



From policy to practice: A program logic approach to describing the implementation of early intervention services for children with physical disability

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ABSTRACT

The benefits of providing early intervention services (including multidisciplinary therapy and family support) for children with physical disabilities and their families are widely acknowledged. Evidence, however, of their efficacy is not well documented. Furthermore, many studies fail to adequately describe the programs being evaluated and how these programs have been implemented by service provider organisations. From a policy perspective, evaluators need to be mindful of contextual variations in program implementation when examining initiatives and determining their efficacy. In this paper we discuss how implementation of a cross-organisational early intervention initiative policy for children with physical disabilities was enacted by three different service providers. In the present study, program logic was employed to identify and explore these variations in implementation. While each individual agency provided services and identified outcomes that were consistent with policy objectives, program delivery varied considerably across service providers.

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1. Introduction

There is impetus for the delivery of early intervention services for children and their families in Australia, echoing an international trend. As a key national priority area early intervention initiatives are evidenced in Australia in undertakings such as Early Childhood-Invest to Grow and the Helping Children with Autism package (Department of Families, Housing, Community Services and Indigenous Affairs, 2008). In 2007, the Council of Australian Governments (COAG) endorsed an agenda for early childhood, with particular focus on education, development, and childcare (COAG, 2007). At a state level, the Queensland government launched the Queensland Early Years Strategy and the 'Best Start – Supporting Families in the Early Years' initiative in 2006 (Department of Communities, 2008). The recent policy focus on early childhood intervention and education reflects an increasing awareness of the benefits of these programs for children, their families and the wider community. Despite this, the evidence in support of early intervention for some groups (e.g. children with physical disabilities) is limited and draws largely on research

involving children with different characteristics and needs (e.g. children with developmental delays, Down syndrome or Autism).

While children with physical disabilities such as cerebral palsy and spina bifida may demonstrate co-morbidities such as developmental delays, it is the visible nature of their disability early in life which makes them amenable to both early identification and intervention. Early intervention programs for young children with physical disabilities are designed to promote child development as well as provide family support to manage their child's ongoing needs (Blann, 2005). These programs typically share a few common characteristics, including provision of therapy services from a multidisciplinary team, support and capacity-building activities for families and development of an individual family service plan outlining the goals of the family and how these will be achieved (Bailey, Aytch, Odom, Symons, & Wolery, 1999). Despite their similarities, early intervention programs can differ with respect to the service delivery models they adopt. Programs may be based in the home, community, early intervention centre or a combination of these settings (Majnemer, 1998). Type and intensity of services provided also vary greatly across programs (Bailey et al., 1999) but most focus on strengthening family capacity to manage the needs of their child within their local contexts, providing specialist support to enhance their ability to meet the needs of their children, and fostering overall participation of the family and their children in their local communities. There is

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emerging evidence from a systematic review of the literature that early intervention programs have beneficial effects for both children with physical disabilities and their families (Ziviani et al., 2010). However there is a paucity of literature examining the long-term efficacy of these programs (Ziviani et al., 2010). Given that early intervention programs for children with physical disabilities require significant financial investment further research examining their effectiveness is both timely and necessary.

In recognition of the limitations of existing early intervention research, the Queensland Government, through Department of Communities (Disability Services) provided funding to three non-government organisations, the Cerebral Palsy League (CPL), MontroseAccess, and Sunshine Coast Children's Therapy Centre (SCCTC) to deliver early intervention services to children with physical disabilities (aged birth to nine years) and their families (Disability Services Queensland, 2007). At CPL, the early intervention program is delivered by both early childhood and school-aged teams (for children aged birth to five years and six to nine years respectively). The program is delivered at eight locations across the state, including four metropolitan and four regional areas. Teams also provide outreach support to children and families living in surrounding areas. At MontroseAccess, two early intervention teams provide services to families residing in Brisbane, the Sunshine Coast, Wide Bay/Burnett region and the Gold Coast. Being a small organisation, a single team at SCCTC provides early intervention services in addition to services for children over nine years of age. The team is based at the therapy centre in Nambour and also provides outreach services to families in the Gympie/Coolooloa area.

