



## **Start as you mean to go on: Project management for beginners**

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### **Abstract**

Too many mental health projects, whether for scientific research or for service development, have delivered less than they promised because a structure to manage all the components necessary for success was not incorporated into their planning. Three contrasting models of project management are described. The PRINCE method in particular is suitable for most projects because of its adaptability and its contribution to clarifying the roles and responsibilities among collaborators throughout the lifetime of a project.

### **Introduction**

This is a personal view, inspired by many projects that died a death before they reached the pages of this *Journal* or any other rigorous publication. However, since our Trust was introduced to the brave new world of systematic Project Management, the productivity and quality of both scientific research projects and the development of new community health services for Cambridge have benefited dramatically (Caan, 1995). We hope that the lessons learnt may help other readers, both academics and practitioners, to bring more of their own ideas to full fruition.

### **'Swimming in treacle' or 'Rollercoaster rides'**

In the health service, most R&D initiatives begin life with a good hunch and a fixed amount of sponsorship money (from a grant or contract) for a fixed period of time. In Britain in the early 1990s, when the National

Health Service R&D strategy was being launched, a widespread problem was poor completion rates of publicly funded research (and many costly developments such as introducing Information Technologies). When project reports did trickle in (for example to Regional R&D offices), the products delivered were often rather disappointing – too little, too late – and simply gathered dust on someone's shelf. How easy it was to accept the *cri de coeur* 'nobody realised how difficult it was going to be to do ...'. The need to get reports off the shelves and to disseminate their findings was grasped as early as 1991, leading to exciting developments such as Trevor Sheldon's NHS Centre for Reviews and Dissemination at York University. In contrast it was only *after* the 1996 'Culyer Declaration' of the costs to the taxpayer of undertaking all research activities that the NHS Executive has put its foot down and insisted on setting up quality assurance systems for any future strategic research fund-

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ing. If clinical researchers sometimes appeared disappointed by expending a great deal of effort on making little progress ('swimming in treacle'), university researchers, who were being penalised for any postgraduates who failed to complete their research degrees and for any failure to publish *something* annually, could experience an equally disagreeable sensation. In their effort to keep up some sort of research momentum for the Research Councils or Higher Education Funding research assessment exercises, these academics might experience a 'rollercoaster ride' of having to react quickly if their projects took an unpredictable series of twists and turns. In those old days, whenever author W.C. was the Scientific Lead Investigator, it always felt as though he was too busy reacting to events (or collaborators) to do any leading!

The common deficiency in both clinic or college was a weakness in planning projects. The Medical Research Council and NHS R&D Directorate reached a Concordat on planning research and the MRC (1994) then issued pioneering guidelines on developing high quality proposals. Around the same time (Caan, 1994) a network of rehabilitation scientists involved with postgraduate students began to apply the method known as 'Projects in Controlled Environments' (PRINCE) to routine research supervision. Our training and support for Project Management was provided by the East Anglian Regional Health Authority, who stipulated that *effective* Project Management required (EA RHA 1993 a):

1. an agreed method,
2. trained individuals, and
3. an organisation able to facilitate Project Management.

### Choosing a method

Three very distinctive approaches are available 'off the shelf', have been tried in healthcare settings, and have a pool of train-

ers available in the UK.

Solly Zuckerman, who had such a pivotal role in planning scientific manpower for the NHS, was himself profoundly influenced by the project management developed for the US Navy by Hyman Rickover, the 'father of the American nuclear navy' (Lord Zuckerman, 1992). In this military model, before any other activities begin, a detailed protocol is written for every person contributing to the project, and everyone recruited has to *do it by the book*. In case there are any exceptions to these starting rules as the project is implemented, each manager/supervisor has individually accepted responsibility for whatever action they may take to put matters right, and these actions are monitored at pre-arranged intervals. Team leaders who have taken part in health services accreditation will recognise that Total Quality Management is a spin-off from this naval philosophy. Pharmaceutical companies which adopt such management approaches to manufacture are likely to adopt them for monitoring their clinical trial protocols. Zuckerman (1992) summarises Rickover's methods succinctly:

'There was nothing rigid about the way that his organisation worked, except that there had to be absolute discipline, and no departure from what he himself had authorised'. (p. 180)

In hierarchical teams with abundant manpower and money this method can be quite effective, but few mental health services have these features.

