King's Fund

PACE

Promoting Action on Clinical Effectiveness

- investigating an integrated approach to implementing change

Discussion Papers

August 1997

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HMI:HB (Kin)

The following discussion papers are based on our work so far and they have been created to help introduce and stimulate discussions about particular issues. They have also been designed as concise introductions to various elements of initiatives in a way to help promote evidence-based practice.

We hope that you find these papers helpful as you progress with your own work and we would welcome any views or comments that you may have.

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PACE Team

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3. **Measuring Impact:** *September 1996*

Describes a framework for measuring the impact of local projects.

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Offers advice about creating local education programmes to support local projects.

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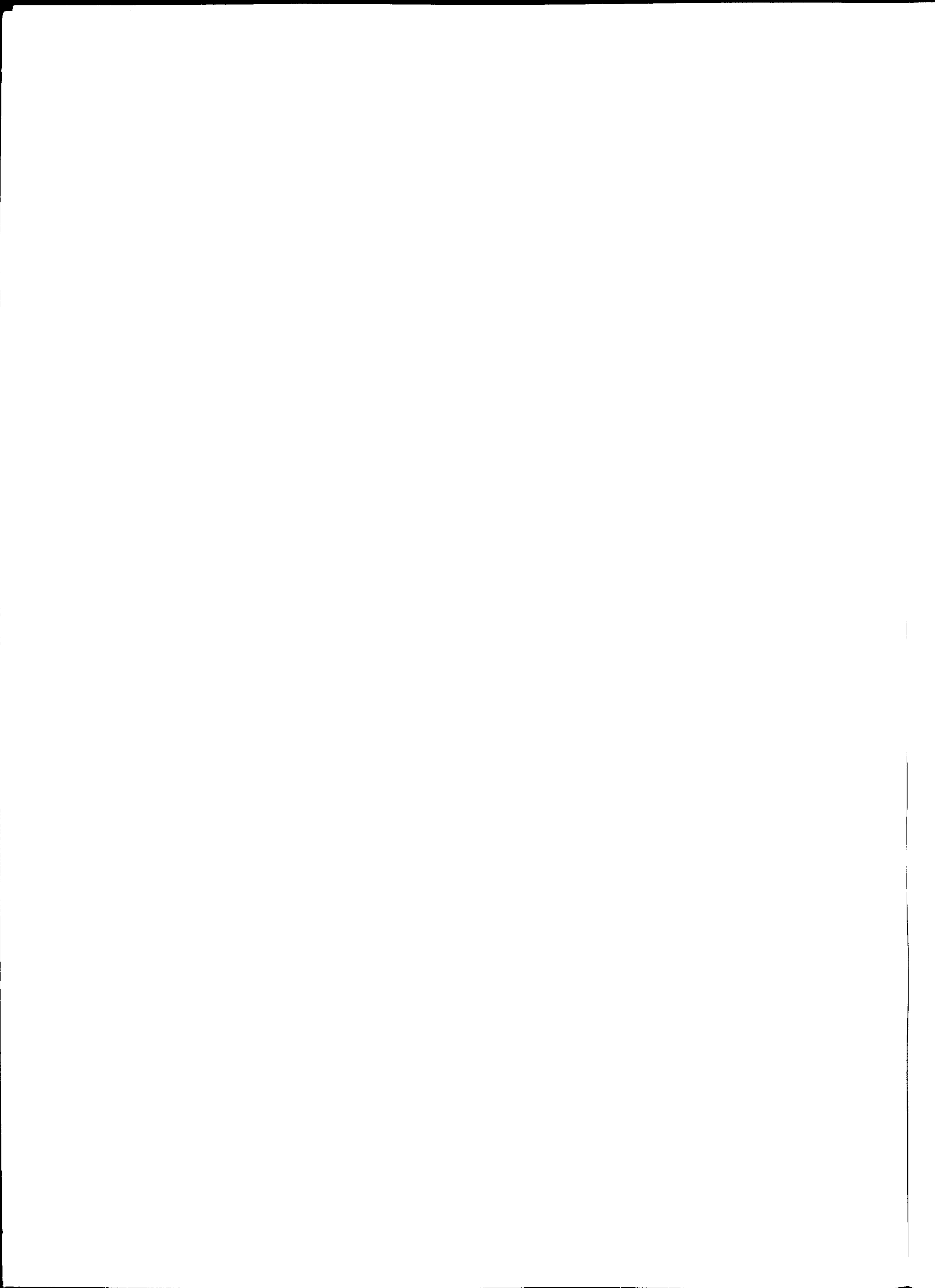
6. **Effective Communications, the PACE experience so far:** *March 1997*

Reports on the work required to keep local staff and organisations in touch with project work. The paper draws on examples from two local PACE projects.

Information about the PACE Programme is available from the PACE Team
(Gerrard Abi-Aad, Michael Dunning, Hayley Livett and David Gilbert) at the King's Fund



King's Fund

Promoting Action on Clinical Effectiveness

Getting Started

Discussion Paper : **September 1996**

Since the PACE programme was launched in September 1995, those involved in creating local projects have had to consider how to turn their initial ideas and plans into reality.

This paper has been prepared so that some of the key lessons from that experience can be shared with others who intend to make a start on their own local clinical effectiveness agenda.

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Despite extensive literature about the management of change, one of the most difficult steps is actually getting a clinical effectiveness project started. This paper offers some ideas for *getting started.* It is based on discussions with those involved in creating the PACE projects in the NHS Thames Regions

The paper is divided into three sections which :

1. identify some of the potential barriers ;
2. describe some of the factors likely to lead to success; and
3. offer some simple steps for launching a project.

The paper is intended to complement the PACE Discussion Paper - *Creating local projects.*

Potential barriers

It is important to identify local factors which may be associated with success and failure. Systems can then be established to overcome potential barriers. It is intended that change should occur as a result of the development of an infrastructure, and not solely due to the enthusiasm of a few individuals.

Potential barriers could include :

1. Lack of perception of relevance. Even if people are aware of the clinical effectiveness agenda, they are unlikely to have critically appraised their own practice, or they may feel that they are already working in a clinically effective manner.

2. Lack of resources. Setting up a clinical effectiveness project is a resource intensive exercise and many health professionals may feel that they simply do not have the time or money to become involved.

3. Short term outlook. Achieving change must be seen as a long term issue. This does not sit well with annual contracting circles. Projects must be developed alongside the commissioning and contracting circles.

4. Conflicting priorities. This may be particularly relevant when trying to secure senior commitment. Other local management priorities e.g. the waiting list initiative may conflict with achieving effective care.

5. The difficulty in measuring outcomes. It may not be understood that because the topic has already been shown to be effective, outcomes do not need to be demonstrated. The effective implementation of the project needs to be demonstrated. This can be achieved using routinely available process measures.

6. Lack of necessary skills. Unfamiliar skills are needed such as critical appraisal (of the research literature) and communication skills.

