



sharing not shelving – achieving implementation of research findings

The naïve assumption that when research information is made available it is somehow accessed by practitioners, appraised and then applied in practice is now largely discredited. Whilst knowledge of a practice guideline or a research based recommendation may be important, it is rarely, by itself, sufficient to change practice. The literature on persuasive communication and advertising makes a distinction between communications that increase awareness and those that actually bring about changes in behaviour. This distinction is helpful in understanding that dissemination and implementation may be considered as a spectrum of activity, where dissemination involves raising awareness of research messages and implementation involves getting the findings of research adopted into practice.¹

This short paper looks at different ways of trying to ensure maximum (or sometimes at least minimum!) impact of research findings and lessons. It covers firstly some of the relevant theories, then looks at advice from the health and social care fields and finally suggests some best practice ideas for RCP projects. The health and social care fields have invested in researching the impact of research on practice, although this is mainly aimed at health practitioners and patients, rather than also at policy-makers and politicians. There are other places we can also learn from – eg how innovation is enabled or sabotaged in companies.

Why schlep through this necessarily protracted process of focusing on research implementation? Without investing in the full process of following-through research, it's a wasted exercise and the best that can be hoped for is that it avoids the wastebin and actually reaches a few shelves. Creating effective research goes way beyond 'dissemination'. Dissemination is about the distribution channels – important, but equally important is what people do with the information once it's reached them. We need to achieve the research equivalent of 'conversion' in direct marketing, when enquiries are converted to sales.

Research findings need to become seen as the middle rather than the end of the process, with timetables, funds, skills and project management geared up for this. The complexity and challenge of achieving this is illustrated by even this very short summary. There's no straightforward link between knowledge and behaviour, as we know from *Campaigning with Attitude*², and the Home Office's *Improving Public Attitudes to the Criminal Justice System: the impact of information*³

¹ Getting Evidence Into Practice (NHS Centre for Reviews & Dissemination, York University)

² *Campaigning with Attitude* – available from www.payback.org.uk/attitudes

³ <http://www.homeoffice.gov.uk/rds/pdfs2/hors245.pdf>

1. relevant theories and frameworks

It's always nice to have some background theory behind why something does or doesn't happen. The following are useful to consider in relation to why and how research findings are responded to in particular ways.

learning theory

Based on principle that people modify their behaviour depending on its consequences. Produces approaches which use positive reinforcement eg via audit and feedback, financial incentives (money or 'perks' to practitioners and/or their teams; extra resources), enhanced status, educational opportunities.

social cognition models

More about factors 'internal' to the individual, eg their attitudes, beliefs etc, rather than 'external' – eg financial rewards. Attitudes or beliefs may be about:

- likely effectiveness of the intervention
- others' views
- belief in own abilities

*Stages of change theory*⁴

People go through five stages in this process of behavioural change:

1. pre-contemplation
2. contemplation
3. preparation
4. action
5. maintenance

Some of the important lessons for us from this seminal theory include:

- there is often a predictable order of awareness and motivation that people go through in relation to behaviour change
- approaches need to be designed according to what stage the target is in
- "treatments that are quite effective in one stage may be ineffective or detrimental in another"⁵

⁴ Changing for Good – Prochaska and Di Clemente (1993)

⁵ Changing for Good – Prochaska and Di Clemente (1993)

*Diffusion of innovation theory*⁶

People take up innovations at different rates and can be categorised as:

- innovators
- early adopters
- middle majority
- late adopters
- laggards

and the stages that these groups go through in relation to the potential change are:

1. knowledge
2. persuasion
3. decision
4. adoption/rejection

One key lesson familiar to many of us is that there will always be laggards! The 'laggards' may be colleagues within or outside our organisations, service-users, policy makers, politicians or groups of the public. This can be potentially demoralising so it's generally best to focus efforts on the more responsive groups, certainly to create initial take-up and cumulative momentum.

