

Chapter 9

Would it work here?

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Introduction

This chapter is about transferring research findings to somewhere else where they might be implemented. Usually there are differences in client characteristics, staff expertise and commitment, institutional structures and levels of resourcing. Paul Nutting and Larry Green, writing as practitioners in primary health care, draw attention to the different orientations of researchers and practitioners:

First, biomedical research isolates single diseases or disease processes. Much of the research enterprise is designed to understand further the biomolecular mechanisms, diagnoses, and treatments of specific diseases. This often requires that the disease is studied in its fully developed form and in patients without other diseases that would confound the study. In many cases it requires as the focus of study a specific organ, tissue, cell, or intracellular process. Second, disease is studied in highly selected patients. In order to focus on a specific disease mechanism or treatment effect, most medical research carefully restricts the characteristics of the patients under study. Often studies emphasize male adults in their middle years with fully developed disease, without other co-morbidity, and in whom adherence to the protocol can be carefully controlled. Third, most medical research is designed to evaluate single interventions. Although many clinical trials compare special interventions, they are rarely combined in a single arm of the trial in the ways that they are actually used in primary care. Fourth, biomedical research tends to prefer 'hard' outcomes, such as death or changes in physical measurements. Less attention is devoted to key personal consequences of effective primary care such as relief of suffering, a sense of having been understood, and the preservation and restoration of function. Finally, the strong focus on disease mechanisms often purposefully excludes the effects of the patients' physical and psychosocial environments, the powerful effects of the physician-patient relationship, and the multiple effects of the system factors inherent in the organization and financing of primary health care services – all of which are central to the environment of primary care.

(Nutting and Green, 1994, pp. 156–8)

The main burden of the quotation is that the circumstances of experimental research may bear little relationship to what usually happens in practice. It is important not to assume that this difficulty is especially associated with experimental research. It is very likely that a

piece of research done in the ordinary, workaday circumstances of a particular residential home for older people will not apply directly to another residential home, because its ordinary, workaday circumstances will be different in significant respects. The results of qualitative research, which might have a bearing on 'physician-patient relationships' and 'a sense of being understood', are even more difficult to transfer from one place to another.

There are two aspects of applying research in practice. The first is making the decision about whether some research finding is worth the attempt to put it into practice and estimating the feasibility of doing so. The second is about the logistics of actually doing this. The latter is the process of implementing change in practice. There is no great difference here between implementing and bedding down changes that have been inspired by research findings, and implementing those that are foisted on an agency by an external funder, or those that arise from the enthusiasms of staff.

Many of the difficulties of implementing research in practice discussed in Chapter 7 are first and foremost difficulties of change management (Keep, 1998). Action research was dealt with in Chapter 5 and change management and action research can be very similar. This current chapter then is about the first aspect of application. It is about answering the question 'Would it work here?'

1 The context dependence of outcomes

The outcomes of most procedures in health and social care are context-dependent. A large number of factors will determine what happens. These are likely to appear in different constellations, both for different clients and between different practice locations. Figure 1 gives a very simple picture of the kinds of factors that might vary from agency to agency. While each agency might be applying a procedure that looks the same, variations in other kinds of factor are likely to produce different outcomes.

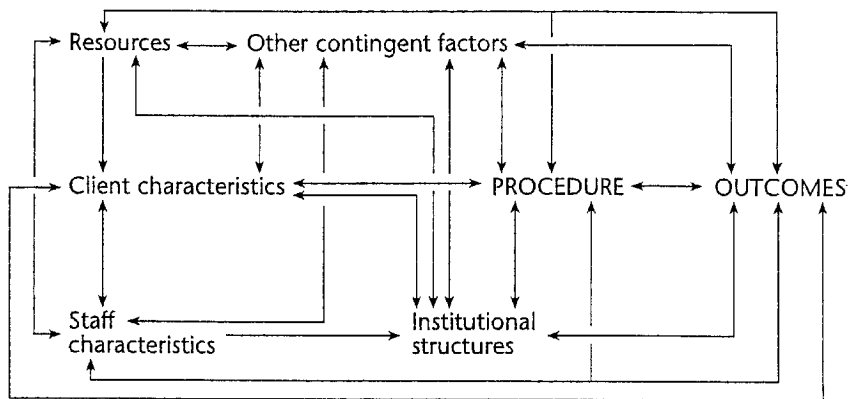


Figure 1 The context dependence of outcomes

Figure 1 can be fleshed out with the quotation from Nutting and Green by comparing the location of some randomised trial of a clinical procedure with a situation in everyday practice, as in Table 1 (overleaf). In principle the table would apply to any situation where research of any kind was done in a different situation from that in the place where an attempt is being made to apply its findings.

