the first milestone is due. This will put the supplier under excessive time pressure before work has even begun. Issues to consider include:

- What approvals are required and have we built in sufficient time to meet them?
- Do we have people with the appropriate skills in the team – if not, it may be difficult to be clear about the project in the time available.
- Are there any 'disconnects' or points of tension within the project team? For example, there can be personality clashes between individuals or teams which can affect the success of the overall project.
- For the supplier, is the bid led by the sales team? If so, the motivation is winning the bid and receiving commission. The sales team is not involved in implementing the system so who is road-testing/ stress-testing the bid?
- When is the signed contract passed to the implementation team?

The 'requirements gathering exercise'

Organisations are not always effectively served by the external advisers they have engaged and the challenge is to ensure that they are performing effectively at this stage – if not problems will surface later on. Issues to consider include:

- Who is doing the requirements gathering exercise?
- Will there be sufficient time to gain a thorough and rigorous understanding of our current and proposed system?
- If you have multiple disparate units over numerous sites, is there sufficient cooperation and understanding about what the project involves and what will change as a result?
- How many applications are being run and what are they?
- How many of these applications are critical to our organisation and to its different units?

- What data from existing systems needs to migrate and how will our organisation ensure that this happens?
- Is there going to be a 'requirements traceability matrix' – so that the achievement of requirements can be tracked?

The price

Whilst it is tempting to go for the cheapest option, particularly with budget constraints, the best contracts are those that are balanced between the customer and the supplier, and between expectations and requirements. If a supplier is under pressure on price, there is a greater likelihood that they will try to recoup money through change. Keeping the price realistic is key. Issues to consider include:

- Is the price realistic for the system that our organisation needs – or is it too low?
- Is the winning bid so low (objectively) that there is a risk that extra costs will be recovered through changes (with a cost impact)? If so, disputes are inevitable.

The specification

Problems can emerge if a specification is not signed off and the customer then requests additional functionality. The key is to make clear who is responsible for the specification – this should also ensure that clashes between the specification and an organisation's business processes are minimised. Issues to consider include:

- Who is responsible for the specification?
- Is the specification output based because our organisation does not have the 'know how' to describe in detail what it needs at the outset? This is high risk because the specification may meet the output but still not be accepted by our organisation – for example, it may involve changes to business processes
- Has the specification been signed off or has the supplier been obliged to start work 'at its own risk' to meet the first milestone?

The bid documents

The bid documents should be reviewed before being added to the contract to ensure they clearly outline the responsibilities of the parties involved. Often bid documents contain a great deal of 'puff' and advertising. Issues to consider include:

- Does your organisation want the bid documents to form part of the contract on the basis that they were part of the reason for the success of the bid?
- If so, do they contain binding obligations or do they need redrafting and tightening up?
- If the bid documents are in the schedules, have they been included as appendices or are they linked properly to contractual provisions in the agreement?

Change control

The volume of changes made to the specification - for example, to reflect a change in business requirements, should be kept to a minimum. If there are too many, the chances are the process for handling changes will be abandoned. This then leaves the specification in freefall. The key to effective change control is for an individual to be appointed by both sides to mediate when necessary. Issues to consider include:

- Is the change control process able to cope with multiple changes over short periods – for example, 2/3 per month?
- Is the change process over-engineered so that too many project members need to be involved/ it will take too long/ it is too complicated and not clear enough?
- If there are say, 2/3 changes per week, what is likely to happen? Is there a risk that the parties will dispense with the change control process – if so, there will be no baseline and the functional design documents / the specification will be in freefall
- Is there a clear critical path? For example, can a delay to the timeline caused by a given change be evaluated with a specific delay attributed to that change?
- What happens if there is a dispute over a change – do the parties have to defer to the escalation process/ dispute resolution process?
- If so, is it too complicated/ lengthy/ over-engineered to secure a swift decision?

Customer obligations

Suppliers may attempt to create client dependencies in contracts. For example, to reverse burdens and reduce costs, a clause may be included that requires the client to timetable staff to be 'transformed' onto a new system. If this cannot be done within the allotted timescale, the client is subject to additional costs to complete a process which should have been covered under the initial contract. Issues to consider include:

- Are there any customer (or client) dependencies (CDs)?
- Has the supplier sought to change the balance of responsibility for delivery by imposing unrealistic CDs?
- Has the supplier introduced new customer obligations/ processes to 'clarify' the contract, but which in fact reverse the burden of delivery so it falls on our organisation?
- Is a failure to meet a CD, a breach of obligation by our organisation? If so, does any such failure justify the supplier not meeting its obligations? Or is any failure met by a potential liquidated damages claim only?

Supplier obligations

Often, there is no obligation within contracts for suppliers to achieve transformation or data migration. There can also be a lack of clarity about the point at which a client accepts a new system. Issues to consider include:

- Is the supplier obliged to achieve implementation/ data migration/ exit?
- What are the key obligations on the supplier?
- Are the obligations on the supplier clear and binding?

Acceptance

There can be a lack of clarity about the point at which a client accepts a new system. Issues to consider include:

- At what point is the system accepted?
- Is it 'deemed' to be accepted at some point, irrespective of the testing regime and defects?
- Conversely, is our organisation as client able to continue to test to destruction?

Defects

Defects occur when, for example, the supplier has misunderstood the business requirements agreed with the client. Defects are usually categorised according to their severity – for example, a category one defect will cause the system to fail so no such defects are allowed. A category four defect may be purely cosmetic with the supplier allowed up to 200-300 instances. A realistic threshold should be agreed that is acceptable to the client and that the supplier can meet. Issues to consider include:

- What are the thresholds for defects?
- How have the defects categories been decided?
- Are the categories realistic and do they work for both sides?
- Are there any 'over broad' or unclear categories – for example, 'possible threat to health and safety' or 'likely business impact'? These can lead to more defects being identified which may in turn result in a right to terminate.
- Is our organisation entitled to zero defects?