Persuasion

Possibly best summed up in *Influence* by Cialdini⁷, with the 6 key factors in influence identified as⁸:

- commitment and consistency (*I did it before so I must do it again*)
- social proof (*everyone else is doing it...*)
- reciprocation (*I scratch your back, you scratch mine*)
- liking (*I had to buy it, the salesman was so nice*)
- authority (*you should always listen to the experts*)
- scarcity (*I got the last one in the shop!*)

Models of organisational change

One model gives 3 stages in the change process⁹:

1. *unfreezing* of old behaviours – a recognition that the old way of doing things isn't sustainable any longer
2. *changing* to a new position, eg through acquiring new information
3. *refreezing* of new practices eg through reinforcement or support

⁶ Diffusion of Innovation – Rogers (1983)

⁷ *Influence: Science and Practice* R Cialdini

⁸ *Campaigning with Attitude* – available from www.payback.org.uk/attitudes

⁹ Field Theory in Social Science - K Lewin (1951)

planning frameworks

social marketing

Provides a framework for identifying factors which drive change. 6 stages:

1. planning & strategy, including 'market research' with target groups
2. selecting relevant channels and materials, including through process of market segmentation
3. developing & piloting materials
4. implementation
5. evaluation
6. feedback to refine intervention

There's a superb book which sets out the application of social marketing practice – *Hands On Social Marketing: a step by step guide* by Nedra Kline Weinreich.

accelerated learning

Not exactly a fully-fledged theory, but another outstanding book¹⁰ and a compelling argument for ensuring that lessons from research are introduced through a sequence of initiatives. It's no good just launching the report, or even having a one-off 'implementation' event. There needs to be targeted preparation and follow-through to have any hope of the lessons being integrated into changed practices. The four 'phases of learning' that Dave Meier describes seem self-evident but are rarely evidenced in practice! They are:

1. preparation
2. presentation
3. practice
4. performance

Regrettably, almost all of the effort is invariably on phase 2, whether that constitutes the research or report, or a particular training event, rather than the holistic process that's needed, culminating crucially in 'performance': how the learning is integrated into work practices.

This is well-illustrated in the health and social care fields, described in the next section.

¹⁰ Accelerated Learning Handbook – Dave Meier (2000)

2. lessons from health and social care fields

The following ideas for increasing practitioner implementation of research findings are from the health and social care fields, mainly plucked from three excellent resources:

Getting Evidence Into Practice (NHS Centre for Reviews & Dissemination, York University, 1999)¹¹

How to put the evidence into practice: implementation and dissemination strategies (National Health and Medical Research Council – Australia, 2000)¹²

What works? Making connections: Linking research and practice (Barnardos 2000)¹³

The ideas and recommendations flow from the identification of barriers to implementing research findings:

barriers to change

- information
 - insufficient
 - unconvincing
 - conflicting
- cost-benefit analysis
- workload levels
- lack of time
- lack of other resources
- strength of the status quo, including habit & reluctance to admit previous practices were sub-perfect
- difficulty accessing, or even knowing about existence of the research
- indigestibility of research findings as presented
- not believing research is relevant
- concern that implementing research findings will not only change work practices but increase work levels or complexity (or reduce pleasures, perks etc)
- effects of stress
- individual decision-making (eg quirky, personalised reason for resisting change)

a. education/training/professional development

Salutary findings of a “*review of 11 studies evaluating the effects of disseminating educational materials including clinical practice guidelines, audio-visual materials and electronic publications, found no statistically significant improvements in practice.*”¹⁴ Similarly:

¹¹ Getting Evidence Into Practice (NHS Centre for Reviews & Dissemination, York University)

¹² How to put the evidence into practice: implementation and dissemination strategies (National Health and Medical Research Council – Australia, 2000)

¹³ What works? Making connections: linking research & practice. Barnardos 2000

¹⁴ Getting Evidence Into Practice (NHS Centre for Reviews & Dissemination, York University) - <http://www.york.ac.uk/inst/crd/ehc51.pdf>