Table 1 has only one column for the practice setting. In reality there should be a different column for each different general practice. Each will represent a different constellation of variables. Even if a piece of experimental research is replicated – copied in exactly the same way – it is still likely to produce different results. That is the point of meta-analyses (see Chapter 7). And when something like the same procedures are implemented in *different* everyday practice settings, diversity of outcome is just what is to be expected. The results of experimental research are just as 'context-dependent' as the results from everyday practice. The difference is that experimental researchers rig the context as far as possible to reduce the number of variables at play to avoid 'confounding' (see Chapter 3). But what are confounding variables for the experimental researcher are the very stuff of everyday practice.

2 Specified procedures

Unless research produces something like a recipe, a set of instructions, guidelines or a protocol, it is virtually impossible for a practitioner to know what to do in order to do 'the same' in an attempt to produce similar outcomes. Some kinds of research are more transferable for this reason than others.

The example in Table 1 was of a procedure that is among the most easy to specify and standardise – administering a drug. Pharmaceuticals are manufactured to high quality control standards; each pill is identical. Protocols for administering drugs can be written unambiguously and followed with ease. Other practice procedures may be much more difficult to specify.

It is now clear from meta-analyses of almost 500 evaluative studies (e.g. Smith, Glass and Miller, 1980) that most forms of psychotherapy and counselling are approximately 50 per cent more likely to produce an improvement than would occur without treatment, provided the outcome is assessed from the client's subjective reports. These same meta-analyses mostly fail to show any difference between different forms of treatment, no matter how different in philosophy ... or how different the procedures ... and no matter what the disorder being treated. ... The non-specificity of treatment is confirmed by the failure to demonstrate any effect of training on the effectiveness of therapy (e.g. the meta-analysis of Berman and Norton, 1985). One is driven to the simple conclusion that psychotherapists do not know what they are doing and cannot train others to do it, whatever it is.

(Howarth, 1989, p. 150, cited in Spinelli, 1994, pp. 76–77)

Table 1 Differences between the context of research and the context of practice

	<i>The context of the research study, for example a pharmaceutical trial</i>	<i>The context in everyday practice, for example general practice</i>
Client characteristics	The subjects are hand-picked to eliminate confounding variables. For example, they fall within a narrow age span, they are suffering from only one condition, their diagnosis is certain. Their understanding of participation is that they are involved in a research study but they do not know whether they are receiving the drug or a placebo, or which of two active treatments they are receiving	The patients choose themselves for presentation. They are of diverse ages, they are often suffering from several medical conditions, their diagnosis may be uncertain. Their understanding of the situation is that they are ill and want the doctor to make them better. They assume that whatever the doctor does is an attempt to make them better
Resources	Funded by a drugs company, the trial is well resourced, with dedicated time to conduct it. Cost considerations do not enter into the decisions to treat, and research considerations inhibit expending more resources on any subject other than those the research protocol dictates	The treatment of these patients, as for all others, has to be accomplished with limited resources of time and budgets. Practitioners may attempt to expend more resources on those in greatest need, and it is most unlikely that each patient is treated in the same standardised way
Practitioner characteristics	Staff have been specially inducted in how to administer the drug and are monitored to make sure they do no more and no less than the protocol dictates	The practitioner may be unfamiliar with the drug. His or her concerns will be fitting the treatment to the patient, and not following a standardised set of procedures
Institutional structures	The study was done in a hospital where drugs were administered by staff	The practitioner works in general practice. Patients are required to administer their own medication at home
Other contingencies	The research is designed as far as possible to eliminate chance occurrences	All kinds of things happen in practice: a locum changes the medication for one client; a patient cannot get her prescription dispensed; and so on
Measures	Baseline and outcome measures may have been designed precisely for the purpose of the trial and the trial will have been organised to facilitate the necessary measurement	The measures used in the trial may not be the same as those used in the practice. It may be difficult to measure in the same way as in the trial. It may not be possible to know whether the practice is achieving better or worse results than the trial (see Chapter 8)
Procedures	The procedures for administering the drug are tightly specified as part of the research design	The procedures adopted are custom-built for each patient. Patient choice plays some part in the process
Outcomes	Because of the research design, outcomes can be attributed to the effect of the drug as administered according to the research protocol	Because of the many factors that vary from patient to patient, it will be unclear how outcomes were produced

