Prevention or Cure in Public Policy?

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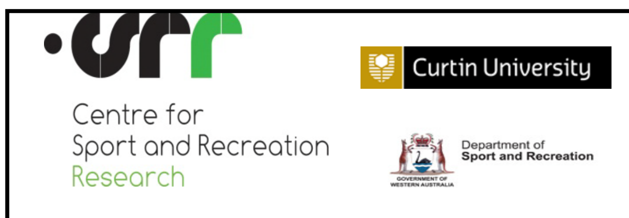

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
1 Prevention as a policy strategy .... **Error! Bookmark not defined.**
2 Public policy principles and values 2
2.1 Prevention, planning and public policy 2
2.2 Values underlying good public policy 4
2.3 Seven principles of good public policy 5
3 Prevention policy criteria 6
3.1 Principles for prevention with children 7
3.2 Conceptual clarification 10
4 Prevention policies and interventions 22
4.1 Costs and benefits 24
4.2 Effective programs 26
5 Possible applications 29
5.1 Children of the Lucky Country 29
5.2 Report of the Inquiry into the mental health and wellbeing of children and young people in Western Australia 30
5.3 Justice Reinvestment 34
5.4 Fetal alcohol spectrum disorder 35
6 Conclusion: Promoting a Prevention Mentality 38
References 42
APPENDIX 1: Project Scope 47

EXECUTIVE SUMMARY

This discussion paper is a study of the idea of prevention in public policy. The ultimate aim of the project is to examine the extent to which a focus on prevention can better inform public policy in Western Australia.

Part 1 states the potential advantages of a preventive approach to policy.

Part 2 identifies principles and values of public policy in general.

Part 3 identifies principles and values that may guide the formation of prevention-focused policy.

Part 4 surveys some of the recent literature in which prevention policies are advocated, especially in the case of policies affecting the socialisation of children.

Part 5 considers some examples of prevention-focused policy.

Part 6 outlines factors that are likely to lead to effective and successful prevention-focused policy.

The research was commissioned by the Western Australian Department of Sport and Recreation (DSR). It is intended to assist the Department in its formulation of policy relating to a range of issues and programs that could benefit from an approach where attention to the early stages of an issue can provide significant financial and other benefits compared to tackling later-stage problems and crises as they emerge.

1 Prevention as a policy strategy

Governments mostly spend their time and money dealing with failures, and often these failures seem preventable. At the state level, this is most obvious in the prosecution of crime and subsequent imprisonment of serious offenders, which, despite being very expensive, often does little to prevent reoffending. It is less obvious but at least arguable in the health field: some illness and disease is unavoidable but much could have been avoided. In education, schools struggle to cope with a minority of children who are under-prepared even when they first arrive at school; schooling would be more successful if such children were better prepared for the school experience.

The continual need to deal with failure may tend to distort our thinking about policy strategy. Policy and practice can become merely a matter of how best to cope with a constant flow of problems. Yet there may be more effective ways to think about policy. Why not apply more thought and energy to the way problems originate, rather than leaving them to develop into almost unmanageable difficulties? Why not deal with the problems at their source? Why not apply a prevention approach – at least much more than we do at present? The flow of problems will never be cut completely, but a reduction at the source may make a large difference at the end point.

This is of course not a new idea. There is today a large literature on the prevention approach to policy. Some even postulate a ‘prevention science’, which they see as applicable to many fields of government. At the least, there are some guidelines and rules of thumb that can help us to think about the prevention alternative. This paper will survey some of the literature on prevention and offer some ideas on where the prevention approach can be further applied.

2 Public policy principles and values

2.1 Prevention, planning and public policy

In Australia, the main aims of government are:

- Law-making, conflict resolution and peace-keeping
- External protection and foreign affairs
- Provision of public goods and services: e.g. infrastructure, health, education, etc
- Provision of minimum living standards

A theory of prevention in public policy-making applies mainly to the third and fourth areas, though crime prevention perhaps belongs in the first category.

These goods can be provided at various levels and by different means:

- Federal government
- State government
- Local government
- The private for-profit sector
- The not-for-profit (NFP) sector
- Voluntary associations
- Families
- Individuals

For the purposes of this discussion, the focus is mainly on what state governments can do, in combination with the NFPs, voluntary associations, and families.

The areas of policy that are most clearly amenable to a prevention approach are:

- Public health
- Crime prevention
- Educational achievement
- Infrastructure planning and civic facilities
- The fostering of civil society and a strong culture of voluntary community participation

The strategies available to governments include:

- Prohibition, regulation, and enforcement of laws and regulations
- Taxation and tax relief
- Direct provision through government agencies

- Arms-length provision through corporatized agencies
- Funding of non-government service providers
- Direct subsidisation
- Deregulation and market liberalisation
- Voluntary standard-setting
- Long-term indicative planning reports
- Parliamentary inquiries
- Public awareness and information campaigns
- School education campaigns
- Funding of academic research and policy analysis.

In general, good government involves a devolutionary attitude: let the problem be solved at the lowest level possible. This places responsibility with those who are closest to problem. On the other hand, the theory of public goods demonstrates that some problems require centralised decision-making and action. There is no across-the-board solution to the problem of when to centralise and when to decentralise.

The planning and funding of government functions include short-term, medium term, and long-term decision-making. Many functions must be provided on a day-to-day basis. These are rigid requirements, they are not controversial, and they don't vary much from government to government. Some functions can be somewhat flexible, rising and falling in importance on an annual basis or according to the priorities of the party in government. However, some are matters that require long-term planning and an investment mind-set. Different governments are likely to have varying priorities. The pay-off from any investment will be evident only over the longer term. These are matters most in need of input from the public, academic experts, and the public service. The issues often cross public sector departmental boundaries, thus raising territorial difficulties. Seen from a time perspective, these issues are often 'tragedy of the commons' issues: problems which arise from slowly shifting incentives, leading over time to the hard-to-detect deterioration of common goods. Clear central decision-making processes are most needed, otherwise they will fall between departmental domains. The prevention approach to public policy is likely to apply most of all to these somewhat intractable long-term cross-boundary policy issues.

Good government requires clear priorities, not just for the allocation of funding but also for the allocation of thought. Policy design and implementation strategies are complex matters. Half-baked decision-making is often worse than doing nothing, in part because it kills off what might otherwise have been good options by giving those options a bad reputation. The point is well made by Marsh and Yencken:

> *Strategic public policy choices are not like private choices. They bind everyone, not just the individual making the decision. In addition, uncertainties are typically large and unintended consequences are legion. So proposed actions need long and thorough*

> *consideration; further, they need to be tested not only for their 'technical' correctness but also for their acceptability*. (Marsh and Yencken 2004: 18-19)

Below we set out some of the widely-accepted principles and values that we take to guide good public policy. The exact interpretation of each concept may be very contestable, and there may be clashes between them and we may need trade-offs before we can arrive at some definite policy proposal, but most policy discussion and analysis assumes these ideas as reference points. The various elements make a complex combination, and indicate why good public policy is difficult to achieve.

2.2 Values underlying good public policy

We can identify at least four sets of values which underpin and guide good public policy: equitability, liberty, legality, and efficiency and effectiveness. The first two are substantive, socio-political values while the latter two are administrative and procedural values.

Equitability

- Vertical equity: no upwards redistribution, and some downwards redistribution, especially for those thought to be the least well off
- Horizontal equity: equality between like cases
- Intergenerational equity: equality between generations
- Merit: valuing positive contributions to the common good

Liberty

- Minimum coercion and regulation
- Devolution or subsidiarity: decision-making at the lowest possible level
- Public goods: pay for goods that can't be privately provided
- Social capital: allow voluntary solutions wherever possible
- Purchaser-provider split: government funding of private or not-for-profit provision

Legality

- Constitutional soundness: federalism, separation of powers
- Rule of law in administration: due process
- Transparency
- Accountability
- Auditing
- The minister-department relationship: principles of responsible government, combining bureaucratic responsiveness to the government of the day with nonpartisanship and a commitment to the public interest and the provision of unbiased, frank advice

Efficiency and effectiveness

- Cost-effectiveness
- Minimal ‘churning’: avoid transfers from A to A where possible
- Competition: avoid monopolies
- Appropriate incentive structures
- Deal with the problem of ‘the commons’ through active management or assignment of property rights
- Fiscal sustainability: overall revenue neutrality
- Regular and independent program evaluation
- Administrative simplicity and clarity.

2.3 Seven principles of good public policy

We can also identify at least seven broad principles of good public policy, which are worth bearing in mind as we proceed through this study:

- conservatism, or don't try to fix what isn't clearly broken;
- liberalism, or the minimum use of coercion;
- equitability, or not causing undeserved harm;
- effectiveness, or having a sound causal hypothesis about how any proposed policy will achieve its ends;
- efficiency, or achieving desired outcomes and effectiveness at least cost and with minimum waste;
- targeting, or a check for possible unintended consequences; and
- practicality, or evidence that the proposal is administratively feasible.

This is a short summary of some leading public policy principles. The first three are clearly in the ethical domain, and they encompass the central points of our dominant political ideologies. The latter four are more matters of prudence, although we do not think there is any very sharp distinction between prudence and ethics.

3 Prevention policy criteria

The above principles and values serve as parameters within which policies can be framed. They tell us not what to do, but what to *not* do once we have decided to do something. They are therefore not very helpful criteria for deciding whether to adopt prevention policies, though they are helpful once we try to design such policies. We need specialised criteria that are applicable to arguments for prevention policies. In broad conceptual terms, this is not a very difficult matter.

We can say that prevention policies are justified when:

1. Current policies are dealing with the end point of an adverse development process
2. The adverse development process is fairly well understood
3. Current treatment or remediation policies are costly and/or relatively unsuccessful
4. Interventions early in the development process might be successful, or at least there is no good evidence that they will not be unsuccessful
5. Interventions will not be very costly
6. Interventions will not violate accepted rights and liberties, and preferably will be accepted voluntarily
7. Interventions will not have large adverse unintended consequences
8. Successful intervention can be defined and recognised, even though success may be many years in the making.