Didactic educational sessions such as conferences, personal visits and workshops in which no explicit effort is made to determine practice needs or to facilitate practice change have failed to produce changes in performance or health outcomes. More comprehensive strategies drawing from health education theory and employing workshops in which interactive participatory elements are included have effected changes through the use of practice rehearsal or other patient educational and practice-reinforcing methods (see section on interactive educational meetings above) (Bero et al 1998).¹⁵

Pharmaceutical companies invest heavily in a multi-stranded promotional approach, with the Australian NHMRC giving the following list of ways that companies try to reach health professionals at the time a new drug is registered:

- journal articles
- advertorials
- news articles in medical magazines
- face-to-face communication by a sales team
- sponsored symposia
- sponsored sessions at scientific conferences
- advertising
- funding key opinion leaders to attend conferences
- funding divisions of general practice or other professional organisations/events
- marketing strategies such as building brand image, using strategies and language similar to those used in advertising, and giveaways

There is a feeling in the industry that it is wise to communicate with specialists first, then GPs, then patients. One interviewee said: ‘Specialists resent finding things out from GPs, and both groups resent finding things out from patients. They find it threatening. Driving patients to doctors can be counterproductive.’¹⁶

Dissemination methods listed in the Barnardos research¹⁷ included:

- launch, with attendant press release, press conference, seminar
- research summaries
- targeted summaries, eg designed specifically for practitioners or users
- professional and academic journals
- conferences and seminars
- ‘key message’ briefings
- regular bulletins or newsletters
- web-sites
- media
- specialist databases, eg Caredata
- direct mailing to agencies
- materials for service-users
- CD-ROMs
- audiotapes

Factors which Barnardos’ respondents identified as increasing likelihood of research uptake included:

¹⁵ How to put the evidence into practice: implementation and dissemination strategies (National Health and Medical Research Council – Australia, 2000):

<http://www.health.gov.au/nhmrc/publications/pdf/cp71.pdf>

¹⁶ How to put the evidence into practice

¹⁶ How to put the evidence into practice

¹⁷ What works? Making connections: linking research & practice. Barnardos 2000

1. accessibility - making research more user-friendly:
 - clear
 - brief
 - attractive
 - targeted
 - with practice or policy implications spelt out
 - including practice tools
2. quality of content:
 - clear strategy
 - clear message
 - content of research consistent with or at least not too much at odds with current practice
3. relevance
 - to practice
 - to local circumstances
 - identifying priorities for change
4. ownership and partnerships between researchers and
 - practitioners
 - service users
5. timing
 - right information at right time
 - balancing speed with usable results

b. audit and feedback

A continuing process in which a professional's clinical performance is fed back to them, sometimes with recommendations for action. The information could be based on observation, patients, records, databases etc.

c. reminders

- manual
- computerised

d. mass media

Most doctors, social workers, patients and researchers watch TV and listen to the radio!

Choices for PR expertise and input to reach these targets include:

- researchers developing and maintaining their own network of media contacts
- research agencies having in-house PR specialists
- research agencies using PR agency when needed
- research findings being publicised by funders' or sponsors' PR agencies (in-house or external)

e. local consensus processes

Where local people problem-solve, partly based on information provided by outside experts. A bit like deliberative polling but resulting in professional changes in practice rather than voting. One format is for an expert to give a presentation, but then to leave and a 'neutral' facilitator then supports the discussion.

Intended partly to avoid rejection of information or advice by outsiders – i.e. to foster local ownership of and enthusiasm for the proposed changes.

f. consumer-mediated interventions

Alternative approach, based on information given to or sought from patients, with the patients then changing their behaviour and perhaps engaging more assertively and informedly with practitioners. In other words, the object is to increase patients' knowledge and change their demands and expectations.