The important issue here is the non-specificity of treatment. It is rarely clear whether two practitioners doing 'counselling' or 'psychotherapy' are doing the same thing. Therapists attempt to make their practice client-specific, so it is not at all clear that a counsellor counselling one client is using the same procedure as the same counsellor counselling another. Studies which demonstrate that counselling can produce high levels of client satisfaction also seem to demonstrate that the critical factors are the

personal characteristics of the counsellor (Howe, 1993), rather than the procedures she uses (see also Berman and Norton, 1985). In terms of Figure 1 then, 'counselling' and 'psychotherapy' seem to produce outcomes which are more dependent on the characteristics of practitioners than on the procedures adopted or the theory behind them.

By contrast, the research literature gives a clearer picture of the effectiveness of cognitive behavioural therapies (Drury *et al.*, 1996a and b; Kemp *et al.*, 1996). It can do so because in cognitive behavioural therapy the procedures are much more clearly specified and more standardised in application, and the practice is aimed at achieving a few simple, measurable outcomes. For the 'talking treatments' there is then the puzzle of deciding whether cognitive behavioural therapy is really more effective than counselling, or whether the former simply lends itself better to evaluation than the latter (Stiles, 1994; Sechrest, 1994).

But the important point here is that research on the effectiveness of cognitive behavioural therapies can tell others what to do in order to produce the same effects, while, seemingly, research on the effectiveness of psychotherapy and counselling cannot.

There are often no fixed meanings for terms used widely in practice. This gives rise to many opportunities for practitioners to believe that they are doing the same as something being done elsewhere, when actually they are doing something different. For example, within a single county council area, Gomm (1996, p. 3) found 12 different patterns of what practitioners called 'care management' in mental health and 10 arrangements called 'community mental health teams', giving rise to the possibility of 120 different combinations. He also found practitioners using the term 'key worker' in at least 15 different ways. Similarly, much of the research on the effectiveness of care (or case) management in mental health founders on researchers not specifying what they mean by the term (Brugha and Glover, 1998).

3 Mapping contexts

Figure 1 and Table 1 suggest that what works under some circumstances for some clients may not work for the same clients under other circumstances, or for different clients under the same circumstances. Thus judging the possibility of emulating what was reported in a research study entails answering the following questions.

- *Are the circumstances of our practice sufficiently similar to those of the research context to make it a good bet that what worked in the research will work for us?*

And:

- *In so far as there are differences, how feasible and how desirable would it be to change the context of our practice to bring it into line with that described in the research?*

Much the same headings as in Figure 1 and Table 1 can be used to represent the mapping exercise needed (Table 2 opposite).

Published research studies will rarely provide all the information needed about the research location. It may also be rather difficult for a team to answer all the questions for its own context and practice (see Chapter 8). But the better the answers to the questions in the first two columns of Table 2, the easier it will be to approach the more difficult questions in the last column.

To illustrate this kind of mapping, a case study of some action research will be used. Here the salient question is not 'Would it work here?' but 'Why did it work in one place and not another?' These are slightly different questions, but the logic of answering them is essentially the same.

4 Why it worked in Kirkholt but not somewhere else

The Kirkholt Burglary Prevention Project in Rochdale (Forrester *et al.*, 1988, 1990; Pawson and Tilley, 1997, pp. 127–52) is regarded as an exemplar of good practice in crime prevention. Crime and fear of crime are major causes of ill health and disease and, hence, should be of interest to community health practitioners. They are major associates of the problems dealt with by social workers. Health visitors, district nurses, CPNs, social workers and housing workers may find themselves all involved together in activities related to crime prevention and victim support in inter-agency projects such as those under the Single Regeneration Budget Programme, Health Action Zone Projects, projects arising from the 1998 New Deal for Communities programme, and especially in the multi-agency crime and disorder strategies initiated by the Crime and Disorder Act 1998.

As social services and social work departments increasingly merge with housing departments, so more social workers are becoming involved in projects to regenerate the fabric and community life of decaying estates. These projects usually have a crime prevention objective among others. Crime and disorder is becoming everyone's business in health and social care. Moreover, all community projects, whatever they are focused on, can have secondary effects, such as improving people's sense of controlling their own lives, giving some of them valuable social roles to play and generally improving sociability in an area (Hunt, 1989).