The key to the problem is to strike a balance between two factors:

- **Optimal targeting**: that is, knowledge of the precise location of the need for intervention in a given population, such that the policy can be accurately targeted; and
- **Optimal timing**: that is, knowledge of the optimal timing of interventions, given the causal pathway or trajectory that the problem typically follows.

If we had perfect knowledge of how best to target prevention programs, the case for a prevention approach would be very strong. But if our knowledge of targeting is weak, the case for prevention is weakened in proportion. While hindsight may show us exactly how and where we should have intervened some time earlier, that is only a rough guide to what we should do now.

Targeting requires identification of an “at risk” population. Of that population, only some will be the real target group – that is, those who would require a treatment or remediation approach if no prevention policies were adopted. Prevention is typically not a simple once-only “inoculation”, but a matter of persistent effort, but a poorly targeted effort may be quite wasteful.

On the other side of the problem, the optimal timing is usually early in the process. Late interventions may be too late, or at least very much more costly than early interventions would have been. Effectiveness often – though perhaps not always – diminishes with time.

Another key point is to distinguish between arguments for interventions and arguments for prevention. Whether it is desirable to intervene in a problem is a different matter from whether prevention is desirable. Arguments for intervention are about the relative merits of intervening or not intervening. Given that some sort of intervention is desirable, it remains an open question what form that should take. Arguments for prevention assume that there will be intervention of some sort, whether it be a preventive intervention or a remediation intervention. They are about the relative merits of these two approaches, not about the merits of intervention as such.

Both prevention and remediation interventions, if they are effective, are likely to have long term personal and social benefits, as well as immediate problem-solving benefits. In evaluating the case for prevention approaches, these long term benefits are relevant only to the extent that we can distinguish between the long term benefits from prevention and the long term benefits from remediation. The two may be indistinguishable, since effective interventions seem equally likely to produce such benefits whether the intervention comes early or late.

On the other hand, by definition effective preventions will produce benefits earlier than will effective remediation. These benefits can be included in the case for preventions. But early interventions are not necessarily more effective than late interventions. That is a matter of finding the optimal timing of the intervention. Just as some interventions may be too late, some may be too early.

3.1 Principles for prevention with children

As a theoretical approach to policy, the prevention approach has its roots in the public health field. In recent years it has spread into the family policy domain, based on a recognition that a fraction of the population of children in modern societies is growing up in an unstable, tense, and impoverished family and cultural environment. Twenty years ago, this was commonly denied: families were diversifying, not declining, it was contended. At that time intervention into families was stigmatised as illiberal or 'surveillance'. Today, there is optimism about the benefits of carefully-designed interventions, the archetype for which is the Perry Preschool Project (described below in part 4). The best-attested Australian intervention is the Triple-P parenting program, designed by Matt Sanders of the University of Queensland. (For a summary of current concerns in Britain about families and dysfunctional communities, see Sacks 1997. For a summary of similar concerns in Australia, see Stanley et al 2005: 45-78.)

The standard aim of a prevention approach to child development is "to maintain positive mental health through pre-emptively addressing factors which may lead to mental health problems or illnesses. These strategies can be aimed at increasing protective factors, decreasing risk factors or both, as long as the ultimate goal is to maintain or enhance mental health and wellbeing" (Commissioner for Children and Young People, 2011. Hereafter, CCYP 2011: 33). "Early intervention strategies refer to the identification of early manifestations of

mental illnesses, and the subsequent delivery of a prompt response aimed at preventing progression and reducing impact" (CCYP 2011: 33).

The case of intervention in children's socialisation illustrates the trade-off between optimal targeting and optimal timing (putting aside for the moment questions of parents' and children's rights and the objections to coercive interventions):

- Optimal targeting: that is, whether intervention is needed in particular individuals or population subsets becomes progressively better known with age, as it manifests itself in problematic behaviour: with babies it is unknown; with pre-schoolers little known; with adolescents fairly well-known
- Optimal timing: that is, when the child is neither too young to benefit (babies, toddlers, presumably in the care of their parents), nor too old (battle-hardened adolescents); generally, ages 3 to 8 seem best.

These two factors are in tension. If we choose to intervene early, we will have to select a target population where the need for intervention is less well known than it would be at a later date. If we choose to intervene late, we will target the intervention better but the population in need may now be at a stage of development where the intervention is less effective.

Prevention advocates generally favour early intervention, and they tend to assume that we can identify needs early, thus being able to target the intervention well. But if our ability to identify those most in need – that is, those who most stand to benefit – is poor, much effort might be spent with little result.

Michael Little distinguishes between four types of prevention with children:

1. *Prevention to intervene with an entire population to stop potential problems from emerging. Universal pre- and post-natal care to reduce infant mortality is an illustration of such activity.*
2. *Early intervention with people who show the first indications of an identified problem and who are known to be at unusually high risk of succumbing to that problem. Special classroom help with children who are exceptionally active in primary school would be one illustration, inoculation against childhood diseases is another.*
3. *Treatment or intervention to focus on the particular circumstances of individuals who have developed most of the symptoms of the identified problem ... most established children's services fit into this category.*
4. *Social prevention to minimise the damage that those who have developed an identified condition can do to others with whom they come in contact. Encouraging people not to leave their property unattended as a mechanism for reducing opportunities for crime provides an illustration of social prevention in the context of children's services.* (Little 1999: 307)

Little puts forward twenty guiding principles for preventive intervention:

1. *Prevention and early intervention tend to be more effective when they are a response to clear evidence on the needs of children in any location ...*
2. *Prevention and early intervention are more effective when they are designed in response to clear evidence about the likely causes of children's problems ...[known as] 'chains of effects' in children's lives.*
3. *Since chains of effects intersect all areas of children's lives, prevention and early intervention require the cooperation of health, education, social and police services as well as voluntary agencies.*
4. *Better diagnosis is a prerequisite of improved understanding of the balance between prevention and intervention early and late in children's services ...*
5. *... [A]n accurate diagnosis requires information about all aspects of the child's situation from birth to the point of referral.*
6. *Prevention should complement early intervention, treatment and social prevention ... Professionals should regard these activities as complementary and not in competition.*
7. *The object of the exercise is to prevent the development of problems. ... Services should be provided only when there is evidence that they benefit some children at some point in their development.*
8. *Professionals in agencies should work to a common definition of prevention and agree on how this activity differs from other forms of intervention, early and late.*
9. *Effective early intervention and prevention involve sharing knowledge ... No location will develop all the answers alone and all will have some contribution to make.*
10. *Early intervention need not mean early in a child's life. 'Early' ... can apply as accurately to a 16-year old exhibiting the first signs of mental health problems as to a three-year old whose difficulties in school may prefigure later behavioural problems.*
11. *Since the majority of support for children in need comes from within the state infrastructure of health, education and social services, effective prevention and early intervention will be delivered within or with the expressed cooperation of these agencies.*
12. *There is evidence for and against universal and targeted modes of prevention and early intervention activity.... Targeted prevention is a better strategy since it can be used to assemble better knowledge about the development of children's needs.*
13. *A proportion of all expenditure of services for children in need should be devoted to evaluating the effectiveness of that service. The principle applies as much to interventions as it does to prevention ...*

14. *Many ideas for better prevention and early intervention are unproven. New initiatives should incorporate evaluation designed to explain the nature of the problems being addressed as well as the effectiveness of individual responses ...*
15. *The effects of good prevention and early intervention activity may be delayed for several years ... Evaluations have to allow for the measurement of such delayed effects.*
16. *Since nearly all children in need live with their families and nearly all separated children eventually return home, effective prevention and early intervention must take account of the ordinary features of family life and incorporate their strengths.*
17. *Much of the expertise concerning the solution of children's problems rests with children and families themselves. Effective prevention and early intervention begin with professionals asking how children and families cope with specific problems.*
18. *Effective prevention and early intervention strategies may depend on a sophisticated understanding of causal mechanisms, but they are likely to take the form of simple practical help for the practical problems experienced by children and their families.*
19. *There are considerable strengths in current arrangements for children in need as well as many identified weaknesses. Effective prevention and early intervention build upon agencies' known strengths and set clear targets to overcome identified weaknesses. Good prevention work is not a matter of starting from scratch.*
20. *Effective inter-agency work does not necessarily require or imply that work is done from the same geographical or bureaucratic location. The ability to work across conventional boundaries is a particularly important component of effective prevention and early intervention activity.* (Little 1999: 308-11)

3.2 Conceptual clarification

Although it is not difficult to make a conceptual argument for prevention, there are still many difficulties in translating that argument into something practically achievable. One level of difficulty arises with the terminology surrounding the idea of prevention. In this section, we discuss some of these difficulties.

The concept of prevention (and its cognates) needs to be understood as neutral with regard to effectiveness and ineffectiveness. A prevention policy is a statement of intent, not a statement of achievement. The effectiveness of any policy requires conceptually independent evaluation.

A prevention approach has obvious attractions, if it can be made to work. Prevention is grounded in common sense, and it is reinforced by our belief in specialised rationality. This has been argued by Richard Freeman. He says that the theory of prevention

is built on scientific understandings of cause and effect and the possibility of prediction; on a capacity for controlled intervention by government in social life; on a universal value base; on the authority of professional expertise; on rational, calculating, individual social subjects. As that [social] order changes, many of its constituent elements begin to be threatened by social processes which it has itself set in train. Prevention is affected by (and implicated in) those changes, too. But far from being eclipsed by them it becomes more prominent. For it is precisely at the point at which systems are most threatened or challenged that they have most need for prevention. This is why policy makers and practitioners in child welfare – among other areas of social and public policy such as health, the environment and policing – are now seeking to revivify prevention and to make renewed commitments in its name. (Freeman 1999: 233)

The academic literature suggests that many academic commentators now share this optimism about the potential value of the prevention approach.

The prevention approach presupposes we have agreement on two points: the background values (that, for example, high crime rates or substance abuse or mental health problems are undesirable); and that it is a legitimate public policy aim to minimise the condition described.

