

# Implementing Evidence Based Programmes In Scotland

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## A consideration of some factors relevant to the implementation of an evidence based programme in Scotland using Multisystemic Therapy as an example

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**Abstract:** Currently there is an increasing focus on improving outcomes for children, young people and their families and also ensuring the most cost effective use of public money. Consequently there is an increasing drive for services to use evidence based programmes and/or to evidence the effectiveness of the services being used. This paper has been written on behalf of the Programme Managers and Supervisors responsible for the implementation of MST in Edinburgh, Fife and Glasgow and reviews their experience of introducing an intensive multi modal evidence based programme into local services in Scotland. Multisystemic Therapy (MST) is one example of an evidence based programme being used currently in Scotland to achieve positive outcomes for young people and their families.

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## Introduction

Evidence based programmes are programmes that have been subject to a rigorous level of evaluation demonstrating that they achieve the outcomes that they set out to achieve. A number of different organisations and guidance bodies recommend programmes based on their own specific standards of research rigour (e.g. National Institute for Health and Care Excellence, Scottish Intercollegiate Guidelines Network, United Nations Office on Drugs and Crime). An example of this is Blueprints for Problem Behaviour and Healthy Youth Development. Blueprints provide a register of evidence based programmes designed to promote the health and wellbeing of children and adolescents. Blueprints programmes are family, school and community based. They target all levels of need, from broad based prevention programmes that promote positive behaviours whilst decreasing negative behaviours, to highly focused programmes for children and young people at risk of a range of difficulties - including chronic physical health problems (e.g. linked to obesity), social and emotional difficulties, engaging in risky sexual behaviours, alcohol and substance misuse, and anti-social and offending behaviours including violence and sexual violence. Each Blueprints programme has been reviewed by an independent panel of evaluation experts and determined to meet a clear set of scientific standards. The standards of evidence that underpin Blueprints cover four dimensions:

- 1) Evaluation quality – investigation into the efficacy and effectiveness of the programme produces valid and reliable findings
- 2) Intervention impact – how much positive change in key outcomes can be attributed to the programme
- 3) Intervention specificity – whether the programme is focused, practical and logical
- 4) Dissemination readiness – whether the programme is accompanied by the necessary support and information to enable its successful implementation in communities

Taken from Axford, Elliott and Little (2012)

Programmes meeting these standards have demonstrated at least some effectiveness for changing targeted behaviour and developmental outcomes. Programmes are rated as either 'Promising', 'Model' or 'Model Plus'. Promising programmes meet a minimum standard of

effectiveness. Model programmes meet a higher standard of evidence, providing greater confidence in the program's capacity to change behaviour and developmental outcomes. Model Plus programmes will also have been subject to at least one high quality study demonstrating the desired outcomes, conducted by a researcher who is independent of the programme developer's research team (both past and present) and has no financial interest in the programme.

To date, more than 1,300 programmes have been reviewed, 43 have been identified as showing promise, 12 designated as 'model' programmes and two designated as 'model plus' programmes. Blueprints report that these programmes will help young people to reach their full potential by promoting positive development such as academic performance and success, emotional wellbeing, positive relationships and physical health. These programmes also help young people to overcome the challenges associated with violence, anti-social and offending behaviour and substance abuse.

Whilst Blueprints started in the United States, since 2010 it has broadened in scope and has operated in partnership with the Social Research Unit based in the UK. A number of Blueprints programmes are currently being delivered across the UK including Functional Family Therapy (model), Incredible Years – child/parent/teacher (promising), Multidimensional Treatment Foster Care (model), Triple P System (promising), Multisystemic Therapy (model plus), Multisystemic Therapy – Problem Sexual Behaviour (model) and Nurse-Family Partnerships (model).

This paper reviews some of the learning made in introducing an intensive multi modal Blueprints recognised programme into local services in Scotland, using MST as an example, based on the experiences of the teams currently delivering MST in Scotland. It is not intended to provide a review of or comparison with other services currently being delivered, or to provide a review of the research literature as it pertains to MST or evidence regarding the efficacy of the model.