For people who cannot think in precise algorithms (and so hate trying to write out comprehensive protocols) an alternative to doing it by the book is to adopt the techniques of 'soft analysis'. There are many variations on this collective method of helping the whole team to picture where they are now, picture where they want to go, and infer routes to attaining that common objective. In prob-

lem-solving terminology, this is a creative method for 'field-dependant' people, and we have had some rewarding moments getting colleagues to arrange cartoons of themselves and their clients like a giant jigsaw puzzle until they reached a common vision of what they needed to deliver. The British management trainers Franklin Quest use the terms 'Visualise', 'Plan', 'Implement', 'Close'. Their method of Project Management is based on the American *Mindmapping* method (Wycoff, 1991). This begins with free association in small groups, charted in a specific pattern that radiates out from a central 'problem' to be addressed. The charts are then restructured into goals and action plans. Because of the highly personal images which may be generated by the initial free association, independent reviewers from outside the small group are usually brought in to translate their plans into more pragmatic terms. It may not be easy to reconcile Mindmapping methods with the critical evaluation of projects and the objective accountability of managers. For example, Wycoff (1991) concludes her chapter on Project Management with this article of faith:

There are two prerequisites to success: believing that a goal *can* be accomplished; believing that *you* can accomplish it'. (p. 92)

Health Service staff have generated two widely used frameworks for the management of projects: CAPRICODE (NHS Estates, 1993) and PRINCE (EARHA, 1993 b), where a *project* is defined by its limits of time, cost and performance. The beauty of PRINCE is that the constraints such as timescale, money and satisfying the sponsors help to structure the design used. This system was developed for major computing projects with Central Computer and Telecommunications Agency (CCTA) the Government Centre for Information Systems. Much of the terminology for

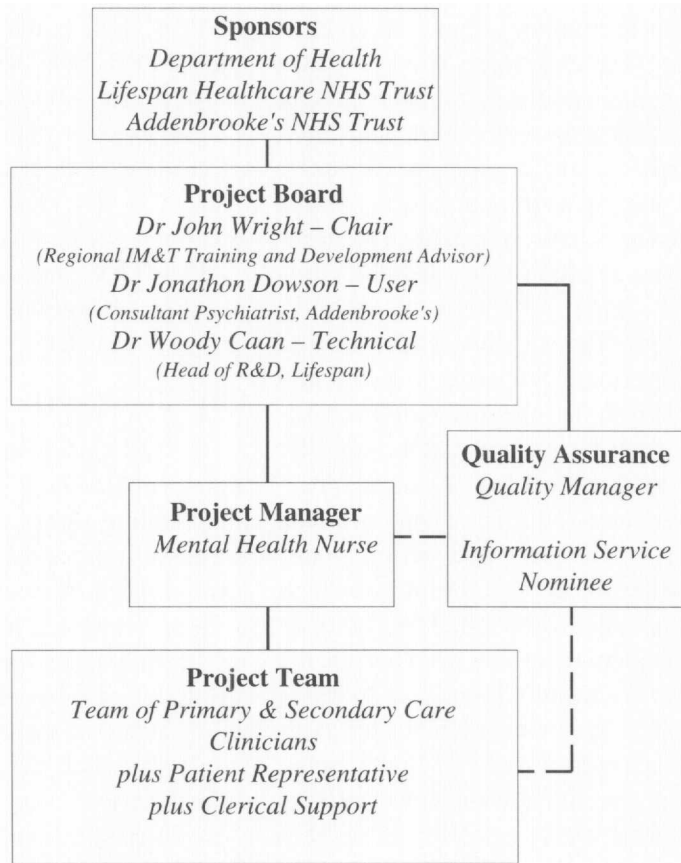
CAPRICODE is the same as for PRINCE, and CAPRICODE has the interesting feature of specialist software called CONCISE to support its use in major capital projects (such as building a suite for a brain scanner). However, it is not clear that any small scale projects have yet benefited from CAPRICODE and that system places tremendous obligations on one individual, the 'Project Manager'.