The public health model distinguishes between three types of prevention: **primary, secondary and tertiary**. Freeman summarises this:

primary prevention refers to interventions designed to stop problems emerging, secondary prevention to early interventions designed to stop them worsening and tertiary prevention to measures intended to pre-empt at least some of their damaging effects. For present purposes, primary strategies tend to be those which act in or on other systems such as families, schools or housing schemes. Secondary strategies are characterised by techniques of screening and assessment which filter the movement of a problem from one domain to another, usually from the personal to the professional. Tertiary strategies are the ways in which a system continues to work on problems it has taken up. (Freeman 1999: 238)

Paradoxically, the accumulated research evaluations of prevention approaches in the public health domain have produced somewhat discouraging results. Louise B. Russell is a leading researcher in this field. She distinguishes between two measures of success:

- An intervention is **cost-saving** if its net costs are negative. No cost-effectiveness ratio is calculated.
- An intervention is **cost-effective** if it has positive net costs and net health effects and is judged to be good value for money.

Her summary of the evidence is this:

> *The evidence, from hundreds of studies published over the last four decades, shows that most preventive interventions add more to medical spending than they save, even as they improve health. With prevention, as with so much else, it costs more to get more.* (Russell, forthcoming. See also Russell 2007.)

A similar Australian public health analysis by Dalziel, Segal and Mortimer concluded that:

> *For any given condition, modality or setting there are likely to be examples of interventions that are cost effective and cost ineffective. It will be important for decision makers to make decisions based on the individual merits of an intervention rather than rely on broad generalisations.* (Dalziel, Segal and Mortimer 2008: 1)

This may seem obvious, but it is a useful corrective against assuming that any and every prevention policy will achieve good results. On balance, it seems that preventive interventions in the health and medical fields may not be strongly cost-saving and may not be cost-effective. They may, however, still be justifiable policies, if the additional benefits of the policy are considered worth the additional expense required to obtain those benefits.

The lack of clear gains from the prevention approach to public health (if Russell's summary is right) shows that a fuller argument is needed. The medical literature on this is relevant. Robert B. Wallace summarises a number of general difficulties with justifying prevention policies in the medical field:

> *While great strides have been made in disease prevention, there are many gaps in our ability to provide preventive modalities because of: (1) absent or incomplete understanding of the causes of many important conditions, (2) our lack of understanding of the impact of community vs. individual health behavior factors that might best impact factors that have been identified to cause disease, (3) poor understanding of where to administer interventions, (4) lack of effective administration techniques, (5) the unknown effectiveness of combined prevention modalities, and (6) limited understanding of providing prevention in the face of existing illness, including the unknown adverse effects of various prevention modalities in combination with medical treatments. Further, even when effective interventions are available, this effectiveness is only partial because of lack of effective methods and important logistical challenges in delivering them to properly targeted individuals and populations.* (Wallace, forthcoming)

These points are applicable also to non-medical policy interventions.

Whatever the case in the public health field (which will not be debated here), the prevention approach to policy may be applicable to a wide range of policy areas, outside the health and medical fields.

The case for prevention can be made to some degree if we compare the high cost of after-the-fact remediation expenditure with the much lower costs of before-the-fact prevention expenditure, as in the following areas:

- Prisons, law courts, rehabilitation, mental health care etc versus early childhood intervention
- Environmental cleanups versus solving the problem of externalities
- Social alienation especially of teenagers versus cultivation of social capital in communities and voluntary associations
- Traffic congestion versus integrated planning of public transport and road systems

The next step in the argument for prevention is much harder to make. It needs to be shown that advance outlays towards the solution of long-term and complex problems are likely to produce the benefits that the previous comparisons suggest are achievable. While an ounce of prevention may be worth a pound of cure, there's also many a slip between cup and lip.

Difficulties arise at the level of policy implementation. Greenhalgh et al. sets out the generic difficulties in achieving successful policy implementation:

> *... interventions will more often be adopted by service providers if: (i) the programme has a clear, unambiguous advantage in either effectiveness or cost-effectiveness; (ii) the programme is compatible with the potential adopters' values, norms, past experiences and perceived needs; (iii) the programme is perceived by adopters to be simple to understand (e.g. if the programme can be broken down into more manageable parts and adopted incrementally); (iv) potential adopters have the opportunity to experiment with the programme on a limited basis; (v) the benefits of the programme are visible (e.g. through practical demonstrations) to potential adopters; (vi) potential adopters have the opportunity to adapt, refine or otherwise modify the programme to suit their own needs; (vii) the organisational structures and systems required for the implementation of the programme are easy to adapt; (viii) the programme carries a low degree of uncertainty of outcome; (ix) the programme is relevant to the performance of the potential adopters' work and improves task performance; (x) the knowledge required for the programme's use can be codified and transferred from one context to another; and (xi) the programme is supplied with training and a help desk.* (Greenhalgh et al 2004; as summarised in Giesen et al 2007: 787)

The central issue with prevention policy is having a well-grounded causal theory that gives plausibility to the claim that an early intervention will bring about the intended effects sometime in the future. Since there are often many variables at work, this is no easy matter. Causal claims in the social sciences are often controversial.

At a minimum program evaluation requires “before” and “after” descriptions. Here the before is before policy intervention and after is after policy intervention (rather than before and after the onset of the condition being prevented or treated). But these descriptions are far short of being an adequate argument for causation, which is what is required if we are to be quite confident that a policy is effective. Better evidence of causal effectiveness will come from measuring effect sizes.

Merely treating symptoms is generally less desirable than treating causes, but if the causes are unknown or untreatable then “symptomatic” remediation is regarded as desirable. However, prevention approaches are attempts to minimise the causes, and not just the symptoms, of adverse conditions. Giesen makes this point in discussing mental health problems.

> *Prevention programmes are only effective if they are able to influence key risk and protective factors that have a causal relationship with the mental health problems being addressed. This requires prevention programmes to have a strong conceptual framework built on a solid empirical base which describes the relationship between risk and protective factors, and relevant mental health problems ... Causal risk factors are the key target for prevention programmes designed to reduce mental health problems.* (Giesen et al 2007: 786)

The prevention approach makes sense on the assumption that we are considering a condition that has a lengthy history and a predictable typical trajectory. It is possible to speak of interventions that are **early, mid-course, late and too late**. For example, the ABS *Survey of mental health and well-being* (Cat. No. 4236.0, 2007) shows a trajectory for mental health disorders (MHDs) at a population level. For both men and women, MHDs are highest in the 16-34 age range and decline markedly after (but not before) age 55. Females suffer higher levels of anxiety and affective disorders than males, while males suffer higher levels of substance abuse disorders.

Below are three examples of causal claims taken from the literature on prevention:

- *Many childhood disorders – once thought to resolve with age – are now known to cast long shadows over later development. Equally importantly, many adult disorders are now recognised as having roots in childhood vulnerabilities, traceable in some instances to the very earliest stages of development*. (Maughan and Kim-Cohen 2005: 310-303, quoted in CCYP 2011: 28).
- *High [antisocial test] scores are associated with low-income environments; low scores with high-income environments. Again, gaps open up early among income groups, and again, gaps can largely be eliminated by accounting for the quality of the early environments facing the child. A large body of literature, surveyed in Carneiro and Heckman (2003) and Cunha et al., demonstrates that skill gaps open up early, before*

schooling begins, and that these gaps are major determinants of social and economic success. The strong association between family characteristics and child performance measured by cognitive and noncognitive skills also demonstrates the value of a strategy targeted toward disadvantaged families ... Conventional school-based policies start too late to effectively remedy early deficits, although they can do some good. The best way to improve the schools is to improve the early environments of the children sent to them. (Heckman and Masterov 2007: 21)

- *Leon Feinstein's work has demonstrated the relative importance of academic, psychological and behavioural attributes in childhood. Feinstein finds that non-cognitive abilities – character capabilities – at age ten have substantial implications for adult outcomes. 'Conduct disorder' in boys, for example, predicts later adult unemployment – whereas 'self-esteem' predicts earnings. For women, 'locus of control' – or agency – is a particularly important predictor of labour market success*. (Lexmond and Reeves 2009: 26; see Feinstein 2000)

The condition at issue might be an individual one (lung cancer, for example) or a community condition (for example, social breakdown of some sort) or an aggregate condition (crime rates, perhaps).

It is standard for prevention arguments to distinguish between **risk factors** and **protective factors**. In the case of children's socialisation, one analysis distinguishes between five levels of risk factors:

1) *individual factors (e.g. gender, temperament);*
2) *parent and family factors (e.g. parental psychopathology, marital discord, family socio-economic status);*
3) *peer group factors (e.g. bullying, dysfunctional peer relationships);*
4) *school factors (e.g. quality of leadership, quality of academic programmes); and*
5) *community or neighbourhood factors (e.g. quality of neighbourhood facilities, neighbourhood socio-economic status).* (Giesen et al 2007: 786; derived from Offord and Bennett 2002)

Giesen adds that "Like risk factors, protective factors can reside within the individual (e.g. good coping skills, social skills, self-efficacy), the family (e.g. parental support, adult monitoring) or the community (e.g. community organisations that promote positive youth development)" (Giesen et al 2007: 786).

In general, the research literature indicates strong confidence in our understanding of the factors that account for the successful socialisation of children. Here we give three instances from the recent literature.