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Table 2 Cross-mapping the context of research and the context of practice

	<i>The context of the research study</i>	<i>The practices and context of practice now</i>	<i>The desirability/feasibility of changing the practice procedures and context to match those of the research study</i>
1 Client characteristics	What were the salient characteristics of their clients?	What are the salient characteristics of our clients?	Where there is a mismatch, could we and should we change our client mix?
2 Resources	What resources were used in producing the outcomes: staff time, money, equipment, space, and so on?	What resources do we expend for similar purposes for similar clients?	Have we got the resources to emulate practice in the research study? Would it be feasible/desirable to enhance or redeploy our resources?
3 Practitioner characteristics	What were the salient characteristics of the practitioners in terms of expertise, experience, commitment?	What are the salient characteristics of our practitioners?	In so far as there is a mismatch, would it be desirable/feasible to recruit different staff, invest in training, go through a team-building exercise, etc.?
4 Institutional structures	How far were the outcomes dependent on, for example, the departmental structure of the agencies featured in the research, or on co-operation with other agencies?	How far do institutional structures or inter-agency relationships determine our practice?	In so far as there are differences, would it be feasible/desirable to change the institutional framework in which we practise?
5 Measures	What baseline, outcome and other measures were used?	Do we use the same measures/could we use the same measures?	Would it be desirable to change the way in which we measure and record our practice?
6 Procedures	What exactly was done in the research study location which led to the outcomes reported?	Do we do exactly the same, or something different?	In so far as there are differences, would it be desirable/feasible to change what we do?
7 Outcomes	<p>What were the outcomes, for whom (see 1) and what are they attributable to (see 2 to 6)?</p> <p>What was the cost per client (1 + 2)?</p> <p>What was the cost per procedure (2 + 6)?</p> <p>What was the cost per successful outcome (2 + 6 + 7)?</p>	<p>What are our outcomes of the same kind? Are they achieved for the same clients as in the research study?</p> <p>What do we achieve that was not achieved in the research study? To what are our outcomes attributable?</p> <p>What do we spend per client/procedure?</p> <p>What does it cost us to produce a successful outcome?</p>	<p>In so far as our outcomes are different, what are the differences attributable to (any of 1 to 6)? Are there outcomes we are not achieving/not achieving to the same degree which would be desirable/affordable for us to achieve?</p> <p>Could we achieve the same at a lower cost? Are we achieving some things now that we would have to forgo in order to emulate the practices in the research study?</p>

Table 3 Outcomes of the Kirkholt anti-burglary project compared with one attempt to replicate it elsewhere

Project	Number of burglaries per year				Burglaries per 100 households
	Year before project	After 1 year of project	After 2 years of project	After 3 years of project	Change over life of project
Kirkholt	526	233	167	132	Drop from 25% to 6% (3 years)
Safer Cities	571	694	991	N/A	Rise from 9% to 12.5% (2 years)

(Source: based on Pawson and Tilley, 1997, pp. 128–32)

Table 3 gives the outcome data for the Kirkholt project and for another project which was inspired by Kirkholt and implemented (later) under the aegis of the Safer Cities programme. There were several attempts to clone Kirkholt in the Safer Cities programme (Tilley, 1993, 1996) with variable degrees of success. Only one of them is featured here. Table 3 shows that the Kirkholt project was highly successful, but that the emulation was not. Kirkholt's reduction in burglaries was accomplished against a rise in surrounding areas, and nationally, while in the replica the rate of increase was almost the same as on surrounding estates.

So why was there a difference in outcome? Some purchase on this question can be gained by doing a cross-mapping exercise similar to that suggested in Table 2, but using some side headings more appropriate to these kinds of community project (see Table 4 opposite).

As Pawson and Tilley say (1997, p. 138), listing comparisons and contrasts like this can go on almost indefinitely as long as the information is available in sufficient detail to allow it. But it takes some inspiration, not to say guesswork, to identify the likely causes of success in one area and failure in another. At first glance, differences in the resourcing of the projects, in the size and nature of the communities, and in the characteristics of the local crime patterns seem likely to be crucial contextual differences to which differences in outcome could be attributed. But this is being wise after the event. It is worth trying to think of some questions the Safer City team should have asked about the Kirkholt project *before* they tried to emulate it. Here are some.

