

IN-DEPTH TOPIC: EFFECTIVENESS OF INTEGRATED SERVICES (HEALTH, EDUCATIONAL AND SOCIAL)

Introduction

Worldwide there has been a move towards more integrated service delivery models. This has in part occurred due to increased service demand, rising costs and staff shortages [256]. Brown and White [257] argue that organisations working in silos are unable to deliver services in the manner required by those that need them. They also highlight instances where a failure to work together has resulted in tragic consequences for children. In addition there are increasing expectations from the public for more co-ordinated service delivery.

De Vaus [258] also finds that there have been social changes that have created problems for families in accessing services. Some of these include:

- Services not being able to meet all the needs of families especially when these needs are complex
- Families have difficulties in finding out about and accessing services
- Services not being well integrated and therefore being unable to provide families with cohesive care
- Services having difficulties in tailoring care for families with diverse needs
- Services being funded on outputs rather than outcomes
- Government departments, research disciplines and service sectors working in silos.

This in-depth topic aims to provide an overview of the effectiveness of integrated services and how such programmes should be delivered to provide optimal benefit for children and their families. In doing so the review is divided into four parts. The first part provides a background and explanation as to what integrated services are and what they are trying to achieve. The second part considers evidence for the effectiveness of integrated services, both in New Zealand and internationally. The third part identifies factors needed for integrated services to be effective. The final part outlines how to implement effective integrated services in New Zealand.

What are integrated services?

Integrated services is one of the many terms that can be used to describe multi-agency working. Other terms include partnership working, inter-professional collaboration, co-operative practice, joint working, integration, interagency working, interdisciplinary working and trans-disciplinary working [259].

Specific aspects of integrated service delivery include organisations working together at an operational level, as the delivery of services may require the input of more than one agency [260]. This can result in unified management systems, pooled funds, common governance, whole of systems approaches to training, information and finance, single assessments and shared targets [261]. In integrated services there can be joint commissioning, unified management systems, shared prioritisation, service planning and auditing, and common governance ultimately leading to shared responsibility for achieving the goals of the service [261].

Models of integrated service delivery

There are multiple models for achieving integrated service delivery. In New Zealand, the Ministry of Social Development has described three types of integrated services [262]:



1. **Case management approaches:** In this model, a package of services from several different agencies is tailored to meet the needs of families. Joint assessment procedures are developed, as well as joint outcomes that take into account holistic needs. There is shared accountability and resourcing of services.
2. **One stop shops or single access points:** This model is based on the provision of a single access point to services, with the aim being to improve access to services for families, as well as facilitating referrals between services. One stop shops can be online as well as having physical access points.
3. **Joint funded service provision:** In this model, several agencies jointly fund a specialised service to meet a specific need. There are two common models of how this occurs. Either a lead agency administers and monitors funding from several agencies or providers, or agencies contribute to a single funding pool that is managed by a joint body. Agencies involved in joint service provision will develop joint service criteria, performance assessment frameworks and monitoring and evaluation processes.

There are many other models for integrated services [258]. These include steering groups, co-location of staff, virtual organisations, centre-based delivery, decision making groups, multi-agency panels, multi-agency teams, service hubs, community outreach and co-ordinated service delivery.

In addition to there being multiple approaches to service integration, there is also a continuum in the extent to which integration can occur [263]. One simplified description of this continuum is no integration, limited integration, partial integration and full integration, with the extent to which integration occurs depending partly on the needs of the users involved [262].

Integration of service delivery may be particularly appropriate when [262]:

- There are complex causes that cannot be addressed effectively by a single agency
- Local areas or groups are receiving a large range of services from different agencies and access and quality of services could be improved by agencies working together
- Agencies have overlapping priorities and concerns and collaboration could make the best use of resources
- Services are committed to common outcomes
- It is clear what each agency can contribute
- Agencies have the flexibility to put resources into the integrated service and the timing and local circumstances are favourable.

Potential benefits of integrated services

Integrated services have a large number of potential benefits, with one global survey that reviewed integration schemes across 22 jurisdictions finding potential benefits for both the service provider and the user [263]. From a provider perspective the survey found that integrated services could potentially increase capacity and provide value for money by reducing duplicated services, and enabling finances to be redistributed for actual service delivery. Integrated service delivery may also lead to improved strategic planning and system integrity as a result of better sharing of information between agencies, thereby enabling a greater understanding of user needs and outcomes, clearer identification of service gaps, and reduced fragmentation of services. As a result there was the potential to reduce future demand for crisis services such as hospital services. From a user's perspective, integrated services may potentially result in simplified access to services through the use of one stop shops and 'no wrong door' approaches. There may also be a more holistic understanding of clients' need through shared information, resulting in a more person-centred approach. Streamlining back-office functions and shared information also offers the potential for faster response times.



A literature review conducted as part of an evaluation of the Victorian Department of Education and Early Childhood Development children's centres found that service workers may become more knowledgeable of the array of services available and be more capable of delivering a wide range of services [258]. In addition the review found that there may also be increased understanding and trust between agencies, resulting in improved outcomes and potential for innovation. Through information and skill sharing there may also be innovation and streamlining of service delivery. All of this potentially resulted in the needs of the community being better met by services. Finally there was the potential for improved outcomes and users' experiences, thereby preventing families falling through the cracks in the system.

Why do New Zealand's children and young people need integrated services?

In New Zealand it is estimated that 285,000 children were living in poverty in 2013 [264]. There are strong associations between poverty and a range of negative outcomes across health, education, justice and welfare [265]. It is also likely that many families living in poverty experience multiple disadvantages, with some having multiple and complex needs which traditional approaches may not be able to meet.

Three qualitative studies on how families experiencing disadvantage access support services have been reviewed by the Office of the Children's Commissioner's Expert Advisory Group (EAG) on Solutions to Child Poverty [265]. The EAG found that families experiencing multiple disadvantage were more likely to engage with services if relationships were built on trust, mutual respect and continuity, if services were universal and non-stigmatising, if all the family's needs were addressed, if services were culturally appropriate and based in the community, and if they used existing links and relationships to access services.

The importance of inter-agency collaboration is often most visible in the area of child protection [266]. Meaningful collaboration in this area is essential for child protection services, family support agencies and other social services to meet the needs of children and families. The failure to share vital information can result in decisions being made about a child in isolation, resulting in a poorly planned intervention that may not be effective.

The Child and Youth Health Compass Report, commissioned by the Children's Commissioner [267] identified one of the most critical barriers to delivering child and youth services was the lack of planning and co-ordination. This report utilised DHBs' responses to a questionnaire containing open ended questions about a number of child and youth service domains. The lack of planning and co-ordination was felt to result in agencies planning in silos, competing with each other, creating crowded and conflicting agendas and not taking account of what was happening locally. In particular it was felt that advice was needed on how to reduce fragmentation between local providers.

The effectiveness of integrated services

While such reviews clearly demonstrate the need for well integrated services, particularly for the families of children and young people with multiple and complex needs, the way forward in terms of implementation is by no means clear. The following sections therefore review examples of integrated service delivery in New Zealand and overseas, with a view to identifying effective models which might be adapted for use in the local context. The programmes described are those for which information was readily accessible and evaluation information available. They do not constitute an exhaustive list of all of the integrated services currently available. As per the Ministry of Social Development's classifications, the programmes have been grouped into three categories: case management approaches, one stop shop/single points of access and joint funded service provision.