*7. **No history of multidisciplinary working.*** It is very likely that the project will span clinical disciplines. Often members of different disciplines are not used to working together in a collaborative fashion.

*8. **Limitations of the research evidence on effectiveness.*** The clinical effectiveness agenda may be viewed with scepticism by health professionals. Criticisms cited include the fact that available evidence often has limited applicability, clinical freedom may be lost, and services may be cut in the name of clinical effectiveness.

*9. **Perverse incentives*** may exert pressure in the opposite direction to that envisaged by the clinical effectiveness project team. For instance a drug company may endeavour to promote H_2 antagonists rather than to encourage the use of eradication regimens.

*10. **Intensity of contribution required.*** Changing practice requires a lot of enthusiasm, hard work and long term vision on the part of the project leaders.

Factors likely to lead to success

Local support and success are likely to be achieved if:

*1. **Good evidence is used.*** Many health professionals may have the sense that certain health services are not being provided in a clinically effective way. However in order to persuade health authority and trust boards that service change is necessary; hard evidence of ineffective practice must be presented. Helpful steps are :
(i) choose well-circumscribed topics for which there is clear evidence for effective practice and where solutions seem feasible.
(ii) Research evidence for effectiveness must be gathered, including a measure of the robustness of the evidence. Publications such as effectiveness bulletins provide easily digested and well-respected sources of information.
(iii) Background information must be gathered e.g. local and national trends as well as outcome data. This should, preferably, be obtained from routine systems in order to show the current state, and to demonstrate what would be expected to be achieved if changes were made.
(iv) The evidence has to be presented to relevant fora, to raise support from health professionals and the commitment of senior staff.

*2. **Build on an existing framework.*** Collation of the evidence entails a large amount of work and so it is helpful if the chosen topic is already high on the Health Authority agenda or is a priority of health professionals. Use established networks for presenting the project proposal, rather than starting afresh with new meetings. Early and wide presentation of the project facilitates topic awareness, and support and commitment from relevant and senior staff who will develop a sense of ownership of the project.

*3. **Engage all stakeholders.*** To achieve a high level of commitment among senior members of the organisation to encourage clinically effective practice. Time and space must be made available to carry out a project. Senior staff must be willing to recognise and allow for this. Development of the project should be aided by other relevant staff, the views of both sceptics and enthusiasts need to be taken on board. Involving a wide

skill mix in the project has the added benefit of facilitating the dissemination of lessons of the project throughout the trust or health authority.

*4. **Demonstrate the benefits.*** Tailor the message according to the audience you wish to influence, eg point out the health benefits and the potential for increasing activity for effective interventions when addressing clinicians. Raising the profile of the Trust in a competitive world and saving costs can be emphasised to managers.

*5. **Involve patients*** from the beginning. A patient centred project is more likely to result in success.

*6. **Identify help.*** Public health physicians have useful skills for implementing evidence based practice and can offer :

- a population based perspective which facilitates the identification of priorities of benefit to the population as a whole.
- critical appraisal and needs assessment.
- presentation of epidemiological information about the topic of local concern to both lay and professional audiences.
- facilitation when working with health professionals from different disciplines, eg between primary and secondary care.
- experience of using routine data and special studies.

Launching a project

Three simply steps to setting in hand the projects are :

*1. **Be explicit and realistic.*** It is important to commit funding and time to a project. A realistic timetable and cost estimate should be developed.

*2. **Establish good communications.*** Ensure that all health professionals and patients who will be affected know about the project, even if they are not directly involved. Keep them up to date with progress via existing communication routes, e.g. newsletters, multidisciplinary committees, health authority meetings, as well as through special events, such as a high profile launch of the project.

*3. **Don't be too ambitious*** and try to do too much all at once. Proceed in an incremental fashion which is non threatening both to those people who are expected to change their practice, and to patients. Start work with those health care workers who have expressed enthusiasm for the project, and, as momentum is generated, bring in less enthusiastic professionals - once they have witnessed the fruits of success.

Conclusion

Work on clinical effectiveness requires a careful balance of clinical and managerial effort. Commitment, leadership and resources are all essential.

PACE Team : September 1996

King's **Fund**

Promoting Action on Clinical Effectiveness

Creating local projects

TIPS : Tasks, issues and pointers to success

September 1996

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Over the last three years there has been growing interest in the creation of management initiatives to ensure the implementation of evidence-based health care.

This paper draws on that experience to offer notes on the issues involved. As work on the PACE Programme goes forward our intention is to bring the paper up to date to reflect later experience.

The paper consists of :

- a note about the general task of *creating local projects*; and
- a series of notes relating to the individual *components of the process.*

Michael Dunning
PACE Programme

The main feature of the PACE Programme is a network of sixteen local projects within health authorities and NHS Trusts in the NHS in England. These notes are drawn from a series of similar activities that have focused on the use of robust research evidence to promote service development. The notes assume the credibility of the research evidence on which the initiative is based (such as systematic reviews assembled under the auspices of the Cochrane Collaboration) although discussions will be required locally to generate a common interpretation of the research.

The work which has influenced these notes includes:

* experience in creating the PACE Programme (1995/6);
* work with the NHS Executive in the North West involving the creation of R&D Liaison Groups and a series of local implementation projects (1995);
* learning from the FACTS Project (Sheffield) (1994/5);
* the work of the CRDC Advisory Group (1994/5) in reviewing the priorities for research related to the implementation of research findings; and
* experience from the management and evaluation of the GRiPP project (Oxford) (1993/4/5).

The work of the CRDC Advisory Group (1994/5) included a review of the published research literature related to the implementation of research findings and activities designed to change professional behaviour. One conclusion from that work was that there was limited evidence available from systematic reviews on the issues involved. The limited evidence which is available suggests that specific strategies to implement research based recommendations are necessary and that more intensive efforts are more likely to be successful. Arising from the work of the Advisory Group a programme of research is being commissioned by the NHS Executive (1996). The PACE Programme, jointly funded by the King's Fund and the NHS Executive, is designed to complement that research programme.

The contents of this paper will be kept under review so that up-dated versions are available as the work of the individual projects within the PACE Programme go forward and the results of similar activities - such as the work in the CRDC research programme are available. Discussions are in hand to establish an independent evaluation of the PACE overall.

The PACE Programme is scheduled to run until late 1998. The intention is to ensure that the lessons from the initiative are available during the work, rather than from a final report at the end of its life. It is envisaged that other material related to different elements of the implementation process will be published as work on those elements in the PACE programme is concluded and the lessons become clear. Details will be reported in the PACE Bulletin.