- *Based on Kirkholt what would be a reasonable number of households for the project to cover, given that we've only got £38,000 to spend over two and a half years?*

Kirkholt spent £82,917 over two and a half years (including some start-up costs): £36 per household. If, as it seems, some 855 burglaries were prevented in two and a half years, that is a cost of about £97 per burglary prevented. On this basis, the Safer Cities project was financed to deal with only about 1055 households adequately (not 8000), and it did not manage to reduce the burglary rate overall. This looks like a

Table 4 Cross-mapping the characteristics of Kirkholt and the replication neighbourhood

<i>Characteristic</i>	<i>Kirkholt</i>	<i>Safer Cities</i>
Resourcing	Very well resourced, at approximately £99,500 p.a., for 2280 households	Poorly resourced, at approximately £38,000 p.a., for 8000 households
Scale	2280 households	8000 households
Crime rate	Very high crime rate. Burglaries at 25% before project compared with national average of 5%	Moderate crime rate. Burglaries at 9% before project compared with national average of 5%
Main types of burglary	49% of burglaries involved electricity and gas meters	Few households with electricity and gas meters and few burglaries featured them
Community	Self-contained estate clearly bounded by roads. Outsiders easily identifiable. Culturally homogeneous: white working class. Initial suspicion and hostility to authority. Few obvious community leaders	No clear boundaries to the estate. No obvious limits to the community with much through pedestrian and car traffic. Culturally homogeneous: white working class. Less antipathy to authority, but few obvious community leaders
Organisation/ personnel	Multi-agency: Manchester University supplying the research expertise. Alternately led by the police and the probation service, with social services and housing department staff involved. Project offices adjacent to housing office on estate	Multi-agency, including academic support from University, but with police and probation as the main players. No clear overall leadership
Procedures	<ol style="list-style-type: none"> 1 Improved ease of reporting crime and increased contacts with crime prevention services 2 Removal of coin-in-slot meters 3 Formation of mini Neighbourhood Watch schemes ('cocoon') eventually incorporating 90% of households 4 Target hardening. Security improved for all victims' homes. Victims introduced to cocoon members 	<ol style="list-style-type: none"> 1 Improved ease of reporting crime and increased contacts with crime prevention services 2 Formation of mini Neighbourhood Watch groups ('cocoon') but these only developed to include 25% of households 3 Target hardening for victims but only for council and housing association tenants

(Source: based on Pawson and Tilley, 1997, pp. 128-32)

familiar syndrome of trying to emulate a well-resourced demonstration project on the cheap, with the usual dismal results.

- *Given that Kirkholt featured a programme of crime surveillance by the community, were there any important characteristics of the community present in Kirkholt and absent in our proposed project area?*

Both areas looked unpromising for initiatives of the Neighbourhood Watch type but Kirkholt was an estate with clear territorial boundaries, such that strangers were easily identifiable; this is important if burglars were outsiders. It was a smallish estate where most people knew each other. Given its size, there was a possibility of creating blanket coverage by 'cocoon'. If burglars were mainly residents of the estate, the

characteristics of the community would make it more likely that they would know about increased community surveillance and the increased risk of detection, about the removal of slot meters, the target hardening and the reduced risk of successful burglaries. The Safer Cities project area lacked many of these characteristics.

- *Does burglary have the same pattern in both areas and, hence, will measures adopted in Kirkholt work similarly in our area?*

In Kirkholt, burglary from slot meters predominated. Their removal from houses probably accounted for a very large percentage of the fall in burglaries. It is almost certainly the case that some of the 'burglaries' prevented were actually perpetrated by householders breaking into their own meters, and then reporting these as burglaries. In so far as much of Kirkholt's success was preventing thefts from slot meters, it was unlikely to be transferable to another area where such machines were rare.

Theorising is inevitable, and useful

Other equally enlightening questions might be asked. Some more will be said about 'target hardening' later but there is more than a simple cross-mapping of features between different areas going on here. What there is, in addition, is some theorising. This is nothing very grand but some commonsensical theories offered as possible explanations of how things hang together and why interventions have the effects they do.

So what is it about Kirkholt as a place that makes it possible to trigger what mechanism to produce these outcomes? Some of Pawson and Tilley's ideas are shown in Table 5 (opposite).

A similar kind of theorising was necessary to make sense of Tables 1 and 2. The results are shown in Table 6.