The limitations of integrated services evaluations

Before considering the findings of individual studies, it is important to note that evaluating the effectiveness of integrated services is inherently difficult. Identified barriers to evaluation include structural, practical, cultural and methodological factors [268]. The usual methods of evaluation may not be sufficient to identify improved user outcomes as a result of integrated services.

Existing evaluations of integrated services tend to use one of three approaches to measure outcomes [269]. These include structured surveys of users or professionals (or both), interviews and/or focus groups with users or professionals or both and multi-methods approaches which combine both of these methods. These approaches are also often supplemented by in depth analysis of supporting documents such as meeting minutes, monitoring reports, project plans and usage statistics.

Interviews and focus groups can obtain information on how the collaboration is working, whether there is satisfaction with how services are being delivered and where improvements might be made [269]. However, if only those who are satisfied enough with the service to continue engaging take part in the evaluation this may lead to biased findings, as such surveys cannot provide any insights into the views of those that dropped out, or did not use the service from the outset because it did not meet their needs.

Systems outcomes or usage statistics have also been used to assess whether integrated services have led to improvements for users [269]. Objective measures such as the number of sessions offered, attendance figures, waiting times and caseloads may identify improvements in the efficiency of integrated services. Such information however, provides no insights into whether outcomes for users have improved or whether the service has actually been effective. As a result, many more studies have measured the perceived impact of integrated services than have attempted to assess measurable outcomes [270]. These limitations need to be borne in mind when reviewing the evidence arising from the case studies below.

New Zealand examples

Historical and policy context

Integrated service delivery stems back to the 1990s when the New Zealand Employment Service, the Community Employment Group, the Local Co-ordination Unit of the Department of Labour and the Income Support group of the Department of Social Welfare were merged to establish the Department of Work and Income as a case study of integrated service delivery [265]. Shortly after this, *The Report of the Advisory Group on the Review of the Centre* found that while the public management system provided a reasonable platform, there were shifts that needed to be made to meet the needs of citizens [271]. Areas for attention included:

- Achieving better integrated, citizen focused delivery
- Addressing fragmentation and improving alignment
- Enhancing the people and culture of the state sector.

Following this report, the Integrated Service Delivery: Regional Co-ordination work stream was formed to suggest how government agencies could work better together and with local stakeholders. In their report, *Review of the Centre Integrated Service Delivery: Regional Co-ordination*, the authors concluded that further policy work was needed and *Mosaics. Whakaahua Papiriki: Key findings and good practice guide for regional co-ordination and integrated service delivery* was published [260,262]. This was followed in 2008 by the State Services Commission publishing a document intended to enable agencies to improve co-ordination with each other [272].

More recently, the release of the Government's Better Sooner More Convenient policy in 2009 focused attention on changing service delivery arrangements to better integrate primary healthcare. The policy aimed to create an environment in which community health



professionals were encouraged to work with each other and with hospital-based clinicians to deliver health care in a co-ordinated and co-operative manner [273]. However, this policy mainly focuses on the clinical health sector and therefore may not include other sectors such as education or social services.

In addition, the Better Public Services Programmes introduced in 2012 aims to provide better results and improve services with an ongoing focus on value for money and innovation [274]. Government agencies in all areas will be required to work more closely with each other and to organise themselves around the results. Functions and services will need to be shared, including purchasing goods and services and developing systems. Agencies will also need to improve how they measure and report performance and have a greater responsiveness to New Zealander's needs.

Within these broader historical policy frameworks a range of integrated initiatives have evolved. The following sections reviews a selection of these initiatives, with the focus being on those that have been well documented and evaluated (to a variable extent) over the past twenty years.

Case management approaches

There are a number of initiatives in New Zealand which currently use a case management approach to deliver integrated services. While Strengthening Families has been in place since the 1990s, Whānau Ora is still fairly new and Children's Teams are currently being implemented.

Strengthening Families (SF)

Strengthening Families (SF) is a programme led by the Ministries of Health, Education, Social Development and Justice [266]. It formalises collaborative case management when more than one agency is involved with a child or young person and their family. A collaborative network of agencies from the government, community and voluntary sector work with children, young people and families who are experiencing multiple problems. The model was first piloted in 1996 and was rolled out across the country in 1999.

Local management groups (LMGs) comprise representatives from local government, government agencies, iwi and not-for-profit social sector organisations. Local case co-ordinators usually undertake the co-ordination of case management and become the main point of contact for the family. They also promote SF in the community, liaise between families and agencies during the case management process, assist with the training of facilitators and report back to the LMG.

Families must agree to the case management process at a case management meeting, and will have an involvement in deciding which agencies will be involved, the formulation of a plan, goal setting and allocation of tasks.

A number of studies and evaluations have been conducted on SF. Most, however, have not looked at outcomes for children or families but have focused on the processes involved and perceptions of the providers and families. This review will focus on a limited number of these evaluations.

Oliver and Graham held in-depth interviews with 38 clients selected by SF co-ordinators or lead agents in six SF sites [275]. Most of the clients had been involved with SF for a prolonged period of time and there was potential for recruitment to be biased towards those continuing to engage with the service. Families felt that SF increased the likelihood of agencies co-operating with each other, increased the likelihood of identifying families' actual problems, provided a forum for allowing agencies to acknowledge problems and had the potential to keep agencies accountable for service delivery.

In another review, the Ministry of Social Policy summarised the information in 154 SF final meeting forms received between 2000–2001 [276]. These forms were completed by the lead agency and were based on the consensus of those involved in the final case collaborative meeting. They suggested that families experienced a boost in morale and optimism that a service would be able to meet their needs and the process allowed parents



to become more confident in approaching services. They also suggested that families felt meetings were held at times convenient for them, they were mostly listened to and agencies understood what was important to them. Agencies felt that SF had provided greater support for families, allowed an improvement in the behaviour of the child or young person, produced an improvement in the wellbeing or safety of the child or young person and allowed further assessment or monitoring of the child or young person [276].

Te Puni Kokiri used a mixed methods approach in an audit of SF [277]. This included a review of case management documentation, interviews with LMG's and co-ordinators, a Māori community hui for those working with families at risk and interviews with lead agents, clients and national operations managers. Agencies felt that greater agency accountability was needed within the case management process and agencies needed to follow through on commitments that were made [277]. Half of the Māori clients felt that the objectives in their action plans had been achieved, although a third of Māori clients felt that objectives had not been met. Whether Māori clients perceived there to be a positive outcome depended on how realistic the plan's goals were, how willing the family members were to participate and commit to the process, how committed the agencies were to the plan and how responsive providers were to their needs. The majority of clients interviewed felt that they would go through the process again and recommend the process to others. Māori Communities felt that the level of knowledge and understanding of SF was variable and that Māori may be reluctant to participate in case management due to fears that privacy would be compromised and that they would be further disempowered. Generally there was support for the concept of collaborative case management although it was felt that Māori should also be involved in the delivery of the service. They also suggested that key SF contacts should be promoted at the community level.

Another review in 2005 involved meetings with Local Management Group members, co-ordinators and other stakeholders in a number of regions [278]. In addition, 22 submissions were written by co-ordinators, local management groups and other parties in response to a letter asking for feedback on key issues. The review found there were a number of issues with the initiative. These included variable effectiveness of local management groups, under-resourcing of case management, and a need for improved professional development for co-ordinators and facilitators, more consistent and stable conditions for the provision of co-ordination services, and stronger monitoring and feedback loops.

While these reviews all provided insights into the implementation of SF, including the satisfaction of clients and staff, none included the views of families who had chosen not to engage with SF, nor the reasons for their non-engagement, and none compared the actual outcomes of SF families with those not receiving the service.