Firstly, Lexmond and Reeves put it this way: "A rich research literature demonstrates that healthy psychological development requires nurture, affection, intellectual stimulation, security and stability" (Lexmond and Reeves 2009: 37). They add:

> *There are three main categorical factors that influence the development of character capabilities in the early years, relating broadly to structural circumstances, parenting style and psychology:*
>
> - *Structural factors: Material poverty, parental background, family structure, ethnicity, gender, disability and the other structural circumstances of children's early lives all form the background to their development and exert an influence on that development. This is the kind of 'visible' disadvantage which is most obvious to policy makers, and which drives many policy priorities in this area.*
> - *Parenting style and confidence: Parents' approach to their children – their level of warmth, responsiveness, control and discipline – are strongly influential on children's character capability development. Parents' perceived view of their competence or ability to parent well is also an important influence on the development of children's character capability.*
> - *Psychological vulnerability: Genetic, pre-natal and very early environmental factors can affect children's early psychological development. Some children, as a result of these varying factors, have a temperament that makes them more susceptible to weaker parenting or a less nurturing environment, or less susceptible to better parenting or more nurturing environments. These children are found across the socio-economic spectrum, but suffer more in low-income households; in this sense they are doubly disadvantaged.* (Lexmond and Reeves 2009: 31)

Secondly, the Western Australian Child Health Survey (WACHS) produced a strong model of the processes governing children's mental health. It showed a strong correlation between family structure and family practices and what it called fixable 'mental health problems'. The category 'mental health problems' includes a range of anti-social behaviours, including delinquency, aggression and social problems, but also depression, anxiety and self-harm tendencies. The three key determinants of these mental health problems are:

- whether the child lives with both biological parents
- whether the family is discordant or harmonious
- whether the parents exercise an encouraging and consistent disciplinary style.

These three factors have an explanatory power to correctly classify 83 per cent of children with mental health problems. (Zubrick et al. 1995; Silburn and Zubrick 1996)

Thirdly, consider Green et al on the causes of crime:

The most important influence on socialisation is the family, followed at some distance by schools. Based on longitudinal and cross-sectional studies, four main influences can be identified.

- *The first and most important is parental neglect. Children raised by parents who fail to supervise them or spend much time with them are more likely to become criminals.*
- *Second, family conflict can be important, especially when parents contradict each other—thereby providing no clear moral lead—or compete for affection by being lax with their children. Such conflict is more likely in broken families, whether one-parent or stepfamilies.*
- *Third, criminal parents or those who condone crime are much more likely to raise criminal offspring.*
- *Fourth, disruption of the family is associated with crime. It may take the form of the absence of one parent, the casual arrival of new partners, or the appearance of a step-parent*. (Green et al 2005: 221-2)

Confidence in this sort of psychosocial model helps to account for some of the current optimism about prevention approaches to policy.

It still remains an open question whether a good causal theory can be backed up with effective prevention methods. Confidence in the existence of such methods is claimed in the statements below:

- *Estimates suggest that between one-quarter to one-half of adult mental illness may be preventable with appropriate interventions in childhood and adolescence*. (CCYP 2011: 29)
- *Interventions early in life can address risk factors more effectively, reduce symptoms more easily, to improve outcomes for children and reduce adverse impact on development, especially for conduct and anxiety disorders*. (ibid.)
- *Enriched preschool centers available to disadvantaged children on a voluntary basis coupled with home visitation programs have a strong track record of promoting achievement for disadvantaged children*. (Heckman and Masterov 2007: 6)
- *In the past forty years, many voluntary interventions have been devised to improve the early years of children by supplementing the resources of disadvantaged families. These family supplements do not actively intrude on family life, yet they enrich the early years of the child.* (Heckman and Masterov 2005: 23)

The optimists generally favour interventions to improve parenting skills. Lexmond and Reeves summarise their view on the importance of good parenting thus:

Using a typology that measures four different parenting styles – tough love, laissez-faire, authoritarian and disengaged – we found that 'tough love' children are more than twice as likely to display strong character capability in the early years than those with 'disengaged' parents. Conversely, children with 'disengaged' parents are more than three times as likely to display weak character capability in the early years than children with 'tough love' parents. (Lexmond and Reeves 2009: 13)

Children with disengaged parents are around three times more likely to be in the bottom 20 per cent of outcome scores as children with tough love parents. The two other parenting styles occupy an intermediate position. Children who have 'good' outcome scores and 'bad' outcome scores with laissez-faire parents do slightly better than those with authoritarian parents; both parenting styles are associated with much better results than the disengaged parenting style ... Controlling for other factors, children with tough love parents are still around twice as likely to have top-quintile outcomes as children with disengaged parents, while children with disengaged parents are just over twice as likely to have bottom-quintile outcomes as children with tough love parents. (Lexmond and Reeves 2009: 49-50)

They argue for policy focused on fostering good parenting practices:

character capabilities – application, self-regulation and empathy – make a vital contribution to life chances, mobility and opportunity. The development of these character capabilities appears to be profoundly shaped by the experience of a child in the pre-school years. There is some evidence that lower-income households face more difficulty in incubating these character capabilities. But the most important influence is the quality of parenting. Confident, skilful parents adopting a 'tough love' approach to parenting, balancing warmth with discipline, seem to be most effective in terms of generating these key character capabilities. An ambitious agenda for equality of opportunity will need to take the development of these capabilities seriously. (Lexmond and Reeves 2009: 54)

Leading Australian researchers advocate a similar policy focus on parenting (see for example Silburn and Zubrick 1996; Sanders et al 2002; Sanders et al 2003; Zubrick et al 2005).

The case for promoting good parenting is in part that it strengthens crucial family bonds, especially between mother and child. Attachment theory is a vital part of the causal argument. There is now strong evidence on the formative nature of early attachments. As Lexmond and Reeves put it:

Empathy develops as a direct result of attachment between a child and their primary carer. From birth to age three, the number of synapses (neural connections) in the brain

multiplies by 20 – and most are formed as the result of experience in their new environment. Synapse pathways are reinforced by repeated early experience; the effect is that this early learning becomes extremely resistant to change. The more nurturing and responsive an infant's environment is and the more attuned carers are to the infant's needs, the stronger the infant's sense of empathy will become. Empathy leads to pro-social behaviour. It is ultimately a relational capability and underpins a set of social skills that allows individuals to interact and communicate with each other effectively.
(Lexmond and Reeves 2009: 17)

They show that attachment correlates with pro social behaviour, hyperactivity, emotionality, [good] conduct, and [good] peer to peer relations (ibid: 44-45).

Recent research also demonstrates the significance of good parenting in shaping children's intellectual development. Here the studies by Hart and Risley into children's language acquisition are important. Their work demonstrated two key differences in childhood intra-family experience.

- *In four years of such experience [as documented in their research], an average child in a professional family would have accumulated experience with almost 45 million words, an average child in a working-class family would have accumulated experience with 26 million words, and an average child in a welfare family would have accumulated experience with 13 million words*
- *The average child in a professional family was accumulating 32 affirmatives and five prohibitions per hour, a ratio of 6 encouragements to 1 discouragement. The average child in a working-class family was accumulating 12 affirmatives and seven prohibitions per hour, a ratio of 2 encouragements to 1 discouragement. The average child in a welfare family, though, was accumulating five affirmatives and 11 prohibitions per hour, a ratio of 1 encouragement to 2 discouragements*. (Hart and Risley 2003; see also Hart and Risley 1995)

They show that these differences in early childhood language experience largely determined later IQ and academic success. A focus on good parenting might assist parents to appreciate the critical importance of interactive conversation and consistent encouragement for their children's development.

Arguments against these claims might be based on various grounds. Here we will consider three such grounds.

One argument is that family structure plays a critical part in children's development. The WACHS, as we saw above, showed that whether they live with both biological parents is one of the three principle factors determining children's mental health. This was a robust finding, which remained after controlling for other factors. However, in their British study

Lexmond and Reeves found that "when we control for other characteristics – namely parental style and parental confidence – the relationship between family structure and child outcomes disappears almost entirely" (Lexmond and Reeves 2009: 38-39). The study by Green et al mentioned above observed that family conflict is more common in sole parent and step parent families and that family disruption – "the absence of one parent, the casual arrival of new partners, or the appearance of a step-parent" – is associated with crime" (Green et al 2005: 221-2).

Overall, the interaction between family structure, family conflict and adverse parenting practices is a complex matter. However, no-one contends that family structure is the only determining factor in good socialisation, and all agree that good parenting is a strong determinant in its own right.

A second view proposes a socioeconomic causation model. Children in poorer families do worse in school and behave less well than others simply or largely because they suffer economic deprivation. Evidence on whether there is a causal connection here is mixed. One Australian study supports this view (Bor 1997). In the WACHS, family income was found to be correlated with children's mental health but was found to be not a significant explanatory factor when other factors were controlled for (Silburn and Zubrick 1996). Lexmond and Reeves also take the negative view: "When we control for other characteristics – in particular measures of parental confidence and self-esteem – the differences in child outcomes between richer and poorer families are no longer statistically significant. In other words, parents on a low income, but who are confident and able, are as effective at generating character capabilities in their children as parents on a high income. It is not income itself that causes the different outcomes but other factors which are associated with low income" (Lexmond and Reeves 2009: 35-36). Overall, then, the evidence on socioeconomic causation is not strong.

A third line of argument is that social problems arise from poor public policy (and only secondarily from intra-family factors). On this view, the primary solution is not intervention into problematic families or individuals but reversal of the problem-causing policies, especially "passive welfare". This is the central claim of the Cape York Institute for Policy and Leadership's analysis of the causes of social dysfunction in remote Aboriginal Australia. The Institute's report, *From Hand Out to Hand Up*, argues that in a healthy social system:

- Policy is guided by widely accepted social norms of regular work and family solidarity.
- The society puts in place rationally-aligned incentives, favouring economic independence over long-term dependency on governments or charity organisations.
- Recipient families are supported to become more independent e.g. ensuring access to good schools, good policing and good health facilities. (See CYIPL 2007)

This approach involves “prevention” in a very different sense from the usual interventionist model. The merits of this analysis cannot be debated here. It is not obviously in direct conflict with the arguments considered above, since long-term welfare dependency, sole parenthood, and unemployment are clearly part of the social background that leads to adverse socialisation of children.

4 Prevention policies and interventions

In the previous section we set out some of the parameters of the debate about prevention, especially intervention to improve children's mental health and socialisation. Here we examine and evaluate more closely the literature on some actual prevention policies designed to intervene constructively in children's development.