### PRINCE in practice

For 'field-independent' thinkers like the authors or *Star Trek's* Mr Spock, PRINCE is about telling a story with a beginning a middle and an end, and a cast of characters who have clear entrances and exits as their story unfolds. However, it is not a rigid straight-jacket: tolerances for unexpected outcomes are designed in to plans, and the planning anticipates that there may be critical milestones at which the project's activities or objectives will need to be reviewed. The logical structure involves all the stakeholders in each project reaching agreement on:

1. Why are we doing it?
2. What is it going to produce or deliver?
3. What do we need to make it work?
4. Who is going to do what?
5. When are they going to do their bit?
6. Are we ready to start?
7. How is it going?
8. Are we finished?
9. What have we learnt?
10. How do we do it better next time?

Every project is owned by a Project Board, which is accountable to all the Sponsors who have a stake in the project succeeding. The Project Board can be as small as three members: A chairperson (usually a senior staff member of the mental health service hosting the project or the funding body), a technical advisor (such as an experienced researcher) and an end-user of the research or develop-

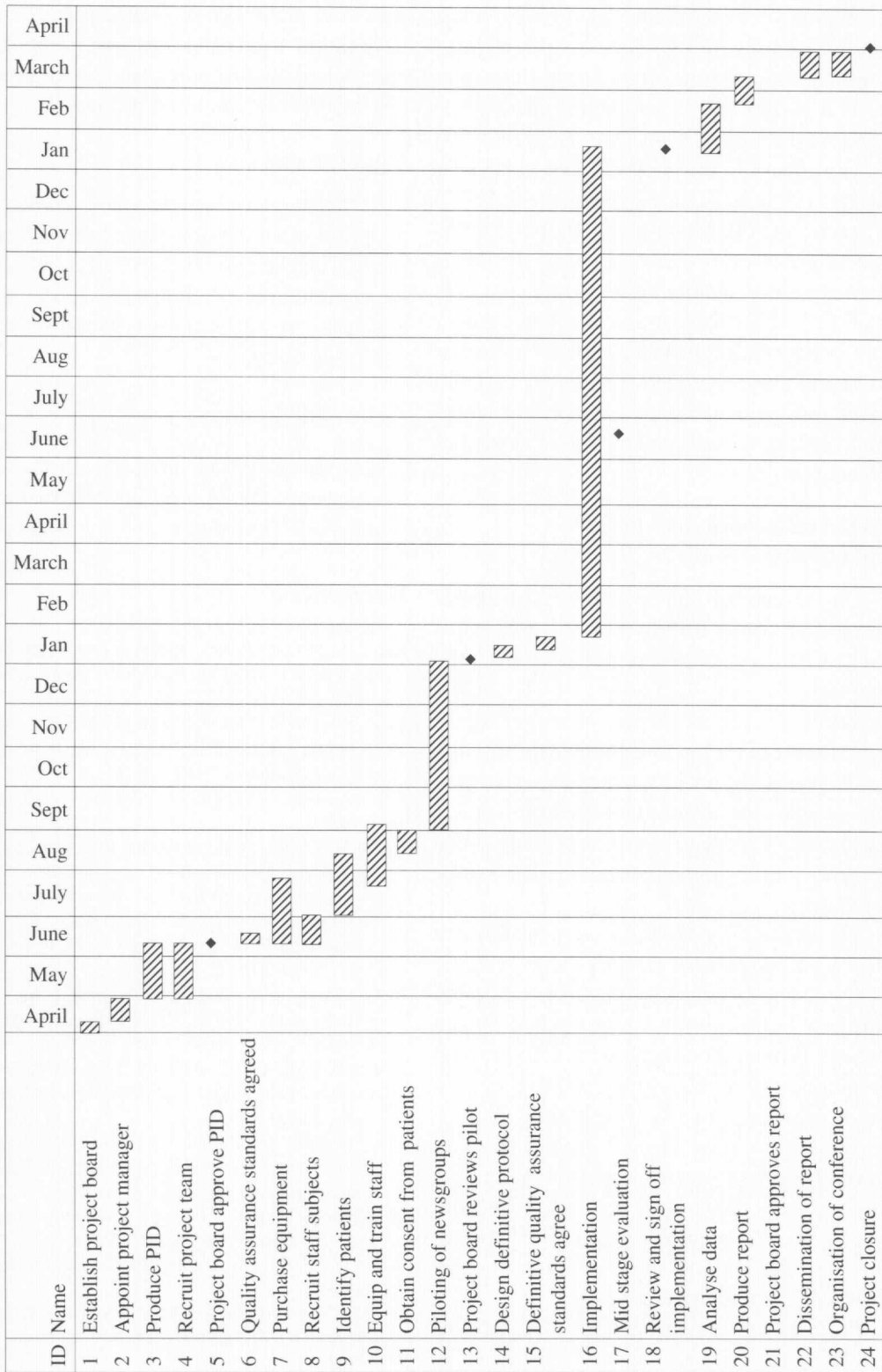


**Figure 1:** Proposed project management structure

ment to be delivered by the project (such as a patient, carer or planner). Figure 1 charts the project management structure for a small scale research study we designed recently for the IMG, about the use of IT newsgroups to support the psychiatric supervision register. These members write a Project Initiation Document (IMG, 1993) based on a clear business case for implementing the project, the steps needed to complete the project and unambiguous roles for the people responsible for executing the project well. This Board selects a Project Manager, who is responsible for the day-to-day oversight of the project (e.g. a research supervisor), but the *Board* has a collective responsibility for planning, starting, reviewing and finishing the project and

ensuring a realistic match of resources and ambitions. The Project Manager leads a Project Team (e.g. research assistants and technicians) who carry out the day-to-day tasks needed for each stage of the plan. For a very complex or lengthy project a number of collaborating Stage Managers, each with their own supporting team, may be needed at different times, but PRINCE is like Lego™: Even the biggest plans are still constructed of the same small building blocks. Quality assurance is the job of an independent Project Assurance team. This last team can be very small and may only need to advise the Project Board on the quality of the work in progress on a few strategic occasions during the life of the project, but it is vital that they are not

Figure 2: GANTT chart for the 2-year project on the supervision register