Whānau Ora

Whānau Ora is a Government initiative that takes an inclusive approach to providing services and opportunities for whānau in New Zealand [279]. It is jointly implemented by Te Puni Kokiri and the Ministries of Social Development, Health and Māori Development [280]. It involves Whānau Ora health and social services providers delivering wrap-around services through a Māori Community Worker, tailored to meet the needs of whānau. It aims to empower families as a whole rather than focusing on individuals and their separate problems.



Key characteristics of Whānau Ora [279]

Whānau taking responsibility for whānau

Whānau being at the centre to lead the development of solutions for their own transformation

Building on whānau strengths and capability

Whānau-centred services that are shaped by Te Ao Māori values and philosophies

Freeing up health and social service providers from the dozens of separate contracts that currently tie them up

Greater co-ordination across government agencies and providers at the local level

Coherent, relevant and connected whānau service delivery approaches

The rationale for Whānau Ora

Prior to establishing Whānau Ora, a case study approach was taken to illustrate its key features and to describe and define the term 'Whānau Ora integrated service delivery' [279]. This approach involved interviews with six Māori health providers and a review of key information sources. In the review, integrated funding was seen as an important component of integrated service delivery. It was felt that the pre-existing funding model did not facilitate a collaborative or integrated approach. Programmes were often started in isolation from other services and incurred transaction costs for reporting requirements. Providers wanted existing contracts to streamline accountability and reporting arrangements. Funders also needed to provide a degree of flexibility when having a focus on outcomes.

All providers felt that services prior to Whānau Ora were about whānau [279]. Services were therefore designed and delivered to meet this goal in close consultation with iwi and whānau. As the majority of whānau had complex needs, it was felt that the service paradigm needed to meet these needs in a comprehensive way. Front line staff often demonstrated this by spending large amounts of time with whānau making referrals, acting as brokers and having a degree of direct contact they were not necessarily contracted for. The evaluation however, was unable to determine whether all providers were providing whānau-centred services in the manner described by the taskforce on whānau-centred initiatives.

The same case study found that while one of the main aims of multi-disciplinary teams was to meet complex needs, not all providers had managed to achieve this [279]. Some of the providers had established strong alliances with other health and social service providers. Capacity and capability however was a limiting factor for some of the providers, who also felt that these requirements placed pressure on them.

The findings of this review were used to inform the development of the Whānau Ora model, which has a three tier operational framework which includes:

1. **A Whānau Ora Governance Group:** This governance group is responsible for the overall implementation of Whānau Ora. Membership includes the chief executives of Te Puni Kokiri and the Ministries of Social Development and Health, plus three community representatives [280].
2. **Whānau Ora Leadership Groups:** These 10 Leadership Groups are defined by Te Puni Kokiri's regional boundaries [280]. They provide regional strategic leadership, foster local communications and relationships and ensure there is co-ordination with other local and regional services. Members include between three and seven community representative plus three officials from Te Puni Kokiri, the Ministry of Social Development and local District Health Boards.
3. **Whānau Ora Collectives:** These collectives are spread throughout the country with a view to developing whānau centred services [280]. Programmes of Action outline the changes that collectives are aiming to make to their service delivery models and the steps that need to be taken to implement these. Collectives have developed navigational approaches where practitioners work directly with whānau to identify their needs, develop plans to address them and broker access to required services. Māori



Community Health Workers are central to this and have a number of different roles and responsibilities including health promotion, advocacy, liaison and cultural support [281].

Supporting these initiatives is the Whānau Ora Integration, Innovation and Engagement (WIIE) Fund, which assists whānau led development and supports whānau and families to engage with each other and other whānau, communities and providers [280]. Activities funded include developing whānau plans, implementing priority parts of the plans, producing information and resources and supporting whānau-based initiatives.

In addition, an information collection trial has collected data on whānau and service transformation in order to measure early results for Whānau Ora [282]. This trial has included a Whānau Ora satisfaction survey involving 51 whānau, representing 235 individuals from three collectives and the completion of a report template about whānau results and services. The trial has found that whānau have high levels of satisfaction with the services and support they have received, which have led to positive changes for whānau members. The satisfaction survey found that 78% agreed or strongly agreed that working with provider collectives improved the amount of exercise they did, 84% agreed or strongly agreed that they had more confidence in parenting/caregiving and 77% agreed or strongly agreed that they had an improved housing situation.

Other possible evaluation frameworks have been described [279], with one suggesting that the main elements of any framework should include: whānau, hapū, iwi and Māori communities; personnel; effective health and disability services; and working across sectors. Indicators of short term outcomes and possible evaluation methods have also been described for each of these elements.

An evaluation has also been performed on the Whānau Ora Wellbeing Service of Te Whakaruruhau Women's Refuge which provides safe housing, support and advocacy to women and children [283]. The evaluation was based on ten case studies of clients, interviews with staff and key informants in allied agencies, as well as participant observation of activities. The evaluation suggested that the programme had led to enhanced interagency collaboration, especially with Child, Youth and Family. The described programme's outcomes were quite individualised given the methodology but highlighted improved physical, psychological and emotional health, feeling more competent and better resourced as a parent, successfully addressing drug and/or alcohol abuse, becoming financially independent, obtaining housing and feeling safe.

The small number of formal evaluations, however, means that it is still too early to assess the overall effectiveness of Whānau Ora. The limited information that is available suggests that the model is viewed favourably by some engaging with its services.

Children's Action Plan and Children's teams

The Children's Action Plan arose from the White Paper for Vulnerable Children 2012 [284]. The Action Plan outlines the Vulnerable Children's Act 2014, which includes provisions for information sharing, processes to track vulnerable children, tougher penalties for, and the monitoring of, child abusers, screening those that work with children, a free child protection phone line, public awareness campaigns and local children's teams.

Children's teams are intended to bring together professionals from different sectors e.g. health, education, welfare and social service agencies to work with vulnerable children and their families. The model is that a group of senior professionals from the community meet regularly and appoint a lead professional to work with a specific child and their family. A unique children's team is formed to meet the needs of each child and family [285].

The service design is developed locally and needs to identify how the children's team integrates into the local community, draws on existing services, aligns with other government initiatives and meets the needs of vulnerable children and their families. So far, children's teams have been piloted in Rotorua and Whangarei and subsequently implemented in Horowhenua/Otaki and Marlborough with implementation in 2015 planned for Hamilton City, Clendon/Manurewa/Papakura, Gisborne, Whakatane, Whanganui and Christchurch.



To date the design and implementation of Children's teams have been assessed using a developmental evaluation approach, with data being collected through observation, document review and semi-structured interviews with key personnel. The assessment also included a two day cross-sector Children's Action Plan workshop involving 140 people [286]. Five critical components for the Children's team model were established namely: planning and development, partnership, implementation, systems change and scaling up [286]. The review also found there had been positive progress on some elements such as building a shared vision, collective ownership and building a working model. However, funding and accountability processes posed challenges. It was also thought that workforce capacity, common accountability measures and addressing service gaps were likely to need more attention.

The Ministry of Social Development has also developed a set of tools for working in integrated programmes called Investing Service for Outcomes" (ISO) and has a Strategic Investment Framework to support initiatives like the Children's Action Plan [287].

One stop shops or single access points

A number of one stop shops or single access point type services have been implemented in New Zealand, with many tailored to the needs of specific age groups.