The identification and evaluation of prevention approaches has been carried out very thoroughly, at least for early intervention in children's cognitive education and socialisation, by Wise, da Silva, Webster and Sanson 2005, *The Efficacy of Early Childhood Interventions* (hereafter EECI). (Some of the same ground is covered by Heckman and Masterov 2005: 24-28; however they did not analyse effect sizes.)

From a review of 108 intervention programs, only 32 were found to be adequately evaluated or capable of evaluation. The remainder were inadequately designed or documented for the purpose of evaluation. Three of these 32 were Australian, 22 were US-based, and one each from Canada, UK, Turkey and Bolivia, with a few from multiple sites.

Of the 32, only three measured long-term effects using a sample not damaged by attrition, and the Australian programs were not in the three. Of these three:

- Perry Preschool Project (Perry) (described below) had some medium or small positive long-term effect sizes (PLTES)
- Chicago Child-Parent Center (CPC) had one small PLTES, otherwise negligible
- Parent-Child Development Centers (PDCD) had two medium PLTES, otherwise negligible
- In most other cases the best that could be said is that the programs produced large or medium short-term or intermediate benefits. Of these the best performer was the Australian Triple-P parenting program, which produced a range of positive intermediate effects sizes, especially in reducing parental conflict over child-rearing.

Another well known early intervention program, Head Start, had no data on effect sizes. Nor did High/Scope, a spin-off from Perry. Early Head Start produced negligible effect sizes.

(Note: This has since been corrected by more recent research. For example, Deming has found that participation in Head Start produces substantial long-lasting benefits. He estimates that "Head Start participants gain 0.23 standard deviations on a summary index of young adult outcomes. ... The long-term impact for disadvantaged children is large despite 'fade-out' of test score gains" (Deming 2009: 111). Head Start is shown here to be more cost-effective than Perry Preschool.)

EECI summarises its findings as follows:

> *effect sizes indicated that child cognitive outcomes demonstrated the greatest change in the short-term; however, the size of these effects diminished over time. The more enduring effects were found on acts of delinquency and crime, with lower incidences of crime and delinquency among intervention participants. Most of the available effects on parent and family outcomes were negligible to small. However, it should be noted that few of the evaluations reporting effect sizes measured parent outcomes, and, in contrast to these findings, the Triple P program found large effects on parent outcomes*. (EECI: 22)

The EECI analysis observes that, overall, "Reductions in acts of delinquency and crime (which are easily measured) were the most enduring intervention effects reported" (EECI: 49). "[T]he Perry Preschool Project stands out as the only intervention to collect comprehensive evaluation data on participants into adulthood. Impressively, the adult follow-up of participants in the Perry Preschool Project, collected after 22 years when participants were aged 27 years, showed positive effects on aspects of intellectual ability as well as income and employment outcomes in adulthood" (EECI, 49). This is similar to the finding of Heckman and Masterov: "Private gains are a substantial benefit of such programs [as Perry PreSchool], and are important for the evaluation of the programs on the grounds of social justice. However, it is the large social benefits for the general public – stemming from the savings to taxpayers, victims of crime and employers – that make the firmest case for the programs. ... The discrepancy between the public and private returns is driven largely by the high earnings boost for girls and the wane in crime for boys resulting from the program" (Heckman and Masterov 2005: 31).

A somewhat sceptical view of the potential of family intervention is presented by Green et al 2005. Drawing on the work of John Graham and Trevor Bennett, they categorise "the main forms of family intervention so far attempted by government agencies" as follows.

- *Discouragement of teenage pregnancy. Children born to teenage mothers are at a high risk of becoming criminals due to parental neglect. However, effective programmes have been hard to come by in the UK.*
- *Pre- and post-natal care. Home visits by health visitors to give advice and discourage abuse have been found to help. The [UK] Government's Sure Start initiative is one example.*
- *Parent training. Erratic and inconsistent discipline is associated with offending and some schemes have found that parents can acquire improved skills by attending classes. Such training may also discourage parents from putting children into care, an even bigger risk factor for crime.*
- *Family support. This can include a wide range of services, including financial assistance, personal counselling, child care and after-school clubs. Social workers*

may also encourage family preservation in the hope that children will not need to be taken into care, where they are even less likely to receive the moral guidance necessary to keep them out of trouble.

- *Pre-school education combined with home visits. The most famous of these schemes is the Perry Pre-School project which began in 1962 with 123 black children from families of low socioeconomic status. About half were single-parent families. Fifty-eight were in the programme group and 65 in the control group. The scheme lasted two years until the children were aged three. The pre-school programme offered a high teacher/ pupil ratio and lasted for 2.5 hours per day for 30 weeks of the year. In addition the teachers visited mothers at home while the child was present for 1.5 hours once per week. Information was gathered as the children grew up: at age 11, 15, 19 and 27. Those in the programme group did better in school and teenage pregnancy was lower. At age 19, arrest rates were about half those for the control group. At age 27, one in three of the control group had been arrested, compared with one in 14 of the programme group.*
- *These programmes for parent support or parental substitution are largely uncontroversial but, compared with the impact of family breakdown, they are able only to scratch the surface. It is unlikely that primary socialisation can be improved while over one-fifth of children are being raised by only one parent.* (Green et al 2005: 222-23; see also Graham and Bennett 1995)

4.1 Costs and benefits

The EECI study also undertook cost-benefit analyses. However, only 8 programs had data suitable for cost-benefit analysis. The main positive results of their analysis were:

- Perry, returning $8.74 for each $1 spent.
- CPC, returning $7.10 for each $1 spent.
- Elmira Prenatal and Early Infant Project (PEIP), returning US$4 for each $1 spent.
- Triple-P "would pay for itself if it averted less than 1.5 per cent of conduct disorder and [...] an aversion rate of 7 per cent or more would result in a cost saving" (EECI: 46).

One program, the Florida Family Transition Project, a welfare-to-work program, "produced a net loss to the government of US$6300 per family" (EECI: 44), proving that prevention approaches can be seriously counter-productive and wasteful.

In summary, they say: "Focusing narrowly on the limited cost-benefit data for early childhood interventions reviewed here, there is some indication that interventions that involve children as participants [i.e. not just parents], or that focus on enhancing parental

efficacy, and that are intensive in nature, have greater cost savings potential than interventions that focus solely on familial economic circumstances" (EECI: 47). This tends to support the idea that it is less economic deficiencies that make a difference to children's socialisation and more a matter of parenting deficiencies.

Heckman and Masterov summarise their analysis of skill formation by families as follows:

> *investments in children are complementary and ... early investments improve the return on later investments. The self productivity of early investment warrants more investment in the young. Their analysis shows that the young receive highest returns to a dollar of investment. Early skills breed later skills because early learning begets later learning. Both on theoretical and empirical grounds, at current levels of funding, investment in the young is warranted. Returns are highest for investments made at younger ages and remedial investments are often prohibitively costly.* (Heckman and Masterov 2005: 22-23)

It is noteworthy that one Australian intervention, the Triple-P parenting program, performed well in cost-benefit terms.

A study by Access Economics, *The economic impact of youth mental illness and the cost effectiveness of early intervention,* contended that in Australian in 2009 "the national financial cost of mental illness in people aged 12 to 25 years was $10.6 billion with the value of lost wellbeing (disability and premature death) costing a further $20.5 billion" (CCYP 2011: 48). This age group constitutes about 5 million people, so – very crudely – the cost is about $6,000 per person, or $24,000 per person if we narrow the cost down to those directly affected by mental illness, which is around one quarter of that age group (according to the National Survey of Mental Health and Wellbeing 2007 which found that "more than one in four young people aged 16 to 24 years experienced a mental disorder in the previous 12 months").

Here the difficult question is one of targeting. Should policies be aimed only at the one-quarter of the population that suffers from some form of mental illness? If we agree that policies should be so targeted, how is this subpopulation to be identified in advance? Even if it is highly concentrated in young people in families with poor parenting, ongoing parental conflict, and/or an adverse family structure, how are such families to be identified by policy designers and administrators? Or should policy be directed at young people who are starting to exhibit signs of mental illnesses? If that is the approach, then in practice there will be less prevention and more remediation.

This problem illustrates one of the main ongoing tensions in prevention approaches. There may be no perfect solution to the tension.

4.2 Effective programs

What are the key features of cost-effective programs? Here we summarise the key features of the four most cost-effective programs listed above in the Efficacy of Early Childhood Interventions (EECI) study.

EECI divided programs into five types:

- Cluster 1: targeted, child focused, centre based, preschool age. Perry and CPC are Cluster 1 programs.
- Cluster 2: targeted, parent focused, home visits, all ages. PEIP is a Cluster 2 program.
- Cluster 3: targeted, family economic/welfare focused, all ages.
- Cluster 4: targeted, holistic, various locations, all ages.
- Cluster 5: universal, various foci, various locations, all ages. Triple-P is a Cluster 5 program.

"[T]he largest effects on child outcomes were found for intervention cluster 1 (where all programs were centre-based)" (EECI: 22). The least effective programs appear to be in Cluster 3 and 4. However, many programs reported no effect sizes, so in most cases we don't know whether they are effective or not.