members of the Project Team itself, but a source of impartial advice. At project closure, the Board signs off the job as done (e.g. after reporting and disseminating the results). The whole life of a project can usually be encapsulated in one GANTT bar chart (EA RHA, 1993 c). Figure 2 shows the GANTT chart for the two year project on the supervision register summarised in Figure 1. PRINCE is eminently adaptable to small projects (CCTA, 1994): for example the three authors are collaborating productively on a modest regional project funded with under £20,000 over one year to investigate health events linkage as selected patients move about between services.

### What difference does project management make?

One researcher can contribute to different projects through different roles. For example, in the recent experience of one of the authors:

While serving as *Project Manager* for an organisational behaviour study of the therapy professions, the project was observed to gain invaluable support and guidance from a multi-disciplinary Project Board, especially when the methodology unexpectedly *needed some re-design*;

While *Technical Advisor* on measurement for a palliative care development, realistic staging and resourcing of the work of the Project Team within a plan owned by the whole Project Board allowed delivery and evaluation of a new clinical service *to proceed in parallel* to a very tight timetable;

While providing *Project Assurance* to an inter-agency project in Child Psychiatry, this autonomous position in dialogue with both the Project Board and Project Team helped to keep all the collaborators *working together* towards common objectives.

Project management has a good track record of bringing different agencies together in

East Anglia (Joslyn & Holman, 1995). We have found that it can even bring traditionally entrenched health 'purchasers' and 'providers' together on common ground.

### Conclusions

At the start of planning a new project, the adoption of an explicit project management method can help to see the project through to its completion. A range of methods are available, to suit various types of research, and researchers.

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### References

- Caan, W. (1994). Rehabilitation: a supervisor's view. *British Journal of Therapy and Rehabilitation*, 1, 158.
- Caan, W. (1995). The evaluation of new rehabilitation services. Abstract in *Scientific Basis of Health Services*. London: NHS E, p. 111.
- CCTA (1994). *PRINCE in small projects*. London: HMSO.
- EA RHA (1993). Making Project Management work for you. (a) *A Management introduction to project management*. (b) *PRINCE: An overview for project managers*. (c) *Project management principles*. Cambridge: East Anglian Regional Health Authority.
- IMG (1993). *A practical guide to project initiation*. Birmingham: NHS ME Information Management Centre.
- Joslyn, E. & Holman, P. (1995). Collaboration through project management. *Journal of Nursing Management*, 3, 109-114.
- MRC (1994). *Developing high quality proposals in health services research*. London: Medical Research Council.
- NHS Estates (1993). *Contracts and commissions for the NHS estate*. London: HMSO.
- Wycoff, J. (1991). *Mindmapping*. New York: Berkley Books.
- Lord Zuckerman (1992). Admiral Hyman G. Rickover. In 'Six Men Out of the Ordinary'. London: Peter Owen, pp. 169-197.