NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE

DEPARTMENT OF BUSINESS MANAGEMENT

FINAL EXAMINATIONS – MAY 2011

PROJECT MANAGEMENT- CBU 4209

TIME ALLOWED: 3 HOURS 15 MINUTES

INSTRUCTIONS TO CANDIDATES

Answer question **One** and any other **three** questions from section B.

INFORMATION TO CANIDATES

- i) Question **One** carries 40 marks.
- ii) All questions in Section B carry 20 marks each.
- iii) Questions may be answered in any order.
- iv) Credit will be given for the **use of appropriate examples**.
- v) This paper contains **Seven** questions.

Question 1

Midlands Hospital NHS Trust

Midland NHS Trust Hospital is one of a large number of trusts that together make-up the National Health Service of the United Kingdom. Developed in the postwar period as a means of providing affordable, quality healthcare to all U.K. residents ,the National Health Service has ,in recent years , been plagued with a series of shortages with respect to staff, theatres and beds , as well as untenably long lead times for non-life –threatening procedures .This has led to a public backlash against the system and formation of dual system of public and private health care to which many more affluent U.K. residents subscribe.

One of the areas targeted by the Government as in need of change is the cataract diagnosis and treatment procedure. Cataract surgery, which is a 20 minute procedure, represents 96 per cent of

the ophthalmology workload. Traditionally, cataract diagnosis and treatment involved a number of visits to various specialists. For example, the patient would begin at the optometrist (the local high street optician) who would diagnose that the patient had cataracts that significantly reducing vision, and then refer that patient to his or her general practitioner (GP) for further treatment. After a visit to the local GP who, not being an eye specialist would generally rely on the diagnosis of the optometrist, the patient was forwarded on to the hospital for further examination. At that time, the patient would meet briefly with the consultant and, in a separate appointment, meet with the hospital nurse for a physical examination. Only when all of these visits were complete would the patient get in the queue for obtaining a date for the cataract surgery. In many trusts, the lead time for cataract surgery was over 12 months. Post-surgery another visit to the consultant was scheduled to check on the patient and then the patient was referred back to the optometrist for a new pair of glasses. Therefore, it took patients at least six visits and often well over a year to have a routine, 20 minute, outpatient, surgical procedure.

Given the complex and long drawn –out nature of this existing process a new reengineered cataract diagnostic and treatment process was seen potentially beneficial .To facilitate that change, a designated

Member of the hospital's transformation team was assigned to process. This was a team that was unique to this particular hospital. Their remit was to facilitate organizational change within the hospital, both identifying where change might provide most benefit and encouraging the relevant groups to design and implement changed processes. In this instance, the transformation team member gathered a team of eye experts from both n the hospital and the community to discuss ways in which to cut surgery lead times and improve patient satisfaction. Members of the cataract team included the head nurse in the eye unit, a hospital administrator, general practitioners, a set of optometrists from the local community, and a surgical consultant who was instrumental in championing the need for change and in leading the process. Team meetings were held in the evening to facilitate attendance, and were led by the transformation team member. Minutes, flow charts and other necessary documentation for the process were produced by the transformation team member, and distributed to all team members after each meeting. In total, approximately five project team meetings were held over a six—month period.

At these meetings the various professional s involved shared information about their current roles and procedures so that all gradually came to a collective understanding of the diagnosis and treatment process. Based on this understanding, plus an increased awareness of the competencies and skills of the various groups involved, they were able to see alternatives to the traditional process. In doing this, each individual in the team drew upon their own experience and knowledge, but also used their personal networks to find out what was happening in other hospitals. For example, the project team went to look at procedures in a leading eye surgery where they felt they might learn something useful to apply to their own context.

A number of changes to the existing process were made. Non-essential visits to the general practitioner, the consultant and the nurse were eliminated. Instead, optometrists were empowered to decide if a patient needed cataract surgery. In doing so, they were required to fill out a detailed form that provided the consultant with specific information about the nature and severity of the cataract, and to call the hospital and book a time for the patient's surgery. This form was developed by the project team through an iterative process of design and testing. For their additional responsibility, the optometrists were given some extra training and received a small financial incentive from the trust

The preliminary pre-operation physical was replaced with a self-diagnostic questionnaire that each patient was required to fill out and return to the hospital before surgery. The self diagnostic questionnaire was again developed by the project team; but in this similar form that had been developed elsewhere. The project team did not, however, simply use the form that had been previously developed by others. Rather, they used this existing form as the starting point to develop a new questionnaire which suited their particular requirements, as perceived by the project team.