There are several things to be said about theorising in this way. First, it is highly speculative. It is wise not to become too attached to any such theory because it may be wrong. Second, it comes cheap. Most people can generate many theories linking context and mechanism to outcomes in a relatively short period of time. Third, this kind of theorising is inevitable. It is virtually impossible to not do it. Since it is inevitable, it is important to get it out in the open so that the ideas can be inspected to see whether they really are credible. As Howe has argued for social work, the problem in linking 'theory to practice' is that practitioners do it all the time, but rarely notice what theories they are actually using (Howe, 1987, p. 1). A fourth point is that explanatory ideas of this kind provide a good starting point for looking at the published literature. This frames the questions research is needed to answer, and does so in a way that will be closely related to practical concerns. Looking again at Table 5, it is easy to see how Pawson and Tilley's little bits of theory would guide them in searching the research literature for confirmation or disconfirmation.

Table 5 Theorising the links between context, mechanism and outcomes in Kirkholt

Context	+ Mechanism	= Outcome
<i>Something about Kirkholt</i>	+ <i>Something about the project</i>	= <i>Dramatically reduced rate of burglary</i>
A high crime rate area marked by very high rates of burglary	+ Security upgrading of previously burgled premises to increase difficulty and risk of apprehension in burgling particularly easy properties	= Lower rate of re-victimisation and a reduced burglary rate overall
High numbers of pre-payment meters, with a high proportion of burglaries involving cash from meters	+ Removal of cash meters reduces incentive to burgle (or fake burglaries) by decreasing actual or perceived rewards	= A reduction in percentage of burglaries involving meter theft; a reduced risk of burglary at dwellings from which meters are removed; and a reduced burglary rate overall
A medium-sized, socially homogeneous, clearly defined estate with little through-traffic. Easy transmission of 'news' from person to person	+ Cocoon home-watch increases perceived risks of recognition of offenders, knowledge among would-be offenders of decreasing rewards for break-ins, plus heightened levels of social control	= A reduced burglary rate overall and a general reduction in crime and incivilities

(Source: based on Pawson and Tilley, 1997, p. 134)

Table 6 Comparing context, mechanism and outcome in a research study with context, mechanism and outcome in practice

Context	+ Mechanism	= Outcome
Something about the research location	+ Some of the activities carried out there	= Produced the outcomes reported
Something about our practice context	+ Some of the procedures we follow	= Produces the pattern of our outcomes

So, a fifth point here is that the literature can be read in a rough-and-ready experimentalist way, posing hypotheses and seeing whether they are disconfirmed by published studies, along the lines of 'natural experiments' (see Chapter 3). For example:

Is it true that burglary prevention projects are only successful in clearly defined, socially homogeneous neighbourhoods?

If so, there should be no examples of successful burglary reduction projects in other kinds of neighbourhood. Or, all other things being equal, burglary reduction projects should be successful in proportion to the extent that the areas have clear natural boundaries, and a fairly stable and socially homogeneous population. Or:

Is it usually true that the main mechanism for burglary reduction is a raised expectation of being apprehended?

If so, there should be no examples of successful projects which did not include some successful means for disseminating information about the increased risk of being caught.

In some areas, context-mechanism-outcome connections are well established by research. For example, much is known about the biochemical mechanisms through which drugs work or the physiological mechanisms through which wounds heal, and the circumstances (contexts) necessary for these mechanisms to operate. Similarly, there is an aspect of the Kirkholt project which is, indeed, well established by research.

Robust mechanisms

In the Kirkholt project and in the Safer Cities replica one set of crime prevention procedures is implicated that is reliable and robust and will transfer to a wide range of different neighbourhoods. This is so-called 'target hardening'. Research studies from many industrialised countries have demonstrated that, unless remedial action is taken, the risk of a residence being burgled increases with the number of times it is burgled. For someone who has been burgled once, their risk of being burgled again increases markedly; twice, and it increases even more (Farrell and Pease, 1993; Pawson and Tilley, 1997, pp. 135-42). Similar regularities are shown in many kinds of victimisation including graffiti, vandalism (Burquest *et al.*, 1992), littering, child abuse, thefts of cars from particular streets or car parks, domestic violence and racial attacks (Sampson and Phillips, 1992). Previous offences predict further offences (Farrell *et al.*, 1995). In other contexts this provides the rationale for police policies of 'zero tolerance' ('nip it in the bud quick'), and it is part of the reason why the police prefer to 'target' their activities, rather than adopt the publicly popular policy of putting more officers on regular beats, which is less effective in reducing crime. Regarding burglary, it has inspired the impressively effective policy of target hardening the residences of people who have been burgled and doing so as quickly as possible. Target hardening can include a wide range of techniques such as property marking, instant repairs after a break-in, better security against unauthorised access, burglar alarms, and direct or CCTV surveillance (Anderson *et al.*, 1995).