## Multisystemic Therapy (MST)

MST is a community based, family driven treatment that aims to address concerns regarding a young person's anti-social and offending behaviour in the setting in which these behaviours occur (i.e. home, school and local community). MST targets young people at high risk of out of home placement due to their anti-social behaviour and aims to address the multiple needs and risk factors contributing to the behaviour; including the characteristics of the individual young person, the family, peer relations, school functioning and the neighbourhood. At the same time MST aims to build protective factors. The focus is on empowering caregivers / parents to solve current and future problems for themselves. MST uses a model of delivery that removes barriers to accessing services, provides families with an intensive service, supports family involvement in treatment and promotes the long term maintenance of positive change. The specific needs of an individual young person and their family are fully assessed and interventions are then individually designed and delivered with the goal of addressing the specific risk factors from each of the systems (individual, peer, family, school and community) tailored to the family's strengths and needs. The specific interventions used are goal-orientated, problem-focused and evidence-based e.g. behaviour therapy, cognitive behavioural therapy, pragmatic family therapies or parent management training.

There are a number of ways in which MST differs from other intensive community based support services. For example, the therapists within the team are responsible for the 24/7 on call aspect of the service. All therapists will have a good working knowledge of every young person and their family due to the low caseloads, intensity of contact and weekly supervision processes. They will therefore be fully up to date with the current plans in place for any particular young person / family. This means that out of hours contacts with a family will continue to be in accordance with current treatment plans and will not be a reactive response aimed solely at managing the current crisis being reported. The MST model is designed to provide a framework and structure within which assessments and interventions are individually tailored based on the professional judgement of a team of skilled therapists in line with available evidence regarding what the most effective methods of intervention are (e.g. cognitive behavioural therapy, behaviour management training, etc). The accuracy of assessments and effectiveness of interventions are then monitored and reviewed by the team and an external expert MST consultant on a weekly basis. This means that a young

person and their family are less likely to be asked to use strategies and skills that are inappropriate to their needs and circumstances and that are ineffective for them, than if such a framework and process were not in place. The performance, outcomes achieved and adherence to the model by the service and by individual team members is closely monitored and reviewed on a regular basis. This data is then used to inform ongoing development at an individual, team and service level. This is not to say that some of the key features of MST are unique to MST services - however, they are not commonplace.

Whilst the research literature and evidence base is not without its limitations, there is a significant body of evidence which supports the effectiveness of MST with a wide range of challenging behaviours and the positive effects have been shown to last more than 22 years post treatment. As noted above, it is one of only two programmes designated as a Blueprints model plus programme (Lifeskills Training is the other). In addition to Blueprints recognition, the effectiveness of MST has also been recognised by the United Nations Office on Drugs and Crime (2010) and is listed as number six of 23 recommended family skills training programmes (ordered according to the level of scientific evidence on which they are based). The latest NICE guidance (CG158, March 2013) for antisocial behaviour and conduct disorder in children and young people references MST as an example of a multi-modal intervention to be offered to children and young people aged 11-17 for the treatment of conduct disorder.

A costing report relating to the implementation of the NICE guidance in relation to antisocial behaviour and conduct disorders in children and young people indicates MST to be a cost effective programme (e.g. estimated initial savings of around £10,000 and annual recurrent savings of around £1,000 to the NHS and social services for every 1% increase in the number of multi-systemic interventions provided). An economic evaluation of Multisystemic Therapy has been carried out by Maria Cary & Sarah Byford at King's College London, based on data from a randomised controlled trial conducted at the Brandon Centre in North London. Focusing on costs and savings predominantly in terms of offending costs, they found that, in comparison to usual care MST reduced criminal activity and saved £2,290 per young person over two years of follow-up, MST reduced the need for youth justice services and saved £1,217 per young person over two years. They reported that MST cost £2,285 per young person, but saved a total of £3,507, resulting in overall (net) savings of £1,222 per

young person over two years. They also found that these findings were consistent over time, and showed the same pattern of results when three-year data was analysed. The study presented some methodological limitations as data was limited to youth justice related costs and the analysis was limited to cost savings, ignoring the impact of MST on outcomes for young people.

The Department of Health, in conjunction with the Department for Education, is currently funding a multi-site randomised controlled trial to evaluate the effectiveness and cost-effectiveness of MST in a UK context. This trial involves nine pilot sites and 684 participants have been recruited. The final results are due to be available in 2015.

## **The Experience of Implementing a Blueprints Programme in Scotland**

In September 2009 Fife Council and Glasgow City Council along with Greater Glasgow and Clyde NHS Trust established Scotland's first MST Teams. Since then Fife have expanded their capacity by introducing a second team and Edinburgh City Council have established two teams. To date, 550 young people and their families have started MST and 470 have had the opportunity to experience a full course of treatment (with the remainder still undergoing treatment). Outcome data has been collated by each team since start up enabling each therapist and team to individually or collectively review the outcomes being achieved. This enables ongoing development planning to facilitate improvements in outcomes at an individual, team, organisational and national level. To date, 87% of young people who began working with MST completed treatment. At case closure 88% of these young people continued to live within the family home, 74% were in school or working and 64% had received no new arrests for offences committed since the start of treatment.