Testing

As mentioned earlier, end users should be part of the initial bid/ tender team to ensure that the new system will meet their requirements. Testing should then be more effective and meaningful. Issues to consider include:

- Who is going to be carrying out 'user acceptance testing'?
- Were these users part of the initial requirements gathering team/ specification process at the outset?
- If not, there is a risk that users may reject the system at this stage and your organisation may then be obliged to revisit the requirements gathering exercise (resulting in delays and higher costs).

How is the supplier to make money on the project?

Suppliers may be incurring costs up until a system goes live after which they may recover costs by providing support and maintenance. It is important that clients have an understanding of these mechanics, particularly during a prolonged testing phase. Options to consider include:

- Milestone payments. However, it may be unclear that a milestone has been met.
- From go live only. Here there is huge potential work in progress for the supplier and pressure to get the system in as quickly as possible.
- On support and maintenance for the duration of the service after go live. Here you need to think through what happens if our organisation wants to take the service back in-house.

Contract post signature

IT contracts are often so lengthy and onerous that they are not reviewed by the project manager and are consigned to a file. Teams on both sides then end up working on what they think or assume should be happening as opposed to what the contract states. Efforts should be made to ensure contracts are user friendly and read. Issues to consider include:

- Is the contract clearly written and easy to follow? Is the project manager/ other key personnel sufficiently familiar with the main terms of the contract so that they are able to follow them for the duration of the project?
- Have those who need to be familiar with (and follow) the contract seen it?

Does the contract contain any final processes 'to be agreed'?

The phrase 'to be agreed' can create an opportunity for the supplier to add in processes that shift the burden of responsibility to the client – for example, timetabling transformation. The client may then find itself responsible for the contract failing. Issues to consider include:

• The phrase 'to be agreed' should ring alarm bells!
• What is likely to happen if the terms cannot be agreed?
• For example, a supplier may introduce a slot based delivery mechanism for our users. But how many slots? Will there be enough with a margin for non-attendance/ illness etc.? Will such an approach work for our organisation? Does the supplier intend to control its costs by forcing our users to attend at a few sites only for the implementation, rather than deliver the service more widely? Will the supplier's resources be adequate, sufficiently skilled and available at the necessary time for the implementation? Is the supplier entitled to recruit/ employ a (different) third party resource which has not been part of the project and may not have sufficient training/ allow the supplier to charge an extra margin?

Planning

Timelines must be clear from both sides. Issues to consider include:

• Is our organisation obliged/ able to carry out the timetabling of appointments for an implementation? What is the lead time for such a critical exercise?
• Is the transformation run rate realistic? What does it depend on? What happens if we or the supplier falls behind?
• Is there slack in the timeline to accommodate a 'bow wave'?
• If there is significant delay, there will come a point on the timeline where no amount of extra resource will be able to catch up on lost appointments.

Termination by the customer?

Termination is usually effected on the basis of a material breach which is rarely specified in contracts. Lawyers acting for clients may start logging regular minor failures to build a case and suppliers must deal with this effectively or face a termination notice. Issues to consider include:

• Is termination possible only for material breach by the supplier?
• What amounts to material breach? It must be spelt out.
• What are the remedies for minor breaches – for example, of the service level agreement?
• Can a number of minor breaches add up to a material breach?

Termination by the supplier?

Generally suppliers are unable to terminate unless the customer has failed to pay a significant amount. This can lead to a 'problem contract' where it is no longer cost effective for a supplier but termination is not possible. The key issue to consider is:

• Is there an option for the supplier to terminate – for example, for non-payment of undisputed invoices in the sum of £X?

Is there an option to terminate for cause?

A clause of this type allows a client the option to give notice after a system goes live if, for example they wish to bring the service and maintenance in house. As the supplier is likely to be making the majority of its profit from this phase, the client should be prepared for resistance or less support than it needs during the handover period (usually about six months). It is also important to bear in mind that the supplier is entitled to charge for support during the exit process. Issues to consider include:

- If such an option exists, how has the termination for cause figure been calculated?
- Normally, the longer into the contract, the less the client pays. However, a supplier may be relying on income from support and maintenance for the duration of the contract and therefore if the option is exercised, expect arguments over high costs towards the end of the contract.
- If exercising an option to terminate early for cause (not breach), there is a real risk that the supplier will then endeavour to recover significant sums for any assistance on exit.
- If seeking to terminate for cause, ensure that any notice is completely watertight – 'notice not less than 3 years from the effective date…' – taking into account any time period in which the notice is deemed to be received/ take effect.
- Avoid any inclination to try and 'improve' on the method of service – for example, if the contract says notice by post, then avoid personal service.

Further sources of guidance

This briefing is based on Geoff Mendelsohn's practical experiences of NHS IT projects from a legal standpoint and is not designed to provide an exhaustive list of possible pitfalls. If you want to look in more detail at issues relating to major IT projects there are many other guidance sources available including:

- Audit Scotland's 2017 guide – Principles for a Digital Future: http://www.audit-scotland.gov.uk/report/principles-for-a-digital-future
- The NAO's 2016 document – Commercial and Contract Management: Insights and Emerging Best Practice: https://www.nao.org.uk/report/commercial-and-contract-management-insights-and-emerging-best-practice/

Contact

If you have any comments on this briefing, please contact: sarah.bence@hfma.org.uk