The four most effective had these characteristics:

- Perry Preschool Project "involved daily 2-hour classes in the morning, from October to May each year (30 weeks)" for 3 and 4 year old children. "The preschool program emphasised active learning with children, focusing on problem solving, choice and decision making, taking responsibility and maintaining consistent daily routines.... Home visits were weekly and involved the teacher visiting the home for 90 minutes in the afternoon, also from October to May each year. The home visiting component was so that parents could conduct the curriculum at home. Group meetings of mothers and of fathers also occurred". (EECI: 68)

- CPC is targeted at economically-disadvantaged 3 to 4-year-olds and their parents. It "emphasises a child centred, individualised approach to social and cognitive development. There is a focus on reading and language development and affective development.... The program requires parental participation of at least 1 half day per week (or 2 days per month) for children to participate.... A number of parenting activities are also provided – parenting classes, providing clerical assistance, developing resources for other participating parents, coordinating school visits, work training, literacy programs and various other activities". (EECI: 75)

- PEIP is targeted at “Low-income first-time mothers and their children”, from prenatal to 2 years. “Home visits by nurses focused on providing parent education, enhancing social support from family and friends and linking the family with outside support services. Mothers were educated about health issues such as substance use and management of pregnancy complications. Nurse also helped mothers improve birth outcomes (by seeking to reduce substance abuse, improve nutrition and better access to obstetric care), learn competent parenting skills (including the promotion of sensitive, responsive and engaged parenting) and assist with reaching educational goals and finding work. A large focus of the program was to reduce the risk of child abuse and neglect”. (EECI: 76)

- Triple P is designed for all children to age 16. It is “A parenting and family support strategy that is prevention oriented, multi-disciplinary and has five levels.... Five different developmental periods are targeted at each level – infants, toddlers, preschoolers, primary school aged and teenagers. The program aims to promote parental competence and enable parents to become independent problem solvers. Five key principles of parenting – safe, engaging environment; positive learning environment; assertive discipline; reasonable expectations and taking care of self as parent.” (EECI: 111)

Lexmond and Reeves argue for a focused approach:

> *although government [in the UK] has done much to emphasise the importance of early years development in public policy, the success of these policies is far from clear. This is partly because government has yet to approach early years policy in a clear and streamlined way. At the moment, early years strategy is broadening in its focus on everything from child care to early education, getting parents back into employment, and providing family support. What it should do is focus clearly on delivering initiatives that support the development of key character capabilities* (Lexmond and Reeves 2009: 27-28).

Lexmond and Reeves also emphasise the importance of strong evaluation follow-up. Overall, they say:

> *The case for investing in helping parents to improve their parenting skills is strong. But it is critical that only interventions with proven impact are funded. US policy makers are applying tough ‘return on investment’ tests to programmes to ensure the best use is made of scarce resources. In the UK there is an urgent need for a body with the knowledge and capacity to evaluate programmes aimed at supporting parents. The National Academy of Parenting Practitioners (NAPP) has been charged thus far with developing expertise and a body of knowledge on what works in this field. At present it is scheduled to complete this work and wind up in 2010. Policy makers should always be wary of allowing organisations to continue in existence when they are past their policy directions use by date. But NAPP has the potential to use its institutional knowledge to act as a qualifying authority for parenting*

> *interventions – a statutorily empowered National Institute for Clinical Excellence (NICE) for parenting policy. Local authorities and other funding bodies would only be permitted to spend on programmes with the NAPP stamp of approval – which signals proven efficacy and cost-effectiveness – and would be obliged to run them along strictly determined parameters. There would of course be considerable scope for local funders to choose interventions suitable for their locality and population, but not to use monies raised from general taxation on unproven interventions* (Lexmond and Reeves 2009: 64-65).

Similar points could be made about the evaluation of programs in Australia.

5 Possible applications

In this section we will consider some practical applications of the prevention approach to public policy.

Two general requirements of a well-crafted prevention policy are:

- Scientific evidence of effectiveness: the policy should be backed by strong evidence, showing how early interventions will very likely lead to later desirable outcomes. In policy areas where prevention works, effectiveness is related to "timing".
- Economic: the policy should be revenue neutral or cost saving. If it is not cost saving then the principle of revenue neutrality applies, in which case any net costs involved in the prevention approach should be matched by cost cuts in other policy areas. (One role of public service expertise is to identify poorly performing policies that might be cut to make space for more promising prevention strategies.) The economic arguments require estimates of both the effectiveness of "targeting" and the effectiveness of interventions that reach the targeted population.

In our survey of the prevention literature only one current Australian social program stood out as meeting the economic and social science requirements. This is the Triple-P parenting program. The evidence suggests that this program could be expanded successfully.

Of course, there may be many social programs that can be justified in both economic and scientific terms. However, we found no literature that demonstrated the case for any Australian program, other than Triple-P. The obvious point here is that very few Australian programs are subject to this sort of scrutiny. Or it may be that our survey has been incomplete and that some well-justified programs escaped our notice.

Furthermore, our survey has shown that while in theory prevention approaches have much to offer, some programs that might seem attractive are less than successful when subject to critical scrutiny. This was shown by Wise, da Silva, Webster and Sanson 2005, *The Efficacy of Early Childhood Interventions* (EECI). We cannot assume that prevention policies are effective or cost-effective, even when compared to costly remediation approaches. Each case has to be taken on its merits.

5.1 Children of the Lucky Country

In their report, *Children of the Lucky Country?*, Stanley, Richardson and Prior write that:

> *The general pattern of this overview of trends is one of increasing rates of complex physical, intellectual and psychological problems in children and young people, including disabilities and substance abuse, teenage pregnancy, sexually transmitted infections, crime rates, and low and unequal educational achievement. The data also suggests*

> *increasing, rather than decreasing, inequalities in many areas.* (Stanley, Richardson and Prior 2005: 77-78)

If we accept this analysis of the trends, we need a causal story to explain the processes that bring about these trends and we need a set of policies targeted at those processes. Stanley, Richardson and Prior paint a picture of wide-ranging social change, driven especially by women's increasing workforce participation. The negative effects on children are brought about through a loss of parental time and investment. Children are being poorly socialised largely because their parents are otherwise occupied. This analysis implies that large changes are needed to moderate the impact of economic competitiveness on the family. It also implies that since the causes are spread across the whole socioeconomic spectrum, so too are the adverse effects.

In Tapper (2010) it has been argued that there is far less change in women's work activity than is commonly supposed; and that, on average, parental time with children has not decreased in the last thirty years. However, we can put that aside and debate the implications of the Stanley et al position. We can accept that the trends are as they describe, but contend that the sociology at work is very different. If the adverse effects are highly concentrated in a subpopulation, then the question to ask is: what causes are acting especially on that particular population? In fact, the proposition that "inequality" and disadvantage are increasing rather than decreasing implies that there is a population of children that is doing well and another population that is doing poorly. And in any case there is plenty of evidence that disadvantage in the form of poor socialisation is not spread evenly across society but is fairly strongly concentrated. Disadvantaged children typically come from dysfunctional families that are more likely to be underemployed than overemployed and more likely to be composed of sole parent and step parent families than of couples with their biological children. If that is so, we need policies that target that demographically concentrated disadvantage. Policies designed to change the whole pattern of work and family are unlikely to have much impact on the disadvantages at work in this population.

(The WACHS found that children of unemployed couples are more troubled than are children where one or both parents work, and children of non-working single parents are similarly worse off than children of employed sole parents. The differences are not small: mental health problems go up from about 20 per cent to 32 per cent in the first case, and from 28 per cent to 36 per cent in the second. The average for the whole population was 18 per cent. Children in their original families had a 14 per cent rate.)

5.2 Report of the Inquiry into the mental health and wellbeing of children and young people in Western Australia

The central finding of this report was that "the mental health needs of children and young people have not been afforded sufficient priority and there is an urgent need for reform in terms of both investment and focus". The report cites strong Western Australian studies

that show that “more than 11 per cent of children aged two years and 20 per cent of children aged five years have clinically significant behavioural problems [and] that more than one in six children aged four to 17 in Western Australia have a mental health problem” (CCYP 2011: 12; see also 47).

Mental health problems often originate in childhood. According to the report, “Up to 30 per cent of adult mental health problems are related to adverse experiences in early childhood and up to half of lifetime mental health problems start by the age of 14” (CCYP 2011: 28). This indicates the value of a prevention approach. Effective early intervention is likely to produce lasting benefits. The “timing” factor favours prevention.

Furthermore, there is good evidence that mental health problems are to some degree preventable and that effective treatments are available. “Estimates suggest that between one-quarter to one-half of adult mental illness may be preventable with appropriate interventions in childhood and adolescence” (CCYP 2011: 29).

The distinction between treatment and prevention approaches is well recognised:

> *by solely resourcing treatment services without also adequately resourcing promotion, prevention or early intervention services, the system becomes heavily skewed to treating severe mental health disorders. The consequence of this is that there is no opportunity to reduce the prevalence or severity of mental health problems and disorders so the demand on treatment services continues to grow, eventually becoming excessive and unmanageable*. (CCYP 2011: 34)

How then does the report deal with the “targeting” dimension of the problem? Its approach, very sensibly, is to identify “risk” and “protective” factors influencing mental health. A key statement is this: “Risk and protective factors can be individual, family or community related, social, environmental or economic. High quality mental health promotion and prevention activities target these risk and protective factors as they are proven to have a connection to the onset of mental illness” (CCYP 2011: 35). The protective and risk factors are divided into five categories, which are spelled out in admirable detail: individual (with 14 protective and 14 risk components); family (8 protective and 18 risk components); school (6 protective and 6 risk components); life events and situations (4 protective and 12 risk components); and community and cultural factors (6 protective and 6 risk components).

But, all this said, it remains an open question to what extent public policy can influence these factors. The problem is recognised in the following quotation:

> *Of major significance for the development of interventions to improve mental health is the realisation that most of the protective and risk factors for mental health lie outside the main ambit of mental health services, in socioeconomic and sociocultural conditions. Of equal importance is recognition that effective interventions related to these risk and protective factors have positive outcomes beyond the mental health domain.* (CCYP

2011: 42; quoting Mental Health and Special Programs Branch 2000, Promotion, Prevention and Early Intervention for Mental Health: A Monograph, Commonwealth Department of Health and Aged Care, Canberra, p. 17).

