

**Agenda Item 7 (iii)**

**Enclosure 6**

**Health and Care Professions Council  
21 September 2017**

**Registration Transformation Project: Update**

**For discussion**

**From Greg Ross-Sampson, Director of  
Operations**

Council, 20 September 2017

Registration Transformation and Improvement Project Update

Executive summary and recommendations

### **Introduction**

In the July 2017 Council meeting, the Executive was asked to provide Council with a paper on the progress of the Registration Transformation and Improvement Project.

The paper below outlines a detailed explanation of the progress of the project, with a particular focus on the issues and challenges which have arisen over the duration of the project so far.

### **Decision**

The Council is invited to discuss the paper. No decision is required

### **Background information**

The project set out to deliver a new operating model for the Registrations department, including processes, systems, and interactions with other areas around the organization. Phase 1 online CPD / proof of concept commenced in September 2015.

### **Resource implications**

See paper and appendices

### **Financial implications**

Due to the complex nature of the project, and from prior experience of running projects, we anticipated that issues may arise. Issues did arise in the areas of design, build and test; the impact on the project timeline was a 12 month increase, as shown in Appendix 1, and a £122k increase in cost.

### **Appendices**

- Appendix 1: Timeline

### **Date of paper**

8 September 2017

## **Registration Transformation and Improvement Project Update**

### **1. Executive Summary**

- 1.1 The Registration Transformation and Improvement project sets out to deliver a new operating model for the Registrations department, including processes, systems, and interactions with other areas around the organization.
- 1.2 The project was undertaken on the understanding that it has a higher level of risk than is usual for HCPC projects, and that these need to be mitigated.
- 1.3 These risk mitigations included using a phased approach to deliver the project, and the addition of Gateway Reviews by EMT between each phase in order to ensure that lessons are learned and applied to future phases.
- 1.4 The biggest project benefits could have been reaped more quickly by firstly replacing the legacy system. However it was decided that the first phase of the project would be a proof-of-concept, in order to minimize the risks around implementing significant changes to business processes, working with new cloud-based technology, and introducing a new supplier.
- 1.5 Due to the complex nature of the project, and from prior experience of running projects, we anticipated that issues may arise. Issues did arise in the areas of design, build and test; the impact on the project timeline was a 12 month increase, as shown in Appendix 1, and a £122k increase in operating expenditure.
- 1.6 The impact of the project timeline increase means that those professions that renew between December 2016 and November 2017 will not have the opportunity to utilise the online CPD functionality.
- 1.7 EMT will make use of the 6 month reforecast process to ensure that HCPC operates within the existing HCPC £37m 2017-18 expenditure (£33.8m opex + £3.2m capex) taking into account the additional costs, particularly in the context of the major project budget allocation.
- 1.8 Grant Thornton were commissioned to review Phase 1 of the project and exam the reasons for extending the time and increasing the cost. Their report was being finalised at time of writing of this paper.
- 1.9 The Gateway Review, which will take place after the completion of the proof of concept phase, will be used to consider fully the implication of these time and cost increases on the future phases of the project.
- 1.10 The project is on track to realise the benefits outlined in the Business Case. Furthermore, the proof of concept has allowed HCPC to minimize the risks and learn lessons.
- 1.11 The lessons learned during the CPD proof of concept have informed the latter phases of the project, and other projects within the portfolio.
- 1.12 The next steps of the project following go-live of the proof of concept phase will be to undertake the formal Gateway Review and decide on whether and how to proceed with the next phase of the project: replacement of the legacy system. The outcome of the review and the direction of future phases will come back to Council.