Early Years Service Hubs

Early Years Service Hubs, established in 2006, are located in high needs areas to provide a central location for access to services for families with children from before birth to six years of age, with the aim of improving outcomes for this age group [288,289].

Components of Early Years Service Hubs

Access to universal services and support that help families to raise their children

Easy access to information and advice

Access to community-based formal and informal support networks

Access to quality, specialised services to meet additional needs

Effective, co-ordinated, intensive, protective and remedial services when children continue to be vulnerable to poor outcomes

The seven core services that are connected through Early Service Hubs are ante-natal services, Well Child Tamariki Ora, early childhood education, parenting information, education and support, home visiting, referrals to off-site services and outreach [289].

An evaluation of these service hubs was undertaken which comprised site visits to five hubs, interviews with hub managers, co-ordinators and Family and Community Services regional office staff, focus groups and interviews with core service providers, a survey of other service providers connected to the hubs, focus groups and interviews with a small sample of service users and analysis of Hub strategic and operational documentation [290]. The evaluation found that community relationships had been built and strengthened and that there was an increased awareness about services. In addition there was increased collaboration between service providers, with the identification of service gaps and possible solutions for these. Key factors leading to successful implementation included good community consultation and partnership, early appointment of co-ordinators and the identification of high quality host organisations.

School-based health services (SBHS)

There are many different organisational arrangements for school-based health services [291]. Some schools employ their own nurses and develop wellness centres providing a range of services. Others have visits from public health nurses, family planning nurses and general practitioners, while others have no services at all [291,292].

There have been two evaluations of SBHS in New Zealand, of which the Healthy Community Schools Initiative in Achievement in Multi-Cultural High Schools (AIMHI) schools was one. AIMHI was a pilot programme funded by the Ministry of Education



established in 1996 to explore how achievement in nine schools could be enhanced. The goal was to improve educational outcomes by:

- Increasing effective learning time
- Reducing barriers to learning
- Improving health and social services within the school
- Gaining greater connectivity and congruency of the school with its community

The initial evaluation during 2002–2004 found that students expressed greater satisfaction with their schools, felt better supported to achieve and felt that ethnic diversity was more supported [290]. A second evaluation during 2008–2009 found that health and social services varied considerably between the schools [293]. However, it was felt that the support services increased students' access to health and social services with a positive impact on their educational achievement. Both students and staff felt positively about the services.

The second evaluation of New Zealand's SBHS was a review of the School Nursing Services [291]. This review concluded that New Zealand's SHBS were developed in an ad-hoc fashion resulting in discrepancies in the availability of and access to services. For more details on both of these evaluations see the in-depth topic on this issue in 'The Health Status of Children and Young People in New Zealand 2011' [294].

A specific example of a School-Based Health Service or Hub in New Zealand is Victory Village [295]. This resulted from a partnership between Victory Primary School and Victory Community Health. Health services, recreational and social programmes and community events are provided through a multi-purpose community health and recreation centre located on the school grounds. Through collaboration across sectors a wrap-around approach is provided to families with complex needs.

A case study review was undertaken involving Victory Village [295]. Data were collected between 1997 and 2009 through interviews with key personnel, staff and family groups, a survey with 13 teachers, photovoice research activity with students, and data associated with academic achievement, participation, success and wellbeing which was collected by the school. The photovoice research activity consisted of participants taking photos of people, places and things of significance to them, followed by discussion of the photos with the researcher and a group of participants. While attendance and achievement in literacy and numeracy had improved since 2000 the methodology did not allow a causal association between the SBHS and these outcomes to be made. However, students were reported to be motivated, having strong self-efficacy and positive relationships with teachers. Families also felt they had better access to services and improved health and wellbeing. The community felt more engaged and had stronger connections with families. Providers felt they were providing better services as they had a more collaborative and holistic approach in place.

Youth One Stop Shops (YOSS)

YOSS are facilities based in the community that provide a range of services to young people and which take a holistic approach within a youth development paradigm [292,296]. Services may include primary healthcare, family planning, social work, youth development programmes and recreation programmes [292]. Services at YOSS are provided free of charge or at a reduced cost [296].



A New Zealand evaluation of 12 YOSS combined a literature and document review with surveys of YOSS managers, as well as site visits to meet managers, staff and stakeholders and to undertake focus groups with clients [296]. The review found that the majority of clients accessed YOSS services opportunistically, depending on their situation and often used other providers as well. It did not collect any data on the effectiveness of YOSS in improving access to services. However, all YOSS worked to reduce the barriers to accessing services faced by young people. They did this through multiple strategies including flexible opening hours, outreach, central locations with access via public transport, youth-friendly settings and services being at low or no cost. No data was included to evaluate whether health outcomes for young people had improved, however, 89% of stakeholders and 94% of clients agreed that services were effective at improving the health and wellbeing of young people. Due to the lack of comparable data for those not using YOSS services it is difficult to assess whether YOSS were meeting the needs of all those in their catchment areas or just those that had registered with the service.

A more detailed review of YOSS can be found in the in-depth topic on this issue in the 'Health Status of Children and Young People in New Zealand 2011' [294].

Jointly funded service provision

Social Sector Trials

The Social Sector Trials (the Trials) are being set up to test a new approach to social service delivery [297]. The approach focuses on a set of outcomes for a target group with a reorganisation of funding and decision-making processes and a shift towards controlling service delivery at the local level. The target group are those aged between 12 and 18 years, with the aim being to improve success in the following high level outcomes:

- Reducing truancy
- Reducing offending
- Reducing alcohol and drug abuse
- Increasing participation in education, training or employment.

Each outcome has a number of associated targets against which progress can be measured. Intermediate outcomes have also been identified. These include increased engagement in school, improved engagement and positive role models, improved engagement/connection with community groups and events, a more supportive community environment, improved responsiveness within the community to the needs of young people, more young people getting the services or programmes they need, and better transitions from school to training and employment.

Through a partnership between the Ministries of Social Development, Justice, Health, Education and the New Zealand Police, decision-making processes and funding are spread across the social sector [297]. The cross-agency funding contributes to the support and administration of the Trials, transferring relevant contracts to the control of Trial leads, funding new initiatives and contributing resources 'in-kind'.

Governance is through a National Level Joint Venture Board (JVB) with local governance groups to support the planning and implementation of trial activities. Local governance groups include young people, the Mayor, school principals, police, iwi, government agencies and community leaders.

The operating model consists of a 'Trial Lead' whose role is to facilitate service delivery at the local level by supporting the decision-making of the stakeholders involved. The Trial Lead is charged with building networks and strengthening co-ordination amongst government and community stakeholders.



Key aspects of the local governance groups that support the Trials include:

Having a high status local stakeholder that give visibility and a mandate to the group
Having membership from across key stakeholder groups that bring a wide range of perspectives and spread ownership of the Trials across multiple agencies
The ability to operate with high trust
Having regular meetings focusing on joint actions that lead to a better understanding of other organisations' business

An evaluation of the Trials utilised stakeholder interviews, youth interviews, documentation reviews, surveys, observations, monthly reports, significant change stories, and financial data [297]. It found that the Trials have improved collaboration between local organisations, NGOs, local and central government agencies. Importantly they have provided a platform for networking and relationship building between community stakeholders. Through improvements in cooperation and collaboration service delivery is more co-ordinated for young people and their families.

The evaluation also found increased community collaboration and responsiveness to the issues faced by young people. Through increased information sharing, community organisations were able to proactively identify issues and gaps and develop tailored solutions.