Seventeen sectors of public services are listed as affecting children's mental health:

1. *the early childhood sector, including child health services, parenting programs, play groups, child care and*
2. *preschools, child and family services;*
3. *the education sector, including teachers, school psychologists and chaplains;*
4. *sport and recreation services;*
5. *the welfare sector, including welfare and social workers, crisis workers in street-based outreach services;*
6. *the juvenile justice sector, including police, youth workers, the courts and detention/remand centre staff;*
7. *child protection services;*
8. *drug and alcohol services;*
9. *accident and emergency services, including ambulance officers and police;*
10. *community support services, including home help services, recreational program workers, phone help lines;*
11. *volunteer services, including home visiting and parent support programs;*
12. *migrant and refugee services;*
13. *youth services;*
14. *religious organisations, including clergy, youth and outreach workers;*
15. *housing services, including youth housing, shelters, supported accommodation staff;*
16. *cultural programs; and*
17. *local government.* (CCYP 2011: 43)

The report's focus is specifically on child and adolescent mental health services. This focus simplifies the targeting problem very considerably, since it limits discussion to those forms of intervention available to mental health professionals. It shelves the question of whether other kinds of service or policy intervention might be needed, alongside or even in place of mental health services. (This is the reverse of the argument in *Children of the Lucky Country?*, where the policy proposals were so broad as to become only distantly related to the problems they were designed to alleviate.) The weakness of this approach is that it is somewhat stipulative about the targeting problem.

By one specialist estimate, child and adolescent mental services are "currently only funded adequately to provide a service to one per cent of the population of children and young people, although five per cent require its expertise (for treatment of mental health disorders)" (CCYP 2011: 52). The solution to this problem might be sought in different ways. One way is simply expanding the services currently offered. This assumes that those services already have the most effective strategies for dealing with the needs of clients; it also

assumes that additional funding or funding diverted from other uses will be made available for expansion.

A different viewpoint is suggested by one submission to the Inquiry, which observed that "community based services tend to struggle to develop and deliver programs that are of consistently high quality and are well targeted to meet the needs of families and young children. Reasons oft cited include a chronic shortfall in funding, the short term nature of contracts and performance management regimes that focus more on outputs than outcomes" (CCYP 2011: 59; quoting a submission by the Telethon Institute for Child Health Research). If this is a valid comment, then the policy required is not simply a matter of "more of the same". Something different is needed. This is recognised by the report:

> *The challenges for this area, therefore, lie beyond restructuring funding arrangements or transferring service delivery responsibility. There is a more preliminary requirement for the capacity of this sector to be developed to an adequate level so that it may deliver the range of mental health services required by children and young people.* (CCYP 2011: 59)

What is needed is services that are not only effective when they are applied but services that also are effectively targeted at the populations most in need of them. This requires a strategy for identifying that population. It is a weakness in this report that the targeting problem is not fully addressed, even despite an excellent account of the protective and risk factors that provide pointers towards a targeting policy.

This problem would be not so great if children and youths and their families in need of help were likely to seek it for themselves. But it is in the nature of the case that this is relatively unlikely to happen. An effective referral process is needed, linking families and expert services. Schools may provide such a link, and the report does recommend that schools play a larger role of this sort. But this too requires targeting, since it is implausible to suppose that every school can have such a role, and some schools and some areas will have much greater needs than others. The problem is how to most effectively allocate the scarce expertise available. Evidence for how this can be done might be found in the 1995 Child Health Survey, though more up-to-date evidence is now needed, and the results of the 2008 Child Health Survey will be valuable. The report does recommend some important structural and management reforms that may assist with improving policy targeting (CCYP 2011: 65-67).

The report also recognises that Aboriginal children and youth are especially vulnerable and experience "very poor mental health outcomes", noting that "24 per cent of Aboriginal children aged four to 17 years were at high risk of clinically significant emotional or behavioural difficulties" (CCYP 2011: 73). The submission by Professor Helen Milroy indicates how multifaceted the problem is for Aboriginal children and youth:

> *The trans-generational effects of trauma occur via a variety of mechanisms including the impact on the attachment relationship with caregivers; the impact on parenting and*

family functioning; the association with parental physical and mental illness; disconnection and alienation from extended family, culture and society. These effects are exacerbated by exposure to continuing high levels of stress and trauma including multiple bereavements and other losses, the process of vicarious traumatisation where children witness the on-going effects of the original trauma which a parent or other family member has experienced. (Quoted CCYP 2011: 73)

Given this, what should be done? The answer depends on whether mainstream services work effectively for Aboriginal children and youth or whether a different approach is needed. How far are the risk and protective factors similar to or different from those that govern the majority population? This is a topic far too large to be analysed here.

5.3 Justice Reinvestment

The idea behind Justice Reinvestment is to apply a prevention approach to the causes of crime and the costs of crime. It supposes that crime originates mostly in particular identifiable communities and that crime prevention requires re-investment in those communities. One of the main costs of crime is the costs of imprisonment. Prisons are very expensive to build and to operate. Justice Reinvestment proposes that the costs that would be incurred at the imprisonment end of the crime trajectory should be “re-invested” at the beginning of that trajectory to reduce or prevent the growth of crime rates. One recent summary of Justice Reinvestment is that it is

> *the process through which the resources currently spent on incarcerating offenders in prison can be redirected into community-based alternatives that tackle the causes of crime at source. It is a form of preventative financing, through which policy-makers shifts funds away from dealing with problems ‘downstream’ (policing, prisons) and towards tackling them ‘upstream’ (family breakdown, poverty, mental illness, drug and alcohol dependency).* (Lanning et al 2011: 4)

Justice Reinvestment involves a multi-stage process.

- Identify those communities that generate high offending rates, using expert analysis of crime statistics
- Identify what it is about those communities that makes them crime-prone, using expert knowledge of the causes of crime
- Identify and bring together the leaders of these communities, tasking them to find possible strategies that will reduce crime trends in their area, with some costing of those strategies
- Drawing upon economic expertise, compare these costs with the costs that would be incurred under current policies
- Put into place those policies that (in the community leaders’ view, after taking expert advice) are most likely to reduce crime and reduce costs

- Monitor crime trends at the local level so that policies can be varied in response to their success or failure.

This is a classic illustration of a prevention approach. It seeks to have public money invested at the point where it will bring the best return. What is unusual in it is that it places decision-making and budgetary control in the hands of local community leaders, whereas most prevention policies are centrally designed and administered. It injects "local knowledge" into the policy process, while still making use of expert analysis. It gives responsibility to those closest to the problem.

It is not our aim here to evaluate the Justice Reinvestment strategy, but we can note some potential strengths and weaknesses in the approach. In practice, Justice Reinvestment programs seem to focus on the management and rehabilitation of known offenders using local alternatives to prison, rather than on the "upstream" antecedents of crime (such as family breakdown, poverty, mental illness, drug and alcohol dependency). This has the advantage of improved "targeting" – there is no guesswork in the identification of the target population. It also has the disadvantage of later "timing" – by this late stage crimes have already been committed and habits of offending at least partly formed. Justice Reinvestment combines prevention and remediation.

To work at all well, Justice Reinvestment requires financial incentives for local authorities to reduce offending in their locality. At present the funding for intervention and rehabilitation services is controlled by state government departments. Some process would be needed to connect locally-based crime prevention agencies with the funding system. Some useful discussion of how to do this is provided by Lanning et al, though they are writing about the UK and their proposal would need to be adapted to Australian circumstances.

5.4 Fetal alcohol spectrum disorder

Fetal alcohol spectrum disorder (FASD) is a condition affecting children born to mothers who engage in heavy drinking during pregnancy. Its effects are physical, behavioural, cognitive and emotional. These effects are often severe. They include brain damage, low intelligence, attention and memory deficits, and poor motor skill development. Using the Health Utilities Index Mark 3 (a measure of overall health), children with FASD scored a rating of 0.47, compared to a population norm of 0.93. The effects are also long-lasting. "Abnormalities in infancy and childhood can carry on into adolescence and adult years, resulting in truancy, mental health problems, alcohol and drug abuse, and incarceration" (Goh et al 2010: 155).

FASD seems an ideal candidate for a prevention approach. The costs to the individual and society of non-prevention are enormous. The solution is, at one level, obvious and simple. In terms of "timing" and "targeting", the parameters are clear: the target is women who drink alcohol and the timing is while they have a child *in utero*. There is some debate about the exact correlation between the quantity of alcohol consumption and the severity of the effects. "Outcomes may also be affected by the timing, frequency, and duration of

exposure, maternal age, maternal health, nutritional status, genetics, environmental exposures, and other maternal exposures" (Goh et al 2010: 155). But the general point is clear. The causal agent is alcohol, and the condition can be prevented simply by not consuming alcohol while pregnant.

What is not clear is how far public policy can help to achieve that aim. In 2002, one of the leading researchers in this field, Sterling Clarren (now clinical professor at the Centre for Community Child Health Research at the Child and Family Research Institute in Vancouver, B.C., Canada) summed up the problem in this way:

> *... after 25 years of pictures, public health warnings, books, magazine articles and a public awareness campaign which are would all agree is not that well thought out but is still impressive, it is probably safe to say that almost everybody knows that if mom drinks, baby drinks and that is somehow bad for babies. It is probably very reasonable at this point to believe that the word is out there, but has it affected anyone's behaviour? Are women drinking less in pregnancy? Are babies being saved from FAS at this point? There is actually no evidence that that is true.* (Clarren 2002)

Clarren makes a number of observations about the fetal alcohol problem in Canada and the United States, based on interviews with women who had given birth to FASD children. First, these women usually do not raise those children: "only about 10% of birth mothers with children with FAS have them in their care". Second, the birth mothers used not only alcohol but many other drugs (including marijuana, cocaine and speed). Third, many of the mothers had fetal alcohol syndrome themselves. Fourth, they started drinking alcohol at a young age, around 15. Fifth, they had suffered extreme abuse, physical, emotional and sexual. ("The sexual abuse stories were so horrible that the nurse who did these interviews generally needed therapy herself after she completed these interviews.") Many had visited mental health professionals and many were diagnosed with Post Traumatic Stress Disorder (90 per cent) and depression (90 per cent). Many suffered agoraphobia and were afraid to leave home and get services. Lastly, they did not want to give up alcohol. "They were too stressed, they were uncomfortable about the problems, they were in abusive relationships. Alcohol was their treatment drug of choice."