Immediately before surgery, nurses were to telephone potential patient to check the patient's details and answer any questions. Post operation consultant appointments were also replaced with follow-up telephone calls. One indication of how much the process changed was the traditional post operation need. Under the traditional method, before discharge each patient was treated to a plate of hospital food; under the new system, they were given a cup of tea and a biscuit and were then sent home.

The new cataract procedure resulted in a number of efficient gains. Lead times were radically reduced from over 12months down to 6 or 8 weeks. In addition, theatre utilization rates improved due to the addition of an administrator whose sole responsibility lay in scheduling theatres. Finally and most importantly, according to the follow-up phone conversations with cataract project patients, patient satisfaction improved dramatically.

The new cataract process had significantly altered roles and responsibilities, particularly for the optometrists, who could now diagnose and directly refer patients. This process however was not entirely straight forward and considerable learning was necessary among those involved. The consultants had worked with optometrists so that the optometrists could learn how to make diagnoses that were acceptable to the consultants. The consultant provided the optometrists with regular feedback on the patient they had referred and also answered their questions. For example, one optometrist explained that he had needed to clarify issues with the consultant in order to ensure that a particular patient was actually suitable fore the cataract operation. The optometrist claimed that this would be very difficult for consultants who had not been involved in the project because they undervalued the optometrists:

When patients eventually find their way to hospital any comment that the optometrist has made that his relayed to the hospital staff is usually treated with contempt-"what do they know about it", that sort of attitude (project member).

While they were, then, many advantages of the new system there were pockets of resistance. Previously theatre scheduling had been done by each consultants' secretary on the basis of the consultants' availability. As part of re-engineering project this secretarial support had been centralized and theatre scheduling as a separate activity. The secretaries had resisted this change, insisting that they were far too busy to be assigned to more than one consultant. In order to over come this resistance one of the nurses on the project team, aware of another hospital that had successfully introduced a centralized secretarial pool took the secretaries to see this pool working. While this helped to weaken the resistance it did not eliminate it. For example, initially the new administrator in charge of theatre scheduling was not provided with theatre schedules from the secretaries and therefore she was unable to perform her role. However, when it became clear that this was not going to be acceptable, the secretaries revised their strategy and all sent in their schedules together so that the new administrator was over whelmed by the workload. As one project member put it, "they wanted her to sink".

There was also some resistance form local optometrists who refused to get involved in the redesigned diagnosis process. The resistance was gradually overcome, however. For example, the transformation team member recounted the story of optometrists with a large local practice who refused to participate in the fast track cataract process. As lucky would have it, the transformation team member happened to need a new a pair of glasses and so decided to visit the reluctant optometrist. She sang the praises of this new cataract procedure through out her eye examination. By the time her glasses were ready. The optometrist had considered his position and had decided to participate in the project.

While the redesigned cataract process was thus considered to be highly successful in the hospital where it had been developed, the transfer of this newly designed process was proving to be problematic. For example, in one hospital which had looked at the new process in Midland hospital the idea had bee rejected, because it was seen as "too radical".

We had some interest from one of the ophthalmologists (from another region) who wanted to start a similar project, so we sent them our paperwork and documentation. We had some interesting discussion and feedback from people but they didn't like the idea (Project Member).

Indeed, even within Midlands Hospital itself, consultants who had not been involved in the re—engineering project still assumed that optometrists could not properly diagnose cataracts and continued to want to see all patients themselves to make the diagnosis:

There are a lot of ether departments where people express reservations about the skills of optometrists who will be referring patients to them and they are not prepared to go down that route (that is, the new cataract process) because of that .(Project Member).

Adapted from Managing Knowledge Work: Sue Newell et al [2002:183-86]

Required

- a) What are the key factors that encouraged the success of this team in redesigning the cataract diagnosis and treatment process. [15 Marks]
- b) How useful was codified knowledge in designing the cataract diagnosis and treatment process? [10 Marks]
- c) Why was it proving difficult to transfer knowledge from this hospital trust to other hospitals where it would also be relevant? [15 Marks]

SECTION B

Question 2

Discuss any <u>four</u> phases of project life cycle.

[20 Marks]

Question 3

Project management brings a unique change through new management tools, highlight the points to be observed in project networking techniques. [20 Marks]

Question 4

Discuss the salient features of the project method.

[20Marks]

Question 5

'A project manager is the king-pin in a project.' Explain the desirable skills for a good project manager.

[20 Marks]

Question 6

a) With the aid of an organogram, explain the role of a project team.b) Distinguish between project and business as usual.[10 Marks]

Question 7

Discuss methods used in identifying risks in risk management. [20 Marks]

END OF EXAMINATION