There was also a broader base of new and improved services aimed at young people. The services ranged from high intensity services involving one on one case management, through medium intensity services to low intensity services such as programmes for a large group of people. These services were also delivered in a more co-ordinated manner.

Stakeholders felt that there were positive results for many young people as a result of the Trials. They identified changes in behaviour, attitude, improved confidence and motivation. Young people interviewed for the evaluation reported an improved sense of belonging and increased feeling of responsibility for those around them.

Key factors that enabled the successful establishment of the Trials included national leadership and an on-going close and direct link between the JVP and front line operational staff [297]. This included the ability to escalate issues from an operational level to a governance level and to overcome blockages that could not be resolved locally. A clear structure, processes and roles at both the local and national levels, and an action plan that reflected the communities' need and intended outcomes were also identified as important. In addition, secure funding and resources, high quality local leadership that was able to work collaboratively, and shared responsibility for the Trials across key community stakeholders were all key success factors.

Key barriers associated with the Trials were identified. These included difficulties in obtaining relevant outcome data, the integration of funding, multiple government initiatives and priorities, ensuring joint governance and ownership of Trials at agency level and the narrow scope and focus of the Trials [297]. Being able to obtain locally relevant outcome data was a particular challenge but was seen as being essential to measuring the impact of the Trials in the future.

Summary: New Zealand examples

There are a number of integrated services in New Zealand. However, the evaluations of these services have either been limited in scope, or the services themselves have not been established long enough for effective evaluations to be undertaken. There is, therefore, a need to also look at international examples of integrated services and to review the evidence for their effectiveness.



Overseas examples

Case management approaches

Victoria Child FIRST and Integrated Family Services

In 2007, the enactment of the Children and Youth Families Act 2005 provide the legislative basis for developing Child FIRST and Integrated Family Services in Victoria, Australia [298].

The aims of Victoria Child FIRST and Integrated Family Services are to:

Co-ordinate and provide a visible point of access to integrated family services

Provide capacity to receive referrals, undertake assessments and assist with the provision of services to vulnerable children

Provide a platform to drive stronger governance and responsibility between services

Provide appropriate targeting and prioritisation of services to more vulnerable children, young people and their families

Child and Family Service Alliances were established in each sub-region with members from the Integrated Family Services, Child FIRST, DHS Policy and Partnership staff and Child Protection. The alliances were responsible for the operational management, catchment planning and providing service co-ordination.

A community-based child protection position was also created to facilitate referrals between Child FIRST and child protection, as well as to provide secondary consultation and advice [298]. The role also involved undertaking joint visits, joint case management, participating in allocations meetings and educating staff about relative roles and responsibilities.

A review of Child FIRST and Integrated Family Services was informed by a mixed method approach [298]. This review utilised a case study analysis (including documentation analysis, stakeholder consultation and analysis of administration data), analysis of family services and child protection data, an evaluation survey of 1,149 members of child and family services, regional and state-wide consultations, interviews, forums and workshops.

The review found that the introduction of Child FIRST and Integrated Family Services resulted in an increase in referrals from a range of professional sources when compared to the period before the initiative was implemented [298]. There was also an increase in accessibility to services with more families receiving services. Children and families receiving services were more likely to have more complex needs identified than previously. While there was evidence of more co-ordinated intake, allocation, service delivery and demand management, challenges to co-ordination still remained which reflected the lack of a common assessment framework. This reduced consistency in determining children and families' eligibility to services and the ability to prioritise the most vulnerable in the catchment.

The Alliances were found to be successful in creating a shared responsibility for service delivery, a mechanism to support consistent intake, prioritisation and allocation based on need and risk [298]. They also provided an opportunity to consistently improve service provision as well as the capacity for joint planning, and a shared approach to demand management.

The community-based child protection position was able to improve information sharing, provide comprehensive and accurate risk assessment and prioritisation, provide greater capacity to manage increased risk and complexity, divert and minimise the progression into child protection and improve working relationships between Child Protection and Integrated Family Services [298].



Every Child Matters, UK

There are three elements to the Every Child Matters programme [299]. These are a common assessment framework (CAF), a lead professional, and information sharing. The CAF is a framework to enable professionals to assess a child's and family's need for services. Following this assessment the lead professional is responsible for the co-ordination of actions identified by the CAF. They also act as a single point of contact for a child and their family. A Team Around the Child (TAC) is formed from practitioners across different services to provide a multi-agency response to deliver the actions. Members of the TAC are jointly responsible for the delivery of the plan to meet the needs of the child and family, with a working definition for the approach being as follows [258]:

'The TAC approach has been designed to provide effective, timely and seamless support for children and young people with complex needs and their families. It supports child and young person-focused family-centred planning and provides each child and young person with their own individual, collaborative team of practitioners.'

In a literature review on integrated working, Oliver et al. found there was considerable variability in how the TAC model had been applied by local authorities in the UK [300]. However, professionals perceived it as helping to keep the focus on the young person and to improve accountability and transparency among services working with young people. It was also felt to maintain a consistent and co-ordinated level of support for young people, improve access to services and reduce duplication of the services provided. For professionals there was an improved understanding and awareness of other professional roles and services resulting in a reduction of inappropriate referrals. The majority of this evidence is anecdotal however, with a lack of systematic recording of outcomes for young people.

One stop shops or single access points

Sure Start, United Kingdom

The Sure Start initiative was introduced in the UK in 1999 as part of the Government's policy to prevent social exclusion [301]. Its aim was to enhance the life chances of young children growing up in disadvantaged areas [302].

Initially Sure Start Local Programmes (SSLPs) were situated in deprived areas with all under five year olds and their families being able to access the programme. There were four key aspects of SSLPs that made them different to previous programmes [303]: The programmes:

- Were outcomes driven with accountability organised around outcomes
- Involved transformation of service delivery, ensuring multi-agency partnership and co-ordinated planning and delivery of services
- Involved communities who were empowered throughout the programme
- Were area-based with universal access in the areas.

Local communities were able to develop services according to local needs, with some of the services offered including personal development courses, support for debt counselling and language and literacy training. The box below outlines the core services delivered by these SSLPs

Core services delivered by Sure Start Local Programmes [301]

Outreach and home visiting
Support for families and parents
Support for good quality play, learning and childcare experiences
Primary and community healthcare and advice about family health and child developments
Support for people with special needs



Adaptations to the Sure Start initiative have evolved as national and local priorities have changed. Initially between 1999 and 2003 there were 524 SSLPs targeting populations living in the most deprived areas in the UK [268]. In 2004 the Sure Start initiative was rolled out over the entire country, with SSLPs becoming Sure Start Children's Centres (SSCCs) and with new SSCCs emerging. In 2010 the government moved away from a universal Children's Centre model to focus on targeting the services to the most vulnerable children and families.

A number of evaluations of Sure Start have been undertaken at both the local and national levels [268]. Each SSLP is required to conduct a locally led evaluation of its services each year, although as each SSLP was able to decide what was to be evaluated and when, the approaches taken have varied across the country.

At the national level, the National Evaluation of Sure Start (NESS) has comprised five different modules: impact, implementation, local context analysis, cost effectiveness and support for local programmes. More details and a full explanation can be found at www.ness.bbk.ac.uk. The NESS impact evaluation used an integrated cross-sectional, longitudinal framework. The cross-sectional phase used 150 Sure Start and 50 control communities, measuring outcomes for infants, two year olds and four year olds and their families and communities [304]. A longitudinal phase of the study followed the infants in the cross-sectional phase when they were 3, 5 and 7 years old and compared them with children in the Millennium Birth Cohort Study.