Creating Local Projects

These initiatives represent significant *"change management"* projects designed to change the behaviour of individual practitioners as well as the structure of the service or services within which they practice. The planning of the work should therefore draw on the experience in creating *"change management"* projects. There is extensive literature in this field and several relevant models of change management. The language may vary but the different models recognise the need to understand the current situation, the possible barriers to and levers for change. For example, one model describes the need to raise *awareness,* promote *decision* taking and secure *action.*

Whatever model is chosen it will require:

* a shared vision of the task
* leadership and a committed management team
* time and resources to sustain the project
* clarity about the scale of change required
* a suitable plan and timetable
* good communications between all those involved.
* plans to monitor and sustain change

As work to take forward the development of a local project plan is being considered it may be helpful to reflect on the early experience from PACE. PACE Bulletin 3 suggested the merit in:

* integrating the work into the *mainstream* activities of the organisation;
* using *existing staff*, for example through internal secondments;
* relying wherever possible on *existing information systems* rather than creating new systems;
* ensuring that the work is *multi-professional*;
* planning to use all available *local processes*, such as guidelines, audit and education; and
* engaging the CHC and/or representative of *patients* in project planning.

From Project to Mainstream

Work is now in hand to explore the practical means of moving from project mode to ensure that the use of evidence is a normal of way of working, ie part of the mainstream business of organisations. Early work suggests the need to consider three elements, ie readiness for change, steps to promote change and markers for success. A separate PACE discussion paper is available about *From Project to Mainstream.*

Components of the process

The following pages identify tasks and issues in eleven areas may need to be addressed as work is taken forward. The 11 areas are:

1. Verification of the Evidence
2. Information: the Baseline and Measuring Impact
3. Consultations and Communications with Local Interests
4. Involving Patients and Carers
5. Creating Guidelines and Care Pathways
6. Records and Management Systems
7. Financial, Resource and Contracting Consequences
8. Professional Education and Development
9. Clinical Audit Programmes
10. Organisational Development
11. Project Leadership

Comments on and suggestions about the material in this paper are welcome.

PACE Team : September 1996.

PACE : Tasks, issues and pointers to success

Section 1 Verification of the Evidence

- *concentrate effort in areas where the need for improvement is greatest*
- *recognise that research is unlikely to yield precise answers (grey rather than black or white)to all aspects of the topic being considered*
- *keep the focus, don't get embroiled in soft or poor quality research*
- *consider the need to assemble further research evidence and determine who should do it - but build as far as possible on reviews already available from reputable sources*
- *ensure that all key stakeholders agree the interpretation of the evidence - consider the critical appraisal approach*
- *ensure that any internal (local) reviews - if they are necessary - are subject to peer review*

Section 2 Information : the Baseline and Measuring Impact

- *aim to rely on routine information systems and avoid creating new systems*
- *review the practicality of using indicators drawn from a range of systems*
- *focus on process measures and rely on published material and relevant primary research to demonstrate the expected health benefits*
- *do not embark on a large scale data gathering programme - without rigorous review of the purpose and methods to be adopted*
- *avoid allowing the data collection to be an end in itself*
- *engage clinicians in the plans for data collection*
- *establish clear targets for the scale and timing of the impact of the work, eg when it will be "visible" in services to patients*
- *explore ways to present together data about efficiency and effectiveness*

Section 3 Consultations and Communications with Local Interests

- *plan early discussions with all key stakeholders (clinicians and managers) to explore ways to involve them in the project*
- *create and apply a communication strategy - to understand the audience and be clear who will carry and maintain the message to which audience*
- *identify influential local practitioners as potential "project champions"*
- *build discussions into normal routine business - rather than create a new (parallel) stream of activity*
- *ensure that communications do not become crossed or confused*
- *avoid large meetings wherever possible*
- *give special consideration to communications with primary care*
- *consider the creation of a - short - standard briefing note to maintain consistency in the message*

PACE : Tasks, issues and pointers to success

Section 4 Involving Patients and Carers

- *discuss with the CHC and/or other (relevant special interest) patient groups their involvement in the work, such as the preparation of guidelines*
- *consider ways to acquire an understanding of patients' perceptions of the current service*
- *explore ways in which health promotion specialists might support the work*
- *plan the preparation of information material for patients - draw on existing material wherever possible, such as that created in similar projects elsewhere*

Section 5 Creating Guidelines and Care Pathways

- *build on the experience of others in the creation of guidelines, eg learn from the Effective Health Care Bulletin (No 4. 1994) and the RCGP Report No 26 (1995)*
- *decide how guidelines will be developed and presented, eg who will lead the work locally and how will consensus be achieved*
- *ensure that the work is multi-professional and reflects links between primary, secondary, community and social care*
- *arrange for all interested parties to be involved and kept up to date with progress - but find ways to make judicous use of clinicians time*
- *do not expect to import guidelines - evidence is more transferable than guidelines*
- *ensure that guidelines are reviewed as they are developed - to ensure that they retain the evidence base*
- *ensure that guidelines are not biased in favour of well researched as opposed to clinically important areas of practice*
- *explore ways to tailor guidelines to the needs of patients - recognise the need for flexibility to account for possible complications and/or contraindications*
- *avoid extensive, glossy papers*
- *plan how any material will be kept up to date - with a clear review date*

Section 6 Records and Management Systems

- *seek ways to reflect the evidence in patient records and systems*
- *consider the merit of structured multi professional case notes*
- *consider merit of introducing "reminder" systems*
- *explore the options for the development of care pathways, ensuring that they are multi-professional and (wherever possible) involve patients*
- *review internal departmental (records and information) systems to seek ways to reinforce proposed service changes*
- *explore the options for using computerised decision support systems*
- *link guidelines to the organisations documentation systems*
- *consider creating structured referral forms which reinforce the proposed guidelines*

PACE : Tasks, issues and pointers to success

Section 7 Financial, Resource and Contracting consequences

- *assess the impact of the work and ensure that any contracting consequences are covered and sustained*
- *review the need to change service specifications*
- *consider the need for support for primary care teams*
- *consider the development of financial incentives where possible, eg from resources released by the proposed change*
- *consider whether work is required to develop new, and more appropriate, contract currency*
- *establish information requirements to support contract monitoring*

Section 8 Professional Education and Development

- *ensure that the project work is carried through into local education, training and development programmes*
- *engage clinical tutors and nurse lecturers in developing appropriate educational and developmental events*
- *explore the role of clinical supervision to support change in nursing services*
- *be clear about the nature of the message the proposed events are intended to convey*
- *ensure that educational events are built on the concept of (small) group discussion rather than lectures*
- *seek productive links between audit programmes (and regular feedback) and education*
- *ensure that primary care teams are able to attend project related training events*
- *secure appropriate approval, PGEA, CME etc*
- *consider the need for a programme of (educational outreach) visits to GPs - but ensure that it is co-ordinated with other similar activities, such as the work of pharmaceutical advisers and locality commissioning teams*
- *learn from the experience of others of working with primary care, eg FACTS (Sheffield) and IMPACT (Keele)*