Communication with the public takes many forms, including:

- direct advertising, as long as the product name is not mentioned directly;
- sponsorship of 'information lines';
- sponsorship of events;
- encouragement of media reports of registration, market research or new data;
- sponsorship of patient information, such as brochures or videos; and
- sponsorship of patient support groups.¹⁸

¹⁸ How to put the evidence into practice: implementation and dissemination strategies (National Health and Medical Research Council – Australia, 2000)

g. administrative interventions

- putting up barriers or hoops to jump through
- removing barriers or red tape
- incentives, sanctions etc

h. incentives and penalties

Many incentives operate within the health system to influence clinician behaviour, including:

- financial incentives, such as differential fee charges, prospective payment systems, clinical budgeting, the removal of items from reimbursement schedules, and the provision of funds for retraining in specific techniques recommended by guidelines;
- personal satisfaction, compounded by recognition from peers or experts/champions;
- professional incentives, such as accreditation or continuing medical education (CME) points.
- invitations to attend professional conferences (eg doctors are more likely to prescribe a particular drug if they have been on expenses-paid weekend 'seminars' in holiday resorts with their spouses organised by the manufacturers of that drug [Orlowski and Wateska 1992]);
- the possibility of increased protection offered against litigation (NHMRC 1999);
- government regulation; and
- the receipt of personalised, relevant data through the evaluation process.

Clinician behaviour is less likely to change if there are disincentives to do so.

Disincentives include:

- extra workload;
- extra time required;
- no extra remuneration, associated with either of the above;
- the need for extra resources; and
- the need for specialised skills and equipment.

Conversely, Barnardos give the following interesting list of reasons why respondents felt research was taken up by practitioners¹⁹:

- to provide a theoretical framework, including making sense of a situation
- as a source of motivation and new ideas
- as justification or ammunition, sometimes after the event or as an argument for increased resources
- to help assess probabilities and help prioritise

i. other methods of increasing implementation of findings

- guidelines, circulars
- opinion leaders
- computers
- feeding back cost information

¹⁹ What works? Making connections: linking research & practice. Barnardos 2000

conclusions from health research into different dissemination and implementation interventions

What works best are:

- multi-pronged approaches – eg educational outreach + guidelines
- focused rather than scattergun approaches

and what works worst is:

- passive dissemination of guidelines and educational materials

Strategies and overall effectiveness

Consistently effective	Variably effective	Little or no effect	Unknown effectiveness
Educational outreach visits	Audit and feedback	Educational materials alone	Financial incentives
Decision-support systems and other reminders	Local opinion leaders	Didactic educational meetings	Administrative interventions
Interactive educational meetings	Local consensus processes		
Multifaceted interventions	Patient-mediated interventions		
Mass media interventions			

Based on Bero et al (1998)

*We repeat that this table is a guide, based on imperfect literature. That is not to say that educational outreach visits will always work in all circumstances, or that educational materials alone are always ineffective. Who knows how cost-effective a well-placed pamphlet may be in the right circumstances?*²⁰

3. increasing the uptake of criminal justice research findings

We spend large amounts of our own and our organisations' time and energy, and funders' money, in producing research, much of which includes compelling evidence and recommendations. To repeat the mantra of this paper, this is all completely wasted unless we follow through and ensure that the findings stand the best possible chance of being implemented by their target audiences.

process

²⁰ How to put the evidence into practice: implementation and dissemination strategies (National Health and Medical Research Council – Australia, 2000)

We need to work energetically to avoid the shelf-magnet route of:

1. needing to find money for researchers' salaries and/or to contribute to core costs so:
2. thinking of topic, applying for funding, getting money
3. doing the research
4. writing it up
5. perhaps launching it
6. shelving it and seeing it on others' shelves when we visit their offices

Rather, research needs to be recognised as being a process which begins ideally with the ultimate beneficiaries identifying the need, or at least helping to shape an identified need. It ends only when the research findings are implemented. The process needs to be something like:

1. identification of need, in partnership with end users of the findings
2. design
3. carrying out
4. conclusions/analysis
5. dissemination
6. promotion
7. follow-up
8. take-up

This elaborates on Meier's *accelerated learning* model²¹ of:

- preparation
- presentation
- practice
- performance

but is the same principle of learning consisting of crucial stages before and after the 'learning event' itself.