## 2 Introduction

- 2.1 The Registrations Transformation and Improvement project set out to deliver a new operating model for the Registrations department, including processes, systems, and interactions with other areas around the organization.
- 2.2 The full business case for the project was approved by Council in September 2015, with approval for a three phase project, starting in September 2015 and ending in May 2020, at a cost of £3,984k. Grant Thornton audited the Business Case, reviewed the risk log that had been captured as part of project initiation, and supported the proposed phased approach.
- 2.3 This business case contained a range of options with the potential for various project approaches. The approved project approach was to go out to external suppliers to build the new system, in Microsoft Dynamics, over three phases. Phase 1 is the implementation of online CPD, also serving as a proof of concept; phase 2 is the replacement of the core register, including rule changes to enable prorated fee charging and payment by monthly or quarterly direct debit; and phase 3 is the implementation of online applications.
- 2.4 The biggest project benefits could have been reaped more quickly by firstly replacing the legacy system. However, the Business Case made it clear that the need to de-risk the project made the proof of concept approach the most desirable, rather than launching immediately into the design and build of the full replacement of the legacy system. It was expected that the CPD proof of concept would not only test whether the proposed solution is proportionate and fit for purpose for HCPC; the CPD proof of concept would also enable lessons to be learned, so that mistakes could be avoided during the design and build of the full solution. This project will undergo further review, in addition to all existing project controls, in order to capture lessons learned, formally assess the project performance, and guide future phases. The first Gateway Review will be completed at the end of the CPD proof of concept phase.
- 2.5 The project represents a significant shift for HCPC; not only is this a high profile and higher risk project, but we are implementing cloud technology for the first time in a business critical environment. The project is technically complex and requires involvement from a range of third parties.
- 2.6 Due to the complex nature of the project, and from prior experience of running projects we anticipated that issues may arise. Issues arose in the areas of design, build and test; the impact on the project timeline was a 12 month increase (7 months reported in February 2017, and 5 months reported in July 2017), as shown in Appendix 1, and a £122k increase in cost. For purposes of analysis in this paper we have categorised the issues by theme, as follows:
  - Developing a proportionate and appropriate product
  - Mitigating risks around new technology
  - Issues around methods of delivery
  - Relationship issues with our third party supplier

- 2.7 These categories will provide structure to the lessons learned analysis during the Gateway Review of phase one, which will be completed after delivery of the CPD solution.
- 2.8 HCPC's business-as-usual service to registrants has not been affected by issues experienced during the project, as the existing CPD process has remained in operation.
- 2.9 By phasing the project with a discreet proof of concept at the beginning, we have minimised the impact of the issues experienced. The impact of these issues could have been considerably higher if incurred during a larger piece of work.

### **3 Developing a proportionate and appropriate product**

- 3.1 In order to mitigate a range of risks around producing a system that is proportionate and appropriate for HCPC, whilst using new technology, a variety of third parties have been engaged.
- 3.2 An additional requirement for a set of high level design principles, or a rulebook for the manner in which we want suppliers to develop our solution, was identified after project initiation. This needed to be developed prior to procurement in order to provide quality criteria for development. This meant that more time was needed before procuring our build supplier.
- 3.3 Also, HCPC needed to engage specialist third parties who have Azure cloud expertise to deliver the system architecture design. Initially the project sought to secure Microsoft resource, on the understanding that they would be experts in their own product. Following protracted discussions with Microsoft, they eventually proved unable to deliver a viable and cost-effective option. An alternative supplier was sourced through our Microsoft licensing partner as part of a three party selection exercise. This meant that more time was needed before we could design and build the Azure cloud infrastructure.

### **4 Mitigating risks around new technology**

- 4.1 This project follows the HCPC IT strategy of moving systems from on-premise to cloud-based. We are moving a major, registrant-facing operational system into the cloud.
- 4.2 One element of the system, the Microsoft B2C platform used for signing into the online portal, is particularly new. Only having been released in October 2016, developing on this platform posed a disproportionately high risk due to its emergent nature. In order to ensure that the B2C sign in solution was the right choice for HCPC, a mini-proof of concept was commissioned from our primary build partner, Optevia/IBM. This mitigated the risk that we would invest in inappropriate technology by establishing that B2C would work seamlessly with our online portal solution, but the mini proof of concept did add time to the project schedule.

## **5 Issues around methods of delivery**

- 5.1 When it was realized that more time was required in order to address the challenges listed above, to try to shorten the time required for user acceptance testing (UAT) Optevia/IBM agreed to a staggered delivery i.e. to overlap the build and test stages of the project. This meant that when UAT cycle 1 began in order to test CRM and the portal, build work was still underway on authentication, document storage and the interfaces. Optevia/IBM were confident that this approach, while risky, was achievable.
- 5.2 However, a number of issues were encountered. The bug fixes we received included new bugs, adding time to the project schedule to fix them. The document storage integration build was poor and gave an unacceptable user experience for registrants on the portal, whereby it was not clear whether documents had been successfully uploaded or not. This required significant rework. This added time, but we did not incur additional costs.