Section 9 Clinical Audit Programmes

- *ensure that the initiative draws on the skills of local audit teams, eg in collecting data*
- *create links between the work on guidelines and the setting of standards for audit*
- *ensure that audits are evidence-based*
- *explore ways to link any local work on Service Quality and clinical audit*
- *explore ways to link audit in primary and secondary care*
- *ensure that audit is multi-professional and linked to the education programme*

PACE : Tasks, issues and pointers to success

Section 10 Organisational Development

- *ensure that the work is reflected in the business plan and/or corporate contract of the organisation/s*
- *ensure that the work has the support of senior staff in the key organisations - or work to build that support - develop effective partnerships between the main organisations involved*
- *define and promote the benefits to the organisation that will arise from the work, eg as a "Quality" organisation*
- *introduce arrangements, eg briefings, to keep all staff in the organisation in touch with progress*
- *encourage partner organisations to explore how they can build on the project, eg to generalise the experience to other service areas*
- *avoid creating more new papers (such as project newsletters) - build on existing publications*
- *explore how the project can act as a catalyst to secure better synchronisation of local systems and processes (such as professional education, audit and information services) to support service change*

Section 11 Project Leadership

- *be clear who - at senior (c. Director level) - is in charge of the project*
- *create a small local project co-ordinating group - to meet regularly to sustain momentum and identify potential barriers*
- *agree deployment and/or secondment of staff to operate in a co-ordinating role (agree job descriptions and reporting arrangements) - avoid seeking to recruit externally*
- *verify resources (funds and staff) available to sustain the project*
- *establish a project plan, including critical milestones*
- *develop a communication strategy - to ensure that information about the work is conveyed, consistently, to all interested parties*
- *consider the merit of a project diary to record lessons as the work goes forward*
- *create a systematic process to identify and share lessons from the work*

(ends)

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Promoting Action on Clinical Effectiveness

Measuring Impact

Discussion Paper : September 1996

Over the past few weeks the PACE team, along with other expert advisors, has been giving thought to the issue of measuring the impact of local projects implementing programmes of evidence based practice. This has been done in order to assist local PACE projects by providing a *framework for measuring impact*.

From the outset we have concentrated on making use of *routine data systems* and on focusing on *process* rather than outcome.

The framework is intended to be used as a guide when considering the impact of local projects.

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Background

Measurement is an important element of all the local PACE projects because it will enable local projects teams to:

- ***Focus attention on the aims and objectives of the project*** - Identifying indicators which are measurable and capable of showing change, will require a clear understanding of what the programme is attempting to achieve in, for example, the area of service development.

- ***Monitor progress and to take corrective action if required*** - Sensitive indicators should be capable of providing evidence of both the direction of the programme and of the rate of change.

- ***Assess the impact of the project*** - An assessment of the overall scale of change will be aided by the selection of baseline levels for comparison, for a more comprehensive assessment it should be possible to compare local outcome with clinical audit information and/or outcome measures based on published research.

- ***Attain and disseminate evidence of achievement*** - Being able to demonstrate achievement is an important element of the PACE Programme both for the morale of project teams themselves and for the justification of service developments.

Because the task of measurement is potentially complex and diverse a set of guiding principles and a framework have been developed as an aid for local project teams.

Guiding Principles

- ***Rely on original research-*** Given that PACE and other similar activities, is about implementing research based clinically effective programmes of care, there is no point in replicating primary research.

- ***Focus on the process of implementation rather than on researching health outcomes*** - Establishing health outcome is a complex and time consuming process, credible research material, including systematic reviews and meta analyses, is widely available and can be used to establish expected outcomes.

- ***Rely - wherever possible - on routine data systems*** - Creating customised data is often unnecessary given the wealth of information already available via routine data collection systems.

- ***Identify suitable comparisons*** - Finding true comparisons within the context of local project implementation is unlikely, nevertheless, it still important to make some attempt to establish whether or not observed change has occurred as a direct result of the implementation.

- ***Establish a baseline against which to measure impact*** - Baseline data are important when attempting to establish the scale of change, they can also be used as a reference point from which to proceed. The baseline, which may be a rate or trend, might reflect norms at a national, regional or local level.

- ***Build in a process to monitor progress*** - It is important to consider what is being measured, why it is being measured and how to measure it. These considerations will take into account the aims and objectives of the project, the availability and appropriateness of data (is a baseline available, is the data obtainable routinely, is it sensitive enough to detect progress).

- ***Finally, keep it as simple as possible.***

Framework

In developing and taking forward local plans for measurement it may be helpful to see the task as a number of steps.

Step 1 *Is routine data available* - PACT, HES, Hospital based data systems (PAS etc.)

Step 2 *What data is available for use as a proxy* - If routine data is unavailable for use as a direct measure is there any data which might be used as a proxy e.g. there may not be any routine data which directly measures morbidity but there may be an indirect indication of changes in morbidity by looking at changes in prescribing trends.

Step 3 *Can clinical audit provide any information* - Audit reports may contain valuable information particularly for the purposes of establishing baselines.

Step 4 *Is it possible to estimate the local outcome by making use of published research literature* - If a more specific assessment of outcome is required, a review of well selected studies should provide further information on outcome.

Step 5 *If customised data is required is it prohibitively difficult and/or expensive to collect and analyse* - In some instances there may not be any appropriate routine data available or, it may be that additional data, beyond the scope of monitoring implementation, may be required. If this is the case, the cost and time required to collect and analyse the data must be considered, as should the feasibility of using research literature.

Given the abundance of research material surrounding evidence based practice and the availability of routine data, it is unlikely and probably unwise for local projects to extend their efforts beyond step 4. It may be helpful to illustrate the application of this framework by considering the following.

Implementation is likely to affect the four broad areas; **Treatment/Interventions, Patients, Staff, Costs.** These are illustrated in Figure 1 which also shows some of the measurable variables within each broad area. A careful selection of variables i.e. those which are most sensitive to change within the context of each programme, coupled with existing research material, should be sufficient to establish the scale of change and the overall impact of the project.

For example, it should be practical to measure the local the impact on **Treatment and Intervention**, rely on published research to gauge the impact on **Patients** and **Staff** and undertake some work on **Costs**. Figure 2 provides an example which has been drawn from recent discussions with local projects, of how this might work in practice.