For the 9 and 36 month old children there was limited evidence that SSLPs achieved their goals of increasing service use or enhancing families' impressions of their communities [305]. There was also limited effect on child outcomes. However, SSLPs did appear to be beneficial to family functioning. The evaluation found that there were diverse effects on subpopulations, for example, children and families who were relatively less disadvantaged seemed to benefit from SSLPs whereas those children and families who were relatively more disadvantaged were adversely affected. For example, 36 month old children of teen mothers showed less verbal ability when in SSLP communities compared to controls, and similar findings were reported for children of workless or lone parent households. However, non-teen mothers reported less negative parenting in SSLP areas and children exhibited fewer behavioural problems than those in control areas.

At three years old, overall, parents showed less negative parenting and provided their child with a better home learning environment. Children also had better social development with higher levels of positive social behaviour and independence/self-regulation. Health outcomes included higher immunisation rates and fewer accidental injuries [306].

At five years old children in SSLP areas had lower BMIs than those in non-SSLP areas due to being less likely to be overweight, with no differences in obesity [307]. Children in SSLP areas also experienced better physical health than children in non-SSLP areas. Maternal outcomes included being able to provide a more cognitively stimulating home learning environment for their children, providing a less chaotic home environment, experiencing greater life satisfaction and engaging in less harsh discipline. However, mothers also reported more depressive symptoms and parents were less likely to visit the child's school for parent/teacher meetings or other arranged visits.

At seven years old significant effects included mothers reporting engaging in less harsh discipline and providing a more stimulating home environment for children [302]. In specific populations there were less chaotic home environments for boys and better life satisfaction for lone parents and workless households. It is thought that these effects are fairly limited due to the large number of outcomes for which there were no effects [268].

Head Start (HS) and Early Head Start (EHS), United States

Head Start started in 1965 to help break the cycle of poverty by providing preschool children in low income families with a programme that was able to meet their emotional, social, health, nutritional and psychological requirements. In 1995 EHS was introduced [308].



The Head Start and EHS programmes support the mental, social and emotional development of children from birth to age five. EHS is provided for pregnant women, infants and toddlers until the child is three years old. HS programmes are delivered to three and four year olds. HS agencies design services for children and families to meet the needs of the particular community in which they are located in. As a result a variety of service models are offered depending on the local needs. While some services are based in centres, home-based services are alternative options [309]. Services offered through HS include education, screening, social and emotional health, nutrition, health and safety, social services and transition services.

HS was formally evaluated by the National Head Start Impact study, which involved approximately 5,000 three and four year old children across 84 nationally representative agencies [310]. Children were randomly selected from classrooms and randomly assigned to HS or a control group for one year. After one year, HS children were found to have modest to moderate positive impacts on most of the outcome areas assessed including language, early pre-reading skills and health and parenting. However, most of the effects found at the end of the HS year had disappeared by the end of the first year at school.

The Early Head Start Research and Evaluation Project (EHSREP) enrolled 3,001 families in a randomised controlled trial in 17 of the first EHS sites funded. EHS children had significantly better social, emotional and cognitive development than the control group [310]. They were also more likely to be immunised. There were also positive outcomes for parents who were more supportive, less punitive and had better self-sufficiency outcomes related to training, education and employment. They were also able to provide more stimulating home environments and read more to their children. While the impacts persisted for two years after the children left EHS, by the fifth grade at school almost all impacts had disappeared except an overall trend effect on a composite of social-emotional functioning. The EHSREP also found that there were small but statistically significant impacts on the percentage of children who visited a doctor for treatment of illness, the percentage of children immunised and the likelihood of hospitalisation for accident or injury [311].

While the national evaluation of HS and EHS found that the impacts were only short term other literature suggests that longer term effects may exist [310]. Four studies have analysed long term outcomes from observational data. These studies have found that those who attended HS were more likely to graduate from high school, go to college, and have higher incomes. Effects on improved health outcomes and the incidence of incarceration have also been found.

Toronto First Duty, Canada

Toronto First Duty (TFD) was established in 2001 as a demonstration project with partnerships between the City of Toronto, the Toronto District School Board and other community agencies. The goal of the programme was to develop a universally accessible service that promoted the healthy development of children from conception to primary school [312]. In addition the ability of parents to work or study was facilitated and they were supported in their parenting roles. Elements of the TFD programme included integrated governance, seamless access, a staff team, an integrated early learning environment and parent participation.

Core service elements at each site included childcare, kindergarten and parenting support or family literacy programmes [313]. Other services also included public health, counselling, a library and other community resources. The schools were thus used as a 'hub' for service delivery. In this programme integration involved kindergarten teachers and early childhood professionals working together as a team with shared roles and responsibilities. There were integrated connections between the early childhood teams, parents and community agencies through direct communications.

There have been a number of evaluations of the TFD model, all using a mixed methods approach [314]. These have included literature reviews, policy document reviews, process records, key informant interviews, front line staff interviews and surveys, direct programme



observations, parent focus groups and surveys, direct child measures, a community public awareness survey and community provider surveys.

These evaluations found that for successful implementation of early childhood school hubs organisational change and leadership were required [314]. Working in integrated teams meant that staff had to overcome professional barriers. Joint professional development, shared goals, specific aims for children and regular meetings helped this to occur. It also found that integration of child care, parenting and kindergarten programmes did not cost any more than traditional service delivery. Other key challenges faced included funding, staff and leadership turnover, and a lack of integration at higher levels of government. It was felt that while the TFD model could be implemented successfully, wide scale integration and improvement of early childhood services required policy change beyond individual sites and beyond the local level [315].

Parents reported high levels of satisfaction with TFD and the concept of integrated services [314]. They reported being consulted more about services and having better access to the range of programmes available. Parents also felt more empowered to talk to their children's kindergarten teacher and help their children learn from home [316]. The research also indicated that service integration was associated with lower levels of parenting hassles when navigating between child care and school, greater satisfaction with some forms of support and parents naming kindergarten teachers and early childhood educators as part of their social network.

There was no assessment of child outcomes built into the evaluation but kindergarten teacher rating of school readiness on the Early Development Instruments suggest that children benefited socially and developed pre-academic skills [316]. More intense use of TFD services predicted child development outcomes in certain domains including language and cognitive development, communication and general knowledge and physical health and wellbeing.

Summary of the effectiveness of integrated services

There are many examples of integrated services in New Zealand and overseas. There are also many challenges associated with assessing the effectiveness of these services [300]. These include a lack of clarity about the meaning of integrated working and the extent to which integration actually occurs. Many evaluations have also been subject to methodological limitations including the biases that arise when recruiting study subjects only from current service users, or from focusing solely on professional and user perceptions, without taking into account actual outcomes for children and their families. Another pitfall is evaluating programmes before they have been up and running long enough for any valid assessment of their effectiveness to be made.

The evaluations of Sure Start (UK) and Head Start/Early Start (US) appear to be less subject to these of limitations than many local studies. However, these programmes still found mixed benefits for children and their families. This may be due to the time required to achieve and document such outcomes [300]. Integrated services are also only one of many influences that affect outcomes and therefore it can be difficult to make a causal link between integrated services and such outcomes.

Factors required for effective integrated services

While the literature suggests there is no one model that is effective in all situations, there are a number of factors that have been identified worldwide that may increase the likelihood of a programme's success [317]. These factors have been identified in a number of evaluations, literature reviews and via expert opinion.