'Cocooning' is not an inevitable part of target hardening but it was used in both projects. Neighbourhood Watch initiatives keep the whole neighbourhood under surveillance, but cocoons are small groups of neighbours who focus surveillance on people or properties at particular risk. The technique has also proved valuable in cases of domestic violence and it seems to work under a wide range of different circumstances: another robust mechanism.

Target hardening was involved in both projects. Looking at Table 3, it might seem sensible to say that the Safer Cities project had no effects. But that would be erroneous. True, it did not lower the overall burglary rate. But there are no interventions that have *no* effects. In fact, target hardening worked to reduce repeat victimisation in the Safer Cities project just as it did in the Kirkholt project. However, in the former only some of the targets were hardened. Burglars, seemingly, avoided the hardened targets and transferred their attention to other easy access property on the same estate. In the Safer Cities project *some people* were made less vulnerable to burglary. But, since the overall burglary rate did not fall, *some people* must have been made *more* vulnerable.

Among the many mechanisms at play in producing outcomes, some will only be triggered under rather peculiar circumstances, while others will operate much more generally. Perhaps the most valuable function that research plays for practice is in identifying robust mechanisms of the latter kind. But beware, the same mechanism that makes an opiate an effective painkiller also makes it an addictive drug. The context determines how the mechanism works. In the same way, the law of repeat victimisation was at work in Kirkholt and in the Safer Cities replica, but with different outcomes in the different contexts.

What works for whom under what circumstances?

This highlights an important set of problems in applying research to practice – the issue of 'What works for whom?' In research reports, outcomes are often expressed without differentiating outcomes for different people: often as average ('mean') or majority effects. The expression of outcomes in terms of a reduction in overall burglary rate is another example of this. A fall in the overall burglary rate in an area might mean that *everyone* became less vulnerable to burglary. It might also mean *some kinds of people* became *less vulnerable*, and *some other kinds of people* became *more vulnerable*, but that there were more of the former and fewer of the latter.

Health and social care interventions often carry a risk of disadvantaging some groups of people to the benefit of some others. The national initiative on hospital waiting lists in the 1990s is an example (Hamblin, 1998). The policy of 'prioritising the most severely mentally ill' in community mental health services is another (Department of Health, 1995). Drug testing in prisons has probably reduced the overall

Table 7 The five outcome groups for any health and social care intervention

<i>For any intervention there will be</i>				
1 People for whom the intervention has only benefits	2 People for whom the intervention produces benefits which outweigh the disadvantages	3 People for whom the intervention has very little or no effect at all	4 People for whom the intervention produces disadvantages which outweigh the advantages	5 People for whom the intervention has only disadvantages

consumption of drugs among prisoners but it has also shifted some users from easily detectable cannabis, to the more dangerous and less detectable heroin (Edgar and O'Donnell, 1998).

This can be expressed more formally as in Table 7.

All people being equal, practitioners would want to tailor their practice so that there were more people in categories 1 and 2 than in 4 and 5. But all people are not equal and they should not be treated equally in practice. In many situations practitioners will be quite willing for an intervention to create large numbers of minimally disadvantaged people, in order to produce large benefits for a few whose needs are regarded as taking moral priority: perhaps simply by doing nothing at all for the former, and much for the latter. There will be no attempt here to discuss the host of difficult ethical and political issues involved in making decisions about distributing the benefits and spreading the misery. For this chapter the important point is this. Unless a research study identifies the five outcome groups in Table 7 (or at least the three 1 + 2, 3, and 4 + 5), it will be difficult to predict the out-turns of applying the research findings to a particular practice population.

What makes this a particularly acute problem is that the mix of clients dealt with by any real-life practice will almost never match the mix of clients featured in a research study (Nutting and Green, 1994, pp. 156–8). In a study, perhaps 10% of the subjects experienced severe drug side-effects. In a GP's caseload there might be as few as none or as many as 50% or more vulnerable to this. Unless the study identifies contra-indications for prescribing the drug, the GP cannot apply the findings to maximise the number of beneficiaries and minimise the number of people harmed by the intervention.

Or again, perhaps a piece of evaluation research shows that an independent supported living scheme was successful for the majority of *their* clients. But does it distinguish between those kinds of clients for whom it is successful and those for whom it is not? Maybe another practice population contains a majority of the latter.

Thus, in appraising the transferability of published research, it is important to see whether the authors specify *differential* outcomes for particular client groups in such a way that would enable practitioners to identify these different groups in their own setting.