> *Why didn't they want to get treatment? They didn't want to stop drinking! They didn't have anyone to leave their kids with. They were afraid they would lose their kids. Their partner wasn't supportive. It was too expensive. They didn't have insurance. The social net wasn't there. But when did they seek services and professionally get them? Ninety five percent of these women effective [sic] sought and got services during pregnancy! They get medical care and prenatal care when they are pregnant. That's when we take care of them! ... They get pregnant -- we give them support. They get pregnant and we take their baby away from them and they don't get any support until they get pregnant again!* (Clarren 2002)

Nevertheless, Clarren notes, half of the women interviewed were voluntarily beginning the recovery process.

We will assume that the FASD problem in Australia is essentially similar to that in the US and Canada, as described by Clarren. What might follow in policy terms? How far can a prevention approach be applied, given Clarren's description of the problem? Three possible conclusions seem plausible.

First, Clarren's own conclusion. Speaking to health care and social work professionals, he said: "No matter how much money or time you lavish on these moms you are saving your systems infinitely more money and time by not having them make another child with this disorder!" This is plausible, because the costs of FASD are so massive that any small improvement is likely to be cost-saving. Clarren advocates close one-on-one assistance.

> *[T]he concept is that a person would work with an individual for three years on up to a daily basis and help these women slowly move in all the directions they need to move initially to affect change. What is really interesting about the program is that birth control and alcohol treatment are never priorities for these women and no one makes them priorities. When you work with them virtually all women will pick that up eventually. Once you work with people with better interventions, they will handle their own change.* (Clarren 2002)

Second, FASD can be seen as a "wicked problem" (a concept to be discussed further in the Conclusion). The complexity of the problem is such that, although the solution is plain, designing a policy that can effectively bring about that solution seems difficult in the extreme.

Third, contrary to first appearances, the basic problem can be seen as one of law enforcement. The women who give birth to FASD children have themselves suffered massive damage that is consequent upon failures to give them standard legal protections. This is one of the premises of the Northern Territory Intervention. Perhaps unexpectedly, legal protection is a form of prevention policy.

6 Conclusion: Promoting a Prevention Mentality

At one level, prevention is just common sense, and is adopted in many walks of life (and public policy) by individuals, families, organisations, and governments.

There has always been a ready-made 'prevention constituency' in many areas of public policy, especially those involving the construction of physical infrastructure such as water, energy, transport and communication systems, as well as in the standards and regulations governing them through, for example, environmental and planning laws. Issues here have tended to be discussed in economic and cost-benefit terms. The debates are reasonably well defined and based primarily around how widely and assuredly we can estimate the costs and benefits of a particular investment (up-front and ongoing) as well as how much we value the future as opposed to the present-day (as represented by the discount rate). Both technical and value debates are present, and arriving at an appropriate balance between paying for 'prevention' measures now versus not investing in them and potentially having to 'rectify' them later, is a common issue for all project investment and planning decisions to consider. In recent years, this has been increasingly expressed in risk analysis and management terms, including a corresponding debate about how much risk we are prepared to accept – or pay for.

More recently, governments have been urged to consider prevention in the context of human services such as health, education, social welfare and crime. Again, the issue is being put in broadly economic terms, with the argument being that prevention offers the possibility of a policy approach that does not require (unlike most things in economics) a trade-off between equity and efficiency. In other words, we can get an economic payback *and* increase social equity, human fulfilment, etc. at the same time, if we invest in prevention programs.

There is one key difference between standard government planning and the special case of prevention. In the case of planning, good policy is primarily a matter of optimal "timing": infrastructure investment policies need to strike a balance between the costs and benefits of early and late timing. In the case of prevention, "targeting" as well as timing comes into play. The optimal target population is often not well known. If the problem is one that might affect anyone, targeting is straightforward and universal policies and programs are required. If the problem is one that is focused on a clearly defined subpopulation, again targeting may not be difficult. But if the problem affects an unknown fraction of a poorly defined subpopulation, targeting is difficult and good policy must solve that problem as well as the "timing" dimension.

However, although prevention approaches may sometimes be difficult to design, many social problems seem best dealt with by such approaches. In addition, they have strong support amongst many professionals who understand the relevant research literature. There is a growing field of academic studies, initially based in the health field but now

reaching much more widely, that is arguing that there is strong evidence to support the adoption by governments of a prevention approach to issues of human development.

Nevertheless, despite the increased advocacy and the growing evidence in support of prevention, it is generally accepted that prevention is still a long way from being a common approach to public policy problems. Why is this so?

The answer can be found partly in the nature of the public policy process; and partly in the nature of prevention and the problems that it is addressing – and in how these two aspects intersect.

Research into the policy process has shown that it is not necessarily 'rational' or scientific. However, it does generally have a structure to it, involving several analytically discrete stages over time, which can be identified broadly as formulating, adopting and implementing policy. This structure gives any particular policy a certain 'sense'.

Althaus, Bridgman and Davis (2007) argue that government involves the coordination of three domains – politics, policy and administration – and that each of these domains needs to be aligned for policy to be effective. Just because a course of action appears sensible from a policy perspective, does not mean it is politically valuable or administratively feasible. Althaus, Bridgman and Davis (2007: 37-40) have identified an Australian 'policy cycle' which has been highly influential in both academic and policy circles. This cycle involves eight discrete stages:

1. issue identification
2. policy analysis
3. policy instrument development
4. consultation
5. coordination
6. decision
7. implementation
8. evaluation

Each stage of the policy cycle has its own characteristics; these cannot be described in great detail in this report. However, what is clear is that there are elements in the policy cycle that help explain why a prevention approach can be problematic for governments to adopt. In the extreme case there are so-called "wicked problems", which involve three features: *complexity* of elements, subsystems and interdependencies; *uncertainty* in relation to risks, consequences of action, and changing patterns; and *divergence* and fragmentation in viewpoints, values, and strategic intentions (Head 2008). Complexity, uncertainty and divergent values can be manageable individually, but when high levels of all three come together in a single problem, seemingly unmanageable "wickedness" results.

Applying the Althaus, Bridgman and Davis “policy cycle” model to the prevention approach suggests that the following impediments may stand in the way of successful prevention policy development.

Issue identification:

- targeted groups who stand to benefit often have limited power and influence, and therefore cannot get the issue on the radar
- there may be competing values involved in issue identification, policy analysis and devising solutions (e.g. the Northern Territory Intervention)
- the issue attention cycle favours short-term, crisis issues with relatively simple (often ‘more funding’) responses.

Policy analysis and policy instrument development:

- complicated causal pathways make it difficult to identify how to understand or solve a problem even when the problem to be solved is clear (and in the extreme case, “wicked problems” lead to policy design difficulties)

Consultation:

- long delayed pay-offs make prevention policies less likely to get support from key resource-holders (such as Treasury, interest groups)
- the targets of the intended policies are often vulnerable and/or difficult to reach

Coordination:

- complex issues and solutions require whole of government solutions and complex coordination issues, and these will involve many stakeholders, both inside government and in the general community

Evaluation:

- long pay-off times make evaluation inherently difficult and hence reduce the ability of program evaluation to contribute subsequent feedback loops into further policy development.

Given these impediments, what sorts of approaches are likely to be successful in promoting prevention policies?

Success requires three kinds of accomplishment:

- *Understanding* of the problem, based on good evidence and professional experience
- *Effective* program design, such that programs are well-targeted and well-timed, and meet the criteria of good policy discussed in the first section of this discussion paper
- *Advocacy* for the policy, from academics, professionals, the public service, and community leaders.

Given all three, the impediments and difficulties can be overcome.

In more practical terms, a preventive approach to policy will have:

- A high degree of consensus on the problem and the solution, including consensus at the level of ordinary citizens
- A strong advocacy coalition, that can see problems in a long perspective and can plan for the future well beyond the normal political cycle
- A clearly defined grasp of the costs and benefits of policies
- A clearly defined grasp of the causation that accounts for effective policy action
- Funding certainty for long periods
- A whole-of-government approach wherever problems cross departmental boundaries, as they usually do
- Sequenced outcomes and staged progress markers to indicate achievement.

In this survey we have examined some of the principles and applications of the prevention philosophy. As we have emphasised, a prevention approach to policy is not a "silver bullet" or a magic wand. In any given case such a policy requires to be critically previewed and reviewed. However, as we have also tried to show, there are good general reasons for supposing that governments become too focused on the remediation of problems and the provision of routine services, and that they can lose sight of the possibility of preventative solutions, to their and our cost.

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APPENDIX 1: Project Scope

PREVENTION OR CURE IN PUBLIC POLICY?

1. Objective

The objective of the research project is to examine the extent to which a focus on 'prevention' can better inform public policy in Western Australia. The research is intended to assist the Western Australian Department of Sport and Recreation (DSR) in its formulation of policy relating to a range of issues and programs that could benefit from an approach where attention to the early stages of an issue can provide significant financial and other benefits compared to tackling later-stage problems and crises as they emerge.

In doing so, the research will provide conceptual clarification of the issues, give examples of the degree to which issues have been successfully addressed in this way in other jurisdictions, and suggest ways in which the approach might be applied to public policy issues in a Western Australian context. The research will also identify possible policy strategies for further consideration by DSR and other relevant stakeholders.

2. Scope

The research may include the following stages:

a. Conceptual clarification of the contrast between 'prevention' and 'cure', including analysis of similar notions and concepts such as 'causes vs. symptoms', 'early intervention', 'upfront investment', 'preparedness' and 'time preference'. This may involve:
   i. Identification of conceptual models for 'prevention' in a public policy context;
   ii. Identification of how these conceptual models translate into public policy settings; and
   iii. Confirmation or disconfirmation that 'prevention' is the most appropriate focal term. Alternative terms will be suggested as needed.
b. Identification of other jurisdictions and policy areas in which 'prevention' has been applied as a basis for public policy:
   i. Identification of specific strategies in a sample of jurisdictions
   ii. Overview of effectiveness of specific strategies
c. Interpret from existing cases and literature the main characteristics of communities and issues where a 'prevention focus' is demonstrated strongly (or weakly).
   i. Develop practical illustrations
d. Identify possible future pathways for WA in which prevention (or similar concept developed in this project) might be demonstrated more strongly than at present.