Figure 1

Framework for Measuring Impact

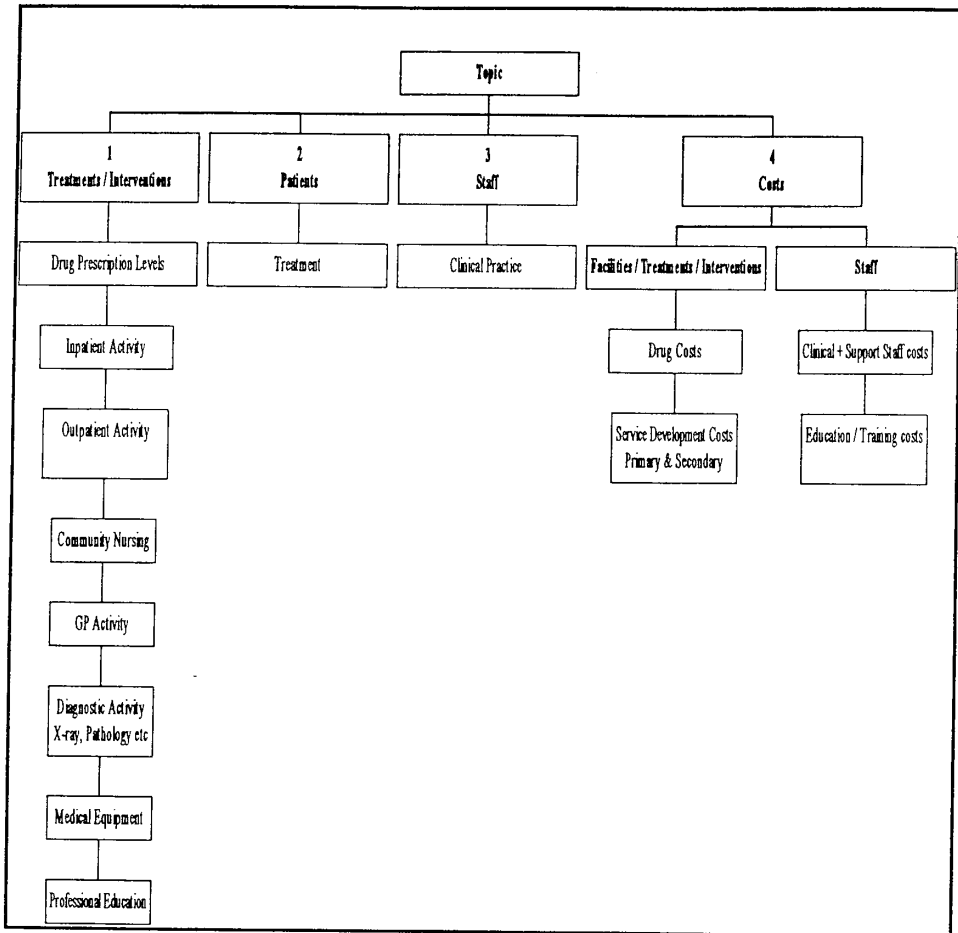

Figure 2

Topic - Reduction in prevalence of urinary incontinence

	Baseline	**Process**	**Comparison**
Treatment/ Intervention	zero base	referrals to advisory service	not feasible
Patients	prevalence (literature)	referrals to secondary care (participating practices)	referrals to secondary care (non participating practices)
Staff	zero base	training	not feasible
Costs	pad/aid/appliance (pre implementation-participating practices)	pad/aid/appliance (post implementation-participating practices)	pad/aid/appliance (non participating practices)

PACE PROGRAMME

Measuring Impact : Themes and examples

This paper sets out some of the *key themes* emerging from the work being done by local projects to measure the impact of their activities, and also provides a couple of examples of the type *indicators* being used by local projects to assess the impact of their work.

The approach adopted by most of the local implementation projects when considering measurement has been pragmatic and reflects the recommendations outlined in an earlier paper[1].

Introduction

Following a preliminary series of discussions with individual projects about measuring the impact of their work, a workshop was organised to review progress, share ideas and discuss concerns. The observations noted below have been drawn in part from the preliminary discussions about measurement proposals, and from comments made at the workshop by local project team members.

Broadly speaking the common areas of concern around measuring impact fall into one of two camps:

1 *Data quality and availability.*
2 *Emphasis on process rather than outcome.*

1. Data quality and availability.

As on might expect using routine data to monitor a process beyond that for which it was originally collected presents special problems. These problems are further compounded by anomalies such as; missing data, the variability of IT systems (particularly in primary care) and the variability in data recording standards.

The problems associated with routine data have to one extent or another been reflected in the measurement discussions with local projects, and whilst no immediate solutions to these challenges have emerged, the lessons we are learning may serve as a useful lever for change in the future development of data collection systems, particularly as evidence based practice becomes more embedded in the health service. An assessment of the sensitivity of proxy data will also be made.

* ***PACT data - item based difficult to measure changes in prescribing volume[2,3]***

Wide variation in the quantities per item prescribed by practices, and in the average quantity per item between practices and between health authorities make monitoring change difficult.

* ***Difficulties in obtaining routine primary care data***

The level and sophistication of computerisation in GP practices is variable, as is the nature of the data which is collected, making it very difficult to collect a 'standardised' data set.

* *Problems with the vagaries of hospital data*

Much of the impact on hospital services will be in areas other than admitted patient care i.e. out-patients, pharmacy and clinical investigation services, tracking change in these areas at a patient or condition level is very difficult.

* *Lack of comparative data*

Ensuring that changes in activity are changing and changing significantly, in line with comparable background activity is an important part of the measurement process. Obtaining comparative data, particularly in the case of prescribing patterns is problematic when considering population characteristics and the neighbouring effects of other effectiveness initiatives.

2. Emphasis on process rather than outcome

From the outset we have focused on the *direction* of change rather than the *outcome* of change. The focus on process has advantages and disadvantages. On the one hand it is relatively simple and cost effective to identify indicators which can be monitored and can provide a sense of direction of change. On the other hand process measures without some accompanying analysis of outcome can be interpreted as meaningless.

The desire to ensure a sense of meaning has been reflected by the fact that a number of projects have either, commissioned additional work on outcome evaluation or, have built in audit assessments.

3. Examples of measurement indicators

A

Dorset Health Authority
Topic: Menorrhagia

Local Vs Regional Trends in:

D&C,
Hysterectomy,
Endometrial Ablation.

Local Vs Regional Prescribing Trends in:

Norethisterone,
Mefanamic Acid,
Tranexamic Acid

B

North Derbyshire Health Authority
Topic: Congestive Cardiac Failure

Local Vs Regional Trends in:

Emergency admissions for heart failure
Re-admission rate for heart failure
Average length of stay for heart failure

Local Vs Regional Prescribing Trends in:

ACE inhibitor
Loop diuretic

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January 1997

1. Measuring Impact - Discussion Paper September 1996
2. PACT Data - Avoiding The Pitfalls - The Pharmaceutical Journal (vol. 257), Jul. 6 1996
3. Measuring prescribing: the shortcomings of the item - BMJ vol. 308, 5 March 1994

King's Fund

Promoting Action on Clinical Effectiveness

Education, learning and professional development

Discussion Paper : September 1996

An important element of the work of the local PACE projects is planned use of educational programmes to support their local projects. This paper drawn from the research evidence about effective education strategies offers advice about the creation of local education programmes.

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Educational programmes are an essential component of all local initiatives designed to promote the development of evidence-based practice. This paper suggests a series of steps that might usefully be followed to create such programmes. A reading list and brief introduction to education theory are in an Annex.