The following are intended as prompts, or checklists, to help with this process. They are, of course, not definitive, and are set out in a format that you can add your own prompts.

target groups

within CJS

- public educators
- vol orgs
- sentencers:
 - judges
 - magistrates
 - justices clerks
 - YO panel members
- offenders
 - what aspects would be of interest to whom?
 - routes for accessing
- practitioners:
 - YOT workers

²¹ Accelerated Learning Handbook – Dave Meier (2000)

- police
- probation
- prison
- policy people
 - civil servants
 - special advisers
 - policy people in vol orgs, quangos etc

outside CJS

- media
- makhers
 - MPs
 - CDA people
 - council leaders
 - other opinion formers, eg heads of think tanks, celebs
- practitioners:
 - medical staff
 - teachers
 - housing staff
 - employment staff??

Each research project needs to be approached as a social marketing initiative. Because it is! Page four outlines the main processes in a social marketing initiative, and the following traditional ‘4 Ps’ of the *promotional mix* are a main chunk of stage 4 in Kline’s six processes²².

product

The ‘product’ needs to:

- be identified (is it the research itself? the report? the findings? recommendations? the issue that it analyses, eg a local service?)
- attract attention – i.e. be distinctive and stimulate people’s interest
- be attractive and clear

The most likely ‘product’ is the research itself and there are a range of choices about how this is physically manifested, eg:

- full report
- research summary
- customised formats which arouse curiosity and have lasting presence (i.e. shelf-avoiding qualities), eg posters (seem much used for health conferences), postcards, glasses cleaners etc

price

There are generally issues about charging for the ‘product’ – eg for the research report:

- whether or not to charge
- if charging, how much

²² *Hands On Social Marketing* – Weinreich Kline

- will free copies be sent to primary targets? And to primary contributors, especially if service-users?

place

Related to price is the issues of how to ensure the research is read by its target audience. Where will people get hold of the research from, eg:

- receive it unsolicited by:
 - mail
 - Internet (e-mail, e-bulletin, website)
- buy from:
 - publications department
 - shop
 - Internet
 - exhibitions
 - seminars and other training events

promotion

Need to promote:

- existence of the research
- lessons and implications

Potential mechanisms:

- **information products**, tailored to different audiences:
 - leaflets
 - promotional information products
 - research summaries
 - targeted summaries, eg designed specifically for practitioners or users
 - web-sites
 - CD-ROMs
 - audiotapes
 - posters
 - books
 - project packs containing combinations of above
- **professional development** for:
 - judges and magistrates
 - probation staff
 - criminologists
 - penal reform sector:
 - via seminars, briefings etc
 - websites
 - features in sector magazines
 - consortium meetings and mail-outs
- **advertising, direct marketing, media coverage**
 - professional/academic publications:
 - CJ specialist
 - ‘straddling’ sectors (housing, health, employment, youth etc)
 - newsletters
 - mainstream media
- **conferences, seminars and ‘key message briefings’:**
 - own
 - other agencies:
 - presentations
 - workshops
 - stands
 - leaflets, posters, give-aways
- **other**
 - large-scale events (eg Youth Justice convention, faith communities’ national gatherings etc)
 - viral marketing
 - networking

conclusion

It can begin to feel like the easy part is getting the funding for and carrying out the research! Certainly, getting research findings to make an impact with policy-makers and to be implemented by practitioners is an astonishingly complex and non-automatic

process. There has to be a strong commitment to enable this to happen from the time of the research project's conception onwards, and the process has to be given enough time and funds to succeed. As with all other communications' initiatives, this needs to be evaluated and RCP's *Right from the Start* evaluation toolkit can support this. Similarly, other resources in the RCP communications' pack extend the information provided here, and we hope that the following *sharing not shelving promotional planner* also helps you make a suitable impact.