Leadership

Leadership is considered a significant factor in the development of integrated services [261]. Bringing together multiple service providers and agencies requires committed and visible leadership [256]. It is important that leaders can communicate the importance of the collaboration to the agencies involved. In addition they must enable agencies to find



common ground so they can bring together their different working practices and expectations [258,300].

Leaders also play an important role in promoting the visions and aims of integrated services. They are integral to inspiring and supporting staff through the process of change [258]. Leaders are also thought to have influence through providing resources, setting deadlines and identifying projects [318]. In addition they can establish the climate of the integrated service, manage the context of the service and provide a structure to support its efforts.

Several qualities have been identified that that may be important in leaders of integrated teams. These include motivation and the ability to motivate others, creativity, passion, charisma, social skills, technical expertise, a commitment to learn and a capacity to draw others in [261,318,319]. Leaders should also have high levels of credibility, influence and integrity that is acknowledged by both internal and external organisations [261]. They need to understand the dynamics occurring within the system in order to develop an environment that facilitates integrated working [318].

Shared vision and goals

A clearly defined vision needs to be identified and agreed on by all stakeholders [258]. This should include a common understanding of the problem and a joint approach to solving it [320]. The language used by different sectors can act as a barrier to determining a common vision. Therefore, it is important that an understanding and agreement of terminology is developed early in the process. Supporting common values can result in individuals creating a collaborative culture which will increase the effectiveness of integrated working [319]. A key challenge can be the lack of clarity in the definition of integrated services [300].

Goals also provide a direction for action and motivation, and can be a base for measuring effectiveness [261]. However, organisational cultures and procedures can make goal setting complex. Differences in goals between organisations can result in the loss of partnership direction and commitment. It is therefore necessary to ensure that all of the organisations involved are committed to the goals. It may be necessary for different goals to be set at different levels of the service (e.g. for managers and front line staff), to ensure that they are relevant for all staff involved.

Governance

Governance structures should facilitate the co-ordination of inter-professional teams [256]. Therefore, governance structures themselves should be representative of all stakeholders that understand the delivery of care. It is also important that service users are included as stakeholders [258]. Responsibilities should be clearly defined as this will enable a sense of joint ownership and responsibility for performance and outcomes [286].

Community engagement

Integrated services need to be based on the needs and priorities of the families and communities using the services [258]. Understanding users' experiences and expectations is crucial when developing a responsive service [261].

Integrated services should also aim to empower families and communities, build on the communities' existing strengths and enable families to develop further skills. The programmes must be sensitive and responsive to cultural, ethnic and socioeconomic diversity. Engagement of the community is important as it creates opportunities for families to participate in the integrated service without perceiving it to be threatening.

Inter-professional practice

In order for integrated services to be effective, strong inter-professional relationships need to be built. These relationships should be based on trust, mutual respect and understanding [319]. Trust is particularly important for integrated working and results in the most enduring relationships. Mistrust can be overcome through the setting of parameters to promote fairness and accountability of behaviour. Shared vision and goals can facilitate



strong relationships. A history of positive informal networking can be a positive influence to inter-professional relationships whereas a history of difficulties and conflict can be inhibitive [261].

The clarity of the role of a professional or an agency is an enabler of integrated services [321]. If role boundaries are clear and there is understanding of the other agencies' boundaries it can lead to effective integration. Confusion over other professionals' or agencies' roles can occur when their respective responsibilities are not understood. This may partly occur due to differences in the language used to define users' problems and the interventions they require. This can result in professionals working in silos where they feel comfortable in their own area, but where the needs of children and families are neglected as they fall out of the individual professional's brief [321]. This may be a particular issue for those that are near the threshold for intervention. In addition blurred professional responsibilities can have numerous effects on staff including feelings of inequity, stress, anxiety and negative effects on job satisfaction.

Brown and White [257] found that cultural differences between professions was also a barrier. These could include differences in language, attitudes to information sharing and professional principles. A lack of shared understanding about the purpose of a partnership, meetings or plans could also cause difficulties in integrated services. The development of a stakeholder culture where professionals were given the freedom to be creative and innovative around service design while being given clear parameters could also lead to effective integrated services. An informal arena for developing relationships can also facilitate trust between professionals. People may be more flexible when they are able to get to know each other on a personal basis. Having the same working/office environment can provide opportunities for professionals to get to know each other personally, have an insight into other professional roles, have easy access to a range of professional knowledge and skills, work more collaboratively and develop a quality, resilient and flexible service.

For an integrated programme or service to be effective staff need to be supported in ongoing training to promote high quality, effective services [258]. Training needs may include communication and counselling skills, family-centred practice, cross-cultural competence, interdisciplinary teamwork, interagency collaboration, inclusive practices and the use of natural learning environments. Ongoing training in interprofessional practice as well as mentoring and supervision is especially important [322]. Informal learning is thought to be just as important as formal training. Sloper [270] also suggest that learning in groups of professions can be effective in decreasing inter-professional stereotypes. Quality improvement programmes and interagency training may also facilitate understanding different professional roles. It can also allow the development of common language and increased knowledge of skills required to work together [261].

Common measures of accountability

A shared measurement system is considered to be essential to achieve collective impact [320]. Collecting data consistently across all organisations not only enables organisations to hold each other accountable but also ensures that partners can learn from each other's successes and failures, as well as ensuring that effort is being focused in the most appropriate areas. The collection of data also supports evaluation, reviews of the service, informed decision making, identifying where additional resources are needed and identifying new approaches to tackling problems [318].

Funding

One of the anticipated benefits of integration is that it will decrease costs, due to the reduction of duplicated data collection, more efficient processes of assessment and communication and better systems of planning and delivering services [321]. However, many have found that integrated services may result in increased costs prior to producing savings [256] due to the increased resources required to facilitate collaboration.



Existing funding arrangements are also often identified as barriers to integration [263]. Siloed funding can prevent agencies from sharing resources and incentivise working individually.

Different mechanisms can be utilised for funding new models of working [263]. Payment for performance funding models (rewarding providers for improved user outcomes) have been used for co-ordinated interventions addressing social issues. Personal budgets have been used to enable users and case managers to bypass organisation silos and purchase supports from the providers. Pooled budgets may be used to co-ordinate services for local needs. Joint commissioning may enable agencies to overcome barriers to share resources and co-ordinate investment. Collaboration can also be incentivised through contracting and tendering reforms.

Information systems and data sharing

Quality information systems will enhance the ability of agencies to communicate with each other and enable the flow of information across pathways [256]. The sharing of information is essential for early intervention and the provision of effective and efficient services [300]. It is also important that professionals understand when, why and how to share information. Data sharing between agencies can also be problematic. This can result from mistrust between service providers or due to legislative barriers [263].

Electronic health records have been identified as a mechanism to link consumers and providers across the care continuum and provide information to all stakeholders [263]. However, developing and implementing electronic systems has been found to be time consuming, complex and costly.

Steps required for effective implementation

International and local frameworks

A number of different steps have been identified that will lead to successful integrated services. Many of these steps aim to decrease the barriers to integrated service delivery and increase the facilitators. In New Zealand, the Integrated Service Delivery: Regional Co-ordination workstream formed following *The Report of the Advisory Group on the Review of the Centre* found that the key steps to implementing successful integration were getting buy-in from other agencies and staff, planning carefully and thoroughly, supporting locally led initiatives, adapting centrally led initiatives, investing in relationship building and building on and linking to existing initiatives and resources [262].