Background

"Education is not so much what one knows but how one behaves" John Ruskin

This quote indicates the *principle* that education is concerned with behavioural change although traditionally the majority of interventions and assessments of success of education are only cognitive. For educational processes to generate change in behaviour they need to relate to the daily working circumstances of the learner and indicate ways in which new clinical practice may be introduced. Its not just about imparting knowledge but about dealing with individual, the environment in which they work, their group and individual values and demonstrating that change is possible as well as desirable.

In more *practical* terms there are factors which promote adult learning and which therefore should form the theoretical basis for any educational approaches to changing clinical practice. Research has shown that Health Care Professionals learn best when:

- they know what they might gain from the effort of learning
- they determine the course and pace of their learning
- learning is related to their own experience
- topics are those which help them deal more effectively with every day problems
- topics relate to actual tasks and problems
- learning is seen to enhance job satisfaction and self-esteem
- learning incorporates elements of challenge to promote critical analysis
- learning takes account of the needs of the organisation and society as well a development of the individual

Changing clinical practice to gain patient benefit - role of education

In developing a programme experience has demonstrated that, if patient benefit is to be gained, there is merit in combining different types of interventions such as :

- outreach visits to clinical staff in their working environment (workplace learning)
- audit and feedback on current performance
- small group activities - sharing experience and beliefs
- patient as well as clinician information
- guidelines, clinical algorithms, or care pathways development
- reminder systems at the point of patient contact

All of these may be seen as part of an educational approach to changing clinical practice although there is an overlap with change management processes.

Normally a series of linked educational events for a particular aspect of patient care is beneficial. Workplace learning can be promoted by suggesting an activity which may be perused between "formal" sessions as a way of reinforcing learning. If this approach is taken it is imperative to have feedback and reflection on this at the next session. It is also important to bear in mind the time required to put such a programme in place. It takes time to secure PGEA, CME, CEPS approval. If specific skills are to be taught and staff certificated to

undertake them, this too takes time and needs discussion with appropriate lead staff and perhaps academic organisations responsible for staff training.

Practical aspects - a check list

Eight steps need to be considered firstly at the planning stage and also as the programme is delivered so that as needs become apparent the later parts of the programme can be modified.

1. **Needs Assessment**
   - expressed needs of learners - these may be obtained by outreach visits to people where they work, questionnaires with plenty of space for free comment, focus groups, SWOT analyses about a proposed change.
   - other externally generated needs - legal, professional, associated with service contracts.
   - identified personal/professional needs through portfolio learning.

2. **Objective setting**
   - based on needs - divide the needs assessment findings into bite size chunks and translate into practical terms eg "GPs should be confident in knowing when to refer patients for gastroscopy" rather than "guidelines for referral for gastroscopy will be written and disseminated".
   - objectives may well depend on whether the session is to be multiprofessional or uniprofessional, workplace based (often with time constraints) etc. - when a topic is challenging to a particular professional group a uniprofessional approach may be a good idea.

3. **Topics to be included**
   - set to meet objectives - beware overloading the session and give as much time as possible for interaction.
   - not too many for time and/or learner ability (or range of ability in audience)

4. **Activities linked to topics**
   - to engage participants - eg feedback on SWOT analysis, create a "headline" comment (What to do with £50,000 - well that's what we spend on drug X or dressing Y when a better alternative is......)
   - to promote sharing of prior learning - use "snowball" and similar approaches to ensure everyone participates.
   - to link to 'real life' - problems brought by participants, use of vignettes/case studies/scenarios etc.
   - use a variety of activities and media eg stories, small group work, video clips etc.

5. **Delivery style**
   - introduction to grab attention
   - agree use of small groups - use a variety of group approaches
   - arrange interaction with 'an expert' - not expert talking down to participants but sharing ideas with a respected individual with particular knowledge and skills.
   - arrange interaction with colleagues - eg through small groups either within or between "formal" educational sessions.
   - arrange interaction with other 'stakeholders' - patients, carers, 1ry/2ry care, even purchasers.
   - use a variety of styles - avoid lecture without activities

6. **Delivery**

- modular with workplace activities or other ways of promoting thought, interaction or practical activity see below
- suitability of location, room layout, visual aids, refreshments, time of day, ease of access, number and range of participants
- within day flexibility to meet needs as they arise
- in the workplace (outreach) or at a central venue

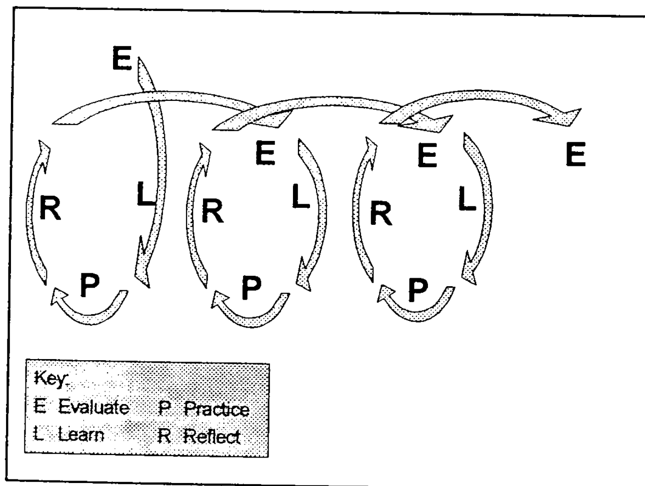
7. **Summing up**

- link to needs/objectives
- link to experience - prior and of the day
- future plans - individual and team
- promote actual writing of plans and if possible the sharing of these.
- agreeing actions to sustain the learning

8. **Evaluation**

- link to needs/objectives
- Kirkpatrick (1967) described four aspects of the learning process which need to be considered in relation in evaluati:on:
  - * Reaction - satisfaction with the educational programme
  - * Learning- demonstration of new/enhanced knowledge/skills
  - * Behaviour - transfer of learning to everyday practice
  - * Results- changes in outcomes eg for patients, the organisation etc
- at a time to show that new practice based on learning has become established routine practice.

The following model illustrates the use of 'formal' modules with workplace learning between these. Reflection through feedback leads to evaluation of practice, experience and discussion of new material within 'formal' sessions and leads to workplace learning 'in practice'.



Annex

Further reading :

- Alan Rogers, Teaching Adults, Open University Press, 1986
- Brookfield S, 1986, Understanding and facilitating adult learning, OU Press, Milton Keynes
- Curzon LB, 1990, Teaching in further education: An outcome of principles and practice, Cassells, London
- Davis DA, The Dissemination of Information: Optimising the Effectiveness of Continuing Medical Education. Disseminating Research/Changing Practice, Research Methods for Primary Care Vol 6, Part III. Sage 1994: 139-150
- Jaques D, Learning in Groups, Kogan Page, 1992
- Knowles M, 1990,, The Adult Learner: A neglected species, Gulf, Houston
- Newble D, Canon R. A Handbook for Medical Teachers - Second Edition. 1987 National Association of Clinical Tutors Handbook, NACT, 12 Chandos Place, London W1

Educational theory

Starting with a philosophical approach.