## **6 Relationship issues with our third party supplier**

- 6.1 During the procurement exercise in 2015, Optevia were selected as our build partner for Dynamics CRM. They also own the work on document storage, which they outsourced to different company: Deltascheme. Due to the specialist nature of document management, no primary build partner could offer internal document storage expertise as well as Dynamics knowledge.
- 6.2 On 28th March 2016 HCPC received an announcement that Optevia were being bought by IBM, and this came into effect on 1st September 2016. The message from Optevia/IBM was that the acquisition of Optevia by IBM would have no impact on the delivery of the project. However this was not the case. Deltascheme did not undertake any work on the document storage piece in October, November and December 2016 and we were informed this was due to ongoing legal negotiations with IBM following their buy out of Optevia. The resolution of this issue was not until late December.
- 6.3 This delayed the identification of the document storage integration build issue detailed in section 5.2 above, and contributed to the decision to overlap the build and test of the system. This had a time impact on the critical path of the project.
- 6.4 While the subcontracting issue detailed above had the most significant impact, the project had experienced some issues working with Optevia even before their incorporation into IBM.
- 6.5 The initial plan for designing our solution from Optevia took the approach of having a 'high level' design phase, followed by detailed design at the start of each sprint. At HCPC's request this became an additional phase of detailed design work before commencing the build sprints, adding time to the project schedule.
- 6.6 The work on the architecture build was subcontracted out to another third party called Elastabytes. The relationship between Elastabytes and

Optevia/IBM as our existing third party supplier for the application development was poorly managed. Unlike the Deltascheme relationship, which Optevia/IBM initiated, Elastabytes were introduced by HCPC. We mandated that we expected that these suppliers would work together to deliver the architecture that was required, however this relationship quickly became confused and had an impact on the project timeline.

## **7 Remaining project risks**

- 7.1 The CPD solution has been built, and we are confident that the majority of the technical issues have been resolved. The project is currently due to go-live in November 2017; there are several challenges still to overcome between now and go-live.
- 7.2 The system has passed UAT, with CPD assessor users and other registrant users providing positive feedback as well as internal users testing the system and signing it off. There are some outstanding issues that only Microsoft can resolve.
  - Users cannot consistently sign-out of the new system creating security concerns. This is an issue which could affect a go/no-go decision.
- 7.3 The system will undergo load testing, in order to be sure that it remains performant during peak times of usage. Simulations will be run to replicate real volumes of concurrent users, in order to identify any weaknesses under load. Any results indicating that the solution will not perform to minimum threshold standard will need to be remediated. The system will also undergo penetration testing, in order to be sure that it is secure. Any vulnerabilities in the system will be identified and addressed. This may add time and cost.
- 7.4 If anything was not functioning as expected, the contingency would be to revert back to the existing CPD process.

## **8 Conclusion**

- 8.1 The issues which have been encountered during the proof of concept phase of the project have caused the project timeline to increase by 12 months and the project costs to increase by £122k. The Gateway Review, which will take place after the completion of the proof of concept phase, will be used to consider fully the implication of these increases on the future phases of the project.
- 8.2 The CPD proof of concept phase is on track to realise the benefits outlined in the Business Case. The proof of concept has allowed HCPC to minimize the risks around implementing significant changes to business processes, working with new cloud-based technology, and introducing a new supplier.
- 8.3 The lessons learned during the CPD proof of concept have been valuable, informing not only the latter phases of the Registration Transformation and Improvement project but also providing guidance to other projects within the portfolio.

- 8.4 The next steps of the project following go-live of the proof of concept phase will be to undertake the formal Gateway Review and decide on whether and how to proceed with the next phase of the project: replacement of the legacy system. The outcome of the review and the direction of future phases will come back to Council.



# Appendix 1: Timeline

Workstream	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18		
Procurement																															
High Level Design																															
Infrastructure Build																															
CRM/Portal Build																															
Testing and Training																															
Go Live																															
Gateway Review																															
Key:																															