Despite the growing body of research seeking to identify programmes that are effective in addressing offending behaviour, there has been very little literature aiming to consider the process of implementing programmes (Mihalic and Irwin, 2003). MST Services recognise the importance of adequate and appropriate organisational support in introducing an MST team to an organisation and require an organisation to undertake a comprehensive process to ensure readiness prior to agreeing a licence to deliver. Our experience has been that integrating an evidenced-based programme successfully within existing service provision is

not without its challenges. Whilst research has highlighted that higher levels of adherence to the treatment model leads to improved outcomes, it is clear that a much broader range of factors can impact on its successful integration into local services and long term sustainability. Whilst not involving any formal research, this paper briefly represents our consideration of the implementation issues that we feel contribute to the attainment of the best possible outcomes for young people and their families when using an evidence based programme, such as MST, within a Scottish context. Consideration is also given to the factors that our experience indicates may potentially help to increase the sustainability of such a programme over the longer term.

How a programme is introduced sets a context for how the programme is perceived by other services and potential referrers, and how well it is utilised. To facilitate this there needs to be clarity regarding the need that the programme will be targeting and a transparent rationale for the introduction of the programme. Particular thought and attention needs to be given to this if the introduction of the programme requires the redirecting of funds from other services. It is important that there is clarity regarding where the programme fits within a continuum of service provision. Referral pathways / protocols should be well established. The target population needs to be well defined and mapped into/aligned with broader service objectives. Inappropriate use of such programmes can impact significantly on effectiveness (i.e. less than optimal outcomes achieved) and under-use impacts on cost effectiveness (i.e. lower throughput leading to a higher unit cost). Potential barriers to the success of a programme should be predicted and problem-solved ahead of time, for example predicting overlap with pre-existing services and agreeing priority roles and responsibilities for each.

The use of evidence based programmes is in line with the policy, practice, strategy and legislative changes being made as part of the Getting It Right For Every Child (GIRFEC) approach. Indeed delivery of an evidence-base programme within the framework of GIRFEC can support positive outcomes. With evidence based programmes such as MST there is clarity regarding the level of need the programme targets (i.e. a broad based prevention programme versus a highly focused specialised programme). They are designed to address clearly specified needs and risks in order to achieve clearly specified outcomes. For example, a young person is typically referred to MST with a minimum of two or more referral concerns (antisocial behaviours such as offending, substance misuse, truancy, absconding). Each of these concerns fit well within the Wellbeing Indicators of the National Practice Model

as do the principle individual and mulitsystemic 'drivers' (vulnerabilities and adversities) of these concerns, for example low supervision and monitoring, a lack of prosocial activities, family conflict or a poor home/school relationship. MST aims to work with all key participants in a young person's life so that everyone can take responsibility for plans that will support positive change. Thus when MST is undertaken within the context of an agreed multiagency Child's Plan the potential for achieving lasting change is enhanced. Conversely, the specificity of evidence based programmes such as MST can facilitate the decision making process in terms of ensuring the right help is accessed at the right time. It also facilitates delineation and specificity of roles and responsibilities as a greater level of clarity can be achieved regarding what concerns/needs/risks will be addressed by a particular programme.

As with the delivery of any service, organisational stability along with strong administrative and organisational support are important. This helps to ensure clear leadership, adequate resourcing, effective and flexible problem solving of challenges as they arise and a stable staff group. With many Blueprints programmes there are usually a number of specified programme characteristics and practices that are required to deliver the programme with a high level of fidelity. For example, within MST, practitioners should be able to work flexible schedules to meet the needs of the families rather than the needs of the organisation, their time must be protected and managed to ensure that they attend weekly supervision and consultation, and they must be full time employees assigned solely to the MST programme.

Organisational expectations of staff members needs to recognise and honour the importance of these practices and support the team in being able to meet these requirements. Having adequate levels of business support helps to ensure that the required programme characteristics are met, staff are supported and required data is collected and recorded in line with programme requirements, and in a manner that means it can be used in informing ongoing service improvement / development.