The following description of the aim of adult learning demonstrates that learning is grounded in previous experience and leads to consideration of future possibilities.

"The aim of adult learning is to reveal, describe, and interpret the past experience of individuals in order to illuminate the present and make manifest the potentialities of the future."

J P Powell

This is amplified by Curzon who recognised that learning relates to seriously considering novel (or even "unthinkable") options for change. The possibility that learning is a liberating phenomenon is implicit in this description:

"Education . . . is declared as human growth, the signs of which include flexibility, openness to new insights, new possibilities, hospitality to novelty, to the imaginative and the creative."

L B Curzon (1990)

There is also the question of whether education of staff within organisations is geared to enhancing the performance of the organisation and its aims or the desires of the individual. This of course is reflected in differing views of needs for educational programmes:

In more practical terms there are factors which promote adult learning and which therefore should form the theoretical basis for any educational approaches to changing clinical practice. Health Care Professionals learn best when:

- they know what they might gain from the effort of learning
- they determine the course and pace of their learning
- learning is related to their own experience
- topics are those which help them deal more effectively with every day problems
- topics relate to actual tasks and problems
- learning is seen to enhance job satisfaction and self-esteem

After Knowles M (1990)

This approach may be considered too "soft" and "cosy". Certainly Stephen Brookfield (1986) considers that in the *facilitation of learning* there is a need to " incorporate elements of challenge, confrontation and critical analysis of self and society."

The 'needs' of the individual and the organisation may appear to diverge. It should be recognised that:

"Needs assessment and evaluation require a different orientation since managers concern themselves with profit and costs, while adult educators concentrate on the growth and development of the individual."

Shipp, 1985

In fact sensible organisations use the principle that they achieve their aims by developing individuals within teams that recognise and work towards the overall aims of the organisation. Further that any process of monitoring or assessment should only occur once individuals and teams have had the educational opportunities to meet mutually agreed standards.

(ends)

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Promoting Action on Clinical Effectiveness

From Project to mainstream

Discussion Paper : September 1996

As the work on the PACE Programme has been taken forward it has become clear that a measure of success in relation to clinical effectiveness is the extent to which that work can become a normal way of working within organisations. This paper offers some initial thoughts on this issue - as a basis for discussion.

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The starting point for the work of the PACE Programme is the model which was developed in Oxford within the Getting Research into Practice and Purchasing project (GRiPP). This suggested work in a series of steps, starting with the selection of topics for attention, running through a local process of consultation and developing, disseminating and implementing evidence based guidelines. Later evaluation demonstrated the effectiveness of the approach.

The objectives for PACE go wider than specific topics and are designed to ensure that the individual projects act as a catalyst to change in local organisations. Discussions with the local projects identified a number of early lessons. These were articulated in the third issue of the PACE Bulletin. Two of those lessons are most relevant here, ie that people should :

* integrate the work into the mainstream activities of the organisations; and
* plan to use all available processes, such as, audit, guidelines and education.

Project to Mainstream

There are undoubted benefits to the project approach to the management of tasks, such as clarity about targets and timetables and a distinctiveness about the work which enables progress monitoring. On the other hand it is important to ensure that the changes stimulated by the projects are sustained and ways found to ensure that the work influences the organisation as a whole. A key factor in success may be the extent to which organisation/s are able to align and synchronise their local systems and processes to carry forward the proposed service changes and support staff involved. For example, ie

a. can the ***intelligence and library services*** assemble relevant, adequate and reliable information (and evidence);
b. are the local ***audit programmes*** used to quantify the need for change and to monitor the impact of new guidelines or care pathways
c. is work to create ***guidelines or care pathways etc*** tied into the local priorities of the organisations;
d. is the local programme for the ***professional education and development*** used to support the changes to local services;
e. is the development of *records and* ***management systems*** used to reinforce the new guidelines, such as patient records, referral forms and computerised decision support systems; and
f. are ***personnel (HR) services*** used to support proposed service changes.

This is not a full list of local processes. The work would benefit also from links to other relevant activities where evidence is a critical component of the work, such as the work of drug and therapeutic committees. Some of these systems and processes will be managed by health authorities, others by and within NHS Trusts and thus require effective horizontal and vertical integration. Figure 1 offers an illustration of the potential interests and contributions.

Formulating a Strategy

Our early discussions suggest it may be helpful to see the task of progression *(from project to mainstream)* in three elements, ie :

First, to be alert to **precursors to change,** *ie factors* that can indicate a readiness for change, such as :

- has the organisation an *acknowledged set of values* which supports the use of evidence in decision making, such as a collaborative - multi professional style of working and a desire to do the right things (ie delivering effective care)?
- financial reality and other issues that might dominate the local management agenda
- are those involved alert to the different *funding and reporting channels* (eg for professional education and audit) and different agendas?
- are the *benefits to those involved* clear - how will the work help them provide better care?
- recognition that research evidence may not provide clear cut answers or address all aspects of care.

Second, to identify and take a series of **steps to promote appropriate change.** These could include :

- retaining a *focus* on a limited number of topics
- promoting an incremental move *from project to programme to mainstream*
- promoting *shared learning* between organisations, groups and functions
- finding ways to *provide help as well as information* to clinicians
- identifying *product champions* (in the key organisations, groups and functions)
- being clear whether the aim is to change the way "we" work or "they " work - is the catalyst internal or external?

Third, to develop a series of **markers of success.** These could include :

- is the *library/intelligence service* seen as a central resource for the organisation?
- is there a *clinical effectiveness programme* addressing work on a range of topics and embracing the potential interests and contributions (see Figure 1.)?
- is there coherence between the *work programmes* of the different organisations groups and functions to improve the delivery of care?
- are there productive relationships between clinical staff and managers?
- are there *training programmes* which cross organisations, groups and functions?
- is work on clinical effectiveness reflected in *NHS contracts*?
- do *corporate contracts and personal objectives* cover clinical effectiveness activity and results?

Discussion

This note has been prepared as a stimulus to debate about the challenge of making evidence based practice a normal way of working within organisations. We'd welcome comments, reactions to and discussion on the points made in this paper.

PACE Team : September 1996

Promoting Action on Clinical Effectiveness

Figure 1.