In Victoria, Australia, a framework has been developed to support the establishment and operation of children's centres [323]. This framework provides a step by step approach to developing integrated services. The steps include developing a shared vision, identifying desired outcomes, identifying the services to be delivered, addressing practical issues, finalising governance arrangements and drafting an action plan.

Following a global survey to review integration initiatives across 22 jurisdictions KMPG also offer steps to successful integration [263]. The first step is planning to ensure that the population and their needs are understood. Secondly leadership and buy-in with cross sectoral support is essential. The third step is ensuring there is organisational capacity, including effective IT infrastructure, funding arrangements, data sharing practices, and an agile workforce. Finally ongoing evaluation is required with feedback mechanisms so that adjustments can be made and outcomes understood.

In the US key steps have also been identified to integrate services [324]. The first is assessing the extent to which the current service is integrated. This may include assessing the vision and leadership, the organisational model, the workforce, the infrastructure, and practices and processes. Second it important to determine where funding is currently being spent, on what, on whom and how to realign this. Third there needs to be a commitment to understand the challenges that users face as well as communicating the vision to reform services. Fourthly assessing performance metrics and management activities that reflect the integrated services rather than a silo mentality and finally learning and sharing



experiences with others also involved in integrating services will increase the knowledge in this area.

When considering how integrated services in New Zealand might be developed, a framework developed by Chatterji which considers how best to address complex public health problems is relevant [228]. This framework suggests that decision makers need to address why an integrated service is needed, what specific actions should be taken, and how these actions can be implemented or scaled up. The evidence to answer these questions can come from quantitative sources (experimental, quasi-experimental or observational), or qualitative or mixed methods approaches. Evidence from different disciplines, expert knowledge or guidelines may also be useful.

Effectively evaluating new services

As described earlier, the majority of integrated services in New Zealand are either relatively new, or their evaluations have been limited in scope. In the absence of a higher quality evidence base, any new integrated services need to be implemented taking into account the “factors required for effective integrated services” outlined above. Given that such evaluations are complex, a framework for evaluating the services’ effectiveness needs to be determined when the new service is being planned.

Bardsley et al. have evaluated over 30 different interventions involving integrated services and suggest the following when planning such an evaluation [325].

1. **Planning and implementing large scale changes takes time, as does the development of the evaluation.** Therefore any results from the intervention will not occur quickly and one year of operation will not show much result beyond the process of implementation. This will also be the case for pilot schemes which often have a large pressure to deliver outcomes quickly. Funders need to be aware of these restrictions and the fact that in the first one or two years, a process evaluation with changes in structure may be all that can be demonstrated.
2. **Clearly define the intervention and what is trying to be achieved.** This will allow proper assessment in the evaluation. The intervention should be implemented well with clear measures for the evaluation. Any changes that are made need to be made through clear logic.
3. **Be explicit about how desired outcomes arise,** i.e. the process by which the intervention will have an impact. It is also helpful to understand what the drivers of that process will be. Interim markers of success can also be beneficial to assess shorter term effects prior to being able to assess any longer term benefits.
4. **The size and duration of the evaluation will affect whether the intervention demonstrates a statistically significant change.** The evaluation will require a substantial number of users to have experienced the service. However, if the evaluation is hurried with loosening of eligibility criteria then the effectiveness of the evaluation may be reduced.
5. **Carry out a process evaluation.** The impact an intervention has will be dependent on its implementation. Factors affecting the strength of the implementation include barriers to implementation not being understood, the intervention being poorly defined, poor implementation and project management and a change in the wider context. A process evaluation may then be able to explain why the intervention is not producing the intended outcomes.
6. **Consider the best model for the evaluation.** For all complex interventions there should be a period with only light monitoring and assessment of the process of implementation. This will allow the intervention time to establish itself. Formative evaluations are also thought to be useful in helping pilot programmes to evolve appropriately and give ongoing feedback.

In addition to these suggestions, Goodwin [326] also suggest that it is important to carry out a baseline assessment on any measure to be assessed. This is needed to demonstrate an improvement in care. In some evaluations matched populations have been



used to assess whether users accessing integrated care can achieve better outcomes than those whose care is not integrated.

Performance and outcome measures for integrated services

Outcome measures in integrated services can include care outcome measures, care process measures and measures of care-co-ordination and family reported perceptions [326]. Alternatively others have suggested that performance indicators can be used to assess whether a service is achieving its aims. Nine categories of performance indicators have been suggested by Hassett and Austin 1997 [269]. These include:

- Responsiveness to programme constituencies
- Responsiveness to local political preferences
- Responsiveness to local need
- Equity in service provision and resource distribution
- Client accessibility to multiple programmes
- Co-ordination and integration
- Accountability
- Maximising of efficiency
- Intra and inter departmental co-ordination.

Every Child Matters (UK) developed an outcomes framework with national indicators for each of the strategic objectives [327]. The indicators included both quality of life indicators such as prevalence of breastfeeding, percentage of children who have experienced bullying and inequality gaps in the achievement of a Level 3 qualification by the age of 19 years, as well as quality of services measures such as the effectiveness of child and adolescent mental health services, percentage of initial assessments for children's social care carried out within seven days and percentage of schools providing access to extended services.

It is important that all integrated services are evaluated for their effectiveness to ensure that outcomes for children and their families are improving. Evaluating integrated services can be a challenge and requires assessment of many different aspects of the services. While information on user and professional perceptions of the service are commonly gathered, it is only by gathering information on child and family outcomes that the effectiveness of integrated services can truly be understood. These outcomes can take time to emerge and therefore it is important that the evaluation performed is appropriate to the stage of implementation of the programme.

Conclusions

Worldwide there is an increasing focus on delivering integrated services to children and their families. Through taking a child and family-centred approach with organisations working together at an operational level, it is anticipated that integration will be beneficial from both the provider and user perspective.

There are many examples of integrated services in both New Zealand and internationally. While integrated services have the potential to improve outcomes from both a provider and user perspective there are limitations in the evaluations of these services. These include a focus on user and provider perceptions rather than outcome measures for children and their families. In addition there may be biases in those recruited to take part in the evaluations. Further work in this area is required.

There are many different types of integrated services with no one model being suitable for every scenario. It is therefore important that each integrated service is developed giving consideration to the local context. Key factors for achieving effective integrated services have been described. These include leadership, shared vision and aims, governance, community engagement, inter-professional practice, funding and information systems. A number of these have the potential to challenge many DHBs. Leadership is a critical factor



in the success of integrated services and leadership from DHBs will be important in being able to drive integrated services forward and promoting intersectoral collaboration. Funding is also integral to the delivery of integrated services, as if it is not addressed, it has the potential to lead to perverse incentives and can encourage organisations to work in silos. Additionally increased funding is often required when integrated services are initiated due to the resources required for collaboration. It is vital that DHBs are able to address the issue of funding for integrated services if they are to succeed.

All integrated services should be appropriately evaluated depending on the stage of the initiative. In the early stages this may involve a process evaluation with identification of how collaboration is progressing. As usual methods of evaluation struggle to identify improved user outcomes as a result of integrated services it will be harder to demonstrate these. Importantly, outcome measures should not be assessed in too early in the programme's development as outcomes can take time to emerge and may result in an unfavourable appraisal of the programme. DHBs should therefore be prepared to support integrated services for longer durations of time, without evidence on outcomes necessarily being available.

Integrated service delivery has the potential to improve outcomes for children and their families. However, the process of developing and delivering an integrated service can be complex with many challenges. It is therefore critical that DHBs are prepared to support all aspects of an integrated service for it to succeed.