Our experience indicates that collaboration between multiple agencies can bolster implementation quality. Where there is good inter-agency co-operation across different organisations outcomes are improved. For example, in July 2011 Glasgow hosted an engagement event for key stakeholders from across services (education, police, social work,

health). At this event consideration was given to the outcomes achieved across the different areas and stakeholders were invited to collaborate on developing a shared understanding of what was supporting positive outcomes and what the challenges were to achieving improved outcomes. From this there was a period of collaborative working and problem solving and relationships between services and stakeholders were strengthened across areas specifically in relation to MST delivery. Close links were formed with the area police team and named individuals within the police supported the MST team in their work on a case by case basis. This was experienced by the MST team as facilitative and impacted positively on the outcomes achieved in relation to offending and this was reflected in the data during that time period (86% of young people with no new arrests in the year following the event compared to 61% the year prior to the event).

To facilitate interagency collaboration, it can be helpful to have programme champions/key personnel serving as a base of support for programme implementers across each organisation. This can be formalised by setting up a multi-agency steering group whose programme deliverers are accountable to, and who provide support to, teams to help problem solve barriers that are encountered within / between systems (e.g. police, education service). The steering group does not need to be programme specific (i.e. a different steering group for each programme is not necessary) and they do not necessarily require a detailed understanding of 'the nuts and bolts' of a particular programme. What is helpful is a good understanding of issues relevant to effective implementation of evidence based programmes and the ability and authority to problem solve barriers to effective implementation. Within Fife it was felt that this was particularly beneficial during the early stages of implementation. Fife have also found it to be helpful for the programme to be part of a multiagency strategic plan and pathway to support the needs of young people displaying antisocial behaviour and/or who are at risk of becoming looked after and accommodated. Within MST in particular a high level of flexibility, commitment and skill is required from a small team of practitioners to provide a 24/7 service that is adherent to a clear model of working and is not disrupted by staff leave or sickness. To achieve this, a stable, cohesive and motivated staff group is essential and it is important to develop and maintain a good level of staff skill and experience in the use of the model within the team. MST Services provide a comprehensive package to support the recruitment of staff who are likely to work well with the model. Our experience has been that it is also essential to give consideration to

strategies aiming to reduce the likelihood of burnout: including gestures of appreciation to ensure the team and individual staff members feel valued and respected, access to opportunities for skill/career development and adequate financial reimbursement (salary/on call, etc).

In MST, like elsewhere staff numbers may temporarily decrease due to a range of staffing factors such as maternity leave, sickness, or annual leave. However unlike many other services, the 24/7 nature of the service must remain in place in order to meet the needs of the young people and their families. Without adequate contingency planning this can very quickly put a high level of pressure on a team. Having multiple teams within the same organisation has a number of benefits over and above an increased throughput. Opportunities for peer support are greater, and the impact of staff sickness/personnel issues can be more easily absorbed whilst minimising the likelihood of service disruption for the families working with the programme.

Elliot and Mihalic (2004) highlight the importance of the Technical Assistance (TA) delivered by programme developers to implementers. They report that in general the quality of TA was evaluated highest early in the implementation, but tended to decline over time. Within MST this takes the form of a weekly hour-long consultation with an MST expert in relation to each of the team's current cases and a quarterly booster training session on a topic of relevance agreed by the team, supervisor and MST expert. Our experience would also support that the TA provided by MST Services has been extremely useful to the Scottish teams in developing a good understanding of the model and helping to ensure our adherence with the model. As the teams have developed their experience in the use of the model our focus has shifted to the wider systemic factors that contribute to effective and sustainable implementation of the programme (e.g. organisational factors / policy context / youth justice system and associated national strategic direction). It is our view that having a consultant providing TA who is based in Scotland and has an in-depth understanding of the wider organisational context that our teams are located within would enhance the TA that could be provided to support teams in overcoming the broader challenges to sustainable implementation. Similarly national support and endorsement for an evidenced-based programme can greatly facilitate local areas in encouraging them to explore and develop the use of evidence-based practices. Without this

support and advice, embarking on this process can appear costly, complicated and potentially risky.

## Conclusion

The increasing number of organisations and local authority areas choosing to deliver evidence based programmes is indicative of a growing recognition of the value that such programmes can add to existing services being offered across Scotland. It is hoped that this paper provides an example of such a service being used to achieve positive outcomes for young people and their families. Furthermore, this paper has sought to highlight the importance of having a focus on the factors relevant to the implementation of an evidence based programme in order to not only replicate the outcomes that have been demonstrated through research but also in helping to ensure that when such programmes are introduced they can stand the test of time.

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