Interests and Contributions

Service Delivery

Clinical Staff
- *Secondary Care*
- *Primary Care*
- *Doctors/Nurses/Therapists*

Patients
- *CHCs*
- *Representative Groups*
- *Voluntary Organisations*

Organisations

Health Authorities
- *Chief Executives*
- *Executive Directors*
- *Non-Executive Directors*

Primary Care
- *Partners*
- *Practice Managers*

NHS Trusts
- *Chief Executives*
- *Executive Directors*
- *Non-Executive Directors*

Groups, Functions and Tasks

Service Management Systems
- *Patient Records, Xray, etc.*

Library Services
- *Access to Evidence*

Health Promotion
- *Information for Patients*

Guidelines/Pathways
- *Define Good Practice*

Professional Education
- *Promote Service Changes*

Commissioning
- *Resources, Priorities*

Clinical Audit
- *Review Current Services*

R&D
- *Securing Evidence*

Pharmaceutical Services

Contracting
- *Financial Implications*

Information Services
- *Monitoring Information*

HR Services
- *Support for Staff*

Finance
- *Information on Costs*

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Promoting Action on Clinical Effectiveness

Effective Communications: the *PACE* experience so far

March 1997

An essential component of implementing change is getting clear messages across to all interested parties. This paper describes examples of the methods being used by the local PACE projects to enable the local project team to keep in touch with other local staff and organisations.

The paper is based on a series of conversations with colleagues involved in some of the local PACE projects around the end of 1996, i.e. after the local projects had been in place for about six to nine months.

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Effective communication needs to be maintained at a number of levels. Members of the core PACE project groups tend to maintain effective communication via informal face to face contact in between formal meetings. However ongoing communication between the core group, the steering group, the rest of the local health service and users, needs more formal methods in order to ensure that the messages are disseminated regularly in a consistent and clear manner.

An example of a formal communication policy comes from the Royal Berkshire and Battle Hospital's leg ulcer core project group. Their work, together with methods used by some other local projects suggests that the stages involved in the implementation of the strategy are:

- identification of all communication target groups including the (parent) steering group, relevant senior and "ground" staff at acute and community trusts, primary health care teams, university departments, CHCs and user groups. It is particularly important to identify communication routes to those target groups that don't have natural assemblies e.g. practice managers in primary care. The identification of all groups it is important to target will help ensure that those harder to reach groups are not neglected. In addition, a database of parties who have shown an interest in the project could be established in order to ensure ongoing communication and thus to harness enthusiasm.

- identification of *existing* communication routes and networks e.g. newsletters, purchasing intentions, existing fora, educational events, user and community groups, health Authority and trust board meetings. It is important to target those communication routes which have high visibility.

- clarification of the agendas of the various professional and user groups. This is vital in order to appropriately tailor the messages given.

- identification of named people in the core PACE project group who would be responsible for the regular dissemination of information via identified communication routes. The core project group is multi-disciplinary. This enables a mechanism whereby group members communicate with members of their own professional or user group. The advantages of this are that they will already be aware of effective communication routes to that group and will speak in the same language when addressing the group. Also they are likely to be known by members of the wider group which facilitates informal dialogue and feedback. This assignment of responsibility is set out in tabular form (see opposite).

- preparation of material, on a regular basis, appropriate for each communication route e.g. detailed information packs on clinical effectiveness in general and the PACE project in particular for the steering group, update articles for the newsletter, relevant clinical vignettes for GP education fora and patient information leaflets.

- identification of mechanisms for measuring the effectiveness of the communication strategy e.g. measurement of response to invitations to study days advertised in local newsletters.

Royal Berkshire and Battle NHS Trust
Focus on Leg Ulcers
Communications Strategy

The table below illustrates how the local PACE Project Core Group assigns responsibility for communications.

Target Audience	**Routes**	**Responsibility**
A. Community Trust - Neighbourhood Managers - District Nurses - GPs	- Nursing Policy Committee - Tissue Viability Link Nurses - Acute Unit GP Newsletter and MAAG open days	This column uses the initials of the appropriate member of the Core Group
B. Acute Trust - CE and Board - CSU Managers - Ward Sisters - Nursing Staff - Senior Medical Staff - PAMs	- Board reports through Director - Monthly Nursing Policy meeting - Lead Sisters meeting (monthly) - Practice Development Nurses and Tissue Viability Link Nurses - Post Graduate meetings - Departmental meetings	
C. Other Local Organisations i. University - College Staff - Students on relevant courses ii. Health Authority	- College Newsletter - Course module leaders - Commissioning meetings	

This illustrative table provides examples only. To be effective the table needs to include all the target audiences, the current routes available and responsibility *and be kept up-to-date - at* regular project group meetings.

Special Events

The strategy described depends on existing routes of communication. However it may also be necessary to plan some ad hoc events to stimulate debate on challenging issues. These may include a large meeting held on an annual basis of all interested parties, including health and social services and user groups gathered together to discuss progress. This could be followed by a special event incorporating disciplines not previously involved in the project, but who could learn from lessons generalised from the work.

The PACE Project in Wirral, which involves the role of a Family Support Worker (FSW), offers an example where special events have been helpful. This project relates to the employment of an FSW employed by a voluntary organisation (Making Space). It involves exploring issues about the links between the Health Authority, Making Space, the local NHS Trusts, Primary Care and the Local Authority Social Services Department. All the organisations have been open from the outset about their desired outcomes from the project

and acknowledged that each agency had a different view. They recognised that the learning from the project work would help them reconcile these differences, and the related tensions, and allow progress to be made.

A number of meetings were arranged with staff in the locality where the FSW operates, including GPs and other primary care staff, community psychiatric nurses, social services staff, ward staff relating to the area to ensure that people understand the role of the FSW and discuss in a two way process how the FSW fits within the community mental health team. To supplement these meetings a programme of workshops is being arranged to explore a number of issue where learning from the project should contribute to the development of the role of the FSW.

The first workshops addressed issues including, confidentiality and questions about the handling of and sharing information, team management, management of case record systems and the organisation and monitoring of assessment and review processes. The discussion provided the stimulus for a series of action to help resolve the issues.

A second workshop is planned for the autumn when it is expected that the issues which will need to be addressed will include, mechanisms for contracting with the voluntary sector, reconciling differing policy objectives of the various organisations and agencies involved and those faced when a small organisation is working closely with larger teams and organisations.

What have we learnt so far?

The local PACE projects have found that:

- using *existing well known networks and communication routes* is a more efficient strategy to employ rather than initiating new and untested systems;
- the *information* disseminated via different routes should *be standardised and presented in a clear simple form*, adapted for the different audiences; and
- it is useful to provide a *contact number* so that feedback can be obtained.

Finally, and perhaps most importantly, *written information should never be seen as an exclusive substitute for the spoken word.* Face to face dialogue should always retain a high priority in any communication strategy if the project is to benefit from the knowledge and expertise of the wider audience. Written material can be seen as an important and regular way of *informing* people, but verbal communication is needed in order to achieve true *involvement.*

Acknowledgements. This paper is based on conversations with colleagues involved in the PACE projects in Bolton Community Healthcare NHS Trust, Bromley NHS Trust, Dorset Health Authority, Royal Berkshire and Battle NHS Trust and Wirral Health Authority.

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