Whatever the truth of this, in attempting to implement research in practice, agencies often adopt more general objectives than in the original research, or they combine the objectives of the research with others with which they are incompatible. There is a very strong pressure to do this wherever there is a process of bidding for funding. Then agencies and partnerships often promise to do more than they could ever reasonably be expected to achieve, and they may promise to do this for less money than would make even some of it possible.

Again, where service-users are allowed a significant voice in determining practice, they may choose what the research shows is less effective. For example, police-public consultation usually shows a very strong demand for more police on the beat (Bucke, 1995). This might help reduce the fear of crime (Bennett, 1991). But reducing the fear of crime by beat policing and reducing the committing of crime by targeting particular locations and kinds of offences may be mutually incompatible objectives within a fixed budget.

Commitment and expertise

Success in achieving outcomes may be due, partially at least, to the staff involved in the research being better trained or better briefed than staff might be in routine practice. Or perhaps the staff or the service-users involved in research or a demonstration project were motivated and enthused by this (Sapsford and Abbott, 1992, p. 105; Bowling, 1997, p. 137). As Sheldon and his colleagues (1998) note, if the success of stroke units demonstrated through research is due mainly to the commitment of their staff, this is a very expensive way of securing commitment.

Enhanced commitment is particularly likely where the research originated from the bright ideas of staff or service-users, as in most 'action research' (see Chapter 5). One of the 'robust mechanisms' referred to earlier is that people are generally more committed if they dreamed up the scheme in the first place. On transferring research to practice elsewhere, this commitment and enthusiasm may be difficult to replicate. Indeed, in so far as a demand for change implies the deficiency of current practice, transferring from research to practice may often be associated with resentment and obstructionism (see Chapter 7).

It is always worth looking closely at published research to see what it says about the expertise and training of the practitioners involved, and about the ways in which they and service-users were briefed, consulted with, and so on. The key question is whether the same levels of expertise and commitment that were associated with successful outcomes in the research programme can be replicated in practice elsewhere. A formal 'training needs analysis' may be necessary to identify whether staff have the requisite expertise, and to commission training where they do not (Buckley and Caple, 1990; Wright, 1999). All but the most minor changes in practice require briefings, consultations and perhaps 'team-building'

exercises. And successful team building requires that participants are given some significant ability to determine what the team will do, and how it will do it.

Conclusion

This latter point poses a dilemma. On the one hand, it seems that the most effective way of transferring research findings to practice is to reorganise practice so that it precisely matches the conditions under which the research was done. On the other hand, to transfer research findings into practice means: generating commitment among practitioners and service-users; satisfying their preferences (which may be different from those featured in the research); respecting their judgement and areas of discretion; combining the pursuit of outcomes featured in research with other equally desirable ones; and managing local obstacles which did not impact on the research, but cannot be eliminated from the practice setting. In these regards, transferring research into practice often means radically departing from what was done in the research programme or demonstration project. Doing the same thing differently with the same results is a difficult trick to pull off.

This chapter explained why this is a difficult trick. It is because of the context dependence of the outcomes of any health or social care intervention – whether routine or part of a research project. Some suggestions have been made for how to approach this set of difficulties. These involve:

- cross-mapping between a local practice setting and what is reported in the research project
- theorising what mechanisms were at play in producing outcomes for the research and how contexts, mechanisms and outcomes were related in the research
- estimating whether the same set of relationships can be reproduced in practice
- deciding whether it would be desirable to change practice in a way that would increase the chances of achieving results similar to or better than those shown in the research
- considering what disadvantageous effects might arise from changing practice more closely to match what happened in the research programme.

Published research will often be inadequate here and ringing people up, visiting them or short periods of secondment may be necessary to fill in the details. The transfer of research into practice also requires practitioners to have detailed knowledge about what actually happens in their own practice setting and what might be possible there (Chapter 8).

Research elsewhere is only the starting point of feasibility research in the local setting. As suggested in Chapter 5, action research can be an effective form of feasibility study: make a change and see what happens. But this is only so where there are minimal risks of harm arising from changing practice in such a speculative way. However, the term 'action research' is a slippery one. It is perhaps better to think of transferring research into practice as always involving an 'action research' *stage*. Just how much reading, planning, consulting and training comes before that should depend on how risky making the change is estimated to be.

One of the important local contextual factors identified in this chapter was resources. These are such an important matter in transferring research into practice that the next chapter is largely devoted to this topic and to questions of cost-effectiveness.

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