The goals of the Early Intervention Initiative (EII), as specified by the funding body, were to (a) enhance the capacity of families to promote their child's development, (b) improve participation of the child and family in their local communities, (c) provide specialist support and information for families regarding their child's disability, support strategies, and relevant support services, (d) provide individualised services at a local level in collaboration with significant people in the child's life and (e) enhance the ability of families to respond to their child's individual needs (Disability Services Queensland, 2007). Coupled with this initiative, Disability Services sought an independent evaluation of service outcomes in order to increase the evidence base for early intervention services specifically targeted at children with physical disabilities (Author et al., 2008).

In undertaking evaluation studies it has been argued that a narrow focus on results or outcomes can result in insufficient attention to program definition (Goodman, 2000). Poor description of programs is one of numerous methodological issues noted as affecting the quality of many early intervention studies. Greater description of program characteristics alone, however, is insufficient without also documenting the implementation processes. For intervention to be successful, both the intervention itself and the implementation process must be effective (Guldbrandsson, 2008). Often when programs fail there is no information available to determine whether it was the intervention, implementation or both that were ineffective (Klein & Sorra, 1996). Therefore, an understanding of whether or not the program was delivered as planned is required to ascertain if results about the effectiveness of the program are valid (Durlack, 1998). Documenting the implementation process also provides insight into barriers and facilitators to program implementation and success (Goodman, 2000).

Variations in program implementation also need to be understood in the context of individual organisations (Durlack, 1998), as service providers have demonstrated marked differences in the level of success in implementing the same programs (Durlack, 2008). Differences in the way programs are implemented also have implications for individual service outcomes (Glisson &

Hemmelgarn, 1998). Many effective programs fail to deliver positive findings as a result of flawed or incomplete implementation (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Programs which have been well implemented tend to produce more positive outcomes (Durlack, 1998); documenting differences in implementation can therefore help our understanding of how variation in program delivery may be linked to outcomes. In this paper we aim to demonstrate how the goals outlined in the Disability Services early intervention initiative for children with physical disabilities were adhered to and/or modified according to the three organisational contexts in which they were applied. In so doing we hope to demonstrate how program logic can be used as a means of determining and understanding these variations.

1.1. Program logic

Program logic provides a useful means of summarising the theory of how a program or intervention works (Rogers, 2008) and is commonly used by evaluators, either as an adjunct to an impact evaluation or as a stand-alone tool for building understanding of a program's service delivery and objectives. Program logic enables examination of the linkages between activities and outcomes – what do we do (or need to do) in order to achieve the program's objectives; that is, how do we get there from here? While there are many approaches to program logic, most have in common the diagrammatic representation of the logic or intention behind a program (Funnell, 2000; Owen, 2006), the assumptions about how and why a program will work, and the relationship between the program's resources (inputs), activities (outputs), and intended goals (outcomes) (Funnell, 2000; Rogers, Petrosino, Huebner, & Hacs, 2000). Typically, outcomes will be identified along a continuum, from immediate or short-term, through to intermediate and long-term outcomes. Outcomes should flow on from each other in such a way that more immediate goals must be accomplished before longer-term goals can be met (Patton, 1997). Because programs can be both complicated and complex (Rogers, 2008) it is helpful also to identify the underlying assumptions and external/environmental factors that may impact on the delivery and success of the program (Owen, 2006).

Program logic is often used during preliminary planning or final evaluation of a program, but may also be used during early stages of implementation (Scheirer, Shediach, & Cassidy, 1995). In fact, in multi-site evaluations, program logic is a useful way of documenting variations in levels of implementation and organisational factors affecting implementation (Rogers, 2007). In the current study, a program logic approach was used with early intervention staff who were experienced professionals focused closely on the day to day delivery of their specialist services. Program logic was utilised for three purposes. First, program logic was used inductively as a tool for documenting the activities and intentions of staff in each agency; that is, clarifying what, in their perception, they are doing and what outcomes they hope to achieve. Thus, these busy professional staff were encouraged to explicitly consider the linkages between program inputs and goals. Second, we aimed to examine how three service providers have enacted broad policy goals, given that Disability Services allowed for flexibility in how these goals were met and to make suggestions regarding contextual factors which may have influenced this process. Finally, the models developed within each agency were used to document inter-organisational differences in service delivery.

2. Methods

The present study fell within a larger research project for which ethical clearance had been obtained from the ethics committee of

The University of Queensland, in line with National Health and Medical Research guidelines (no. 2008000349) and participating organisations where this was necessary. The current component of the study undertakes a descriptive analysis of programs designed by three organisations to deliver early intervention initiatives for children with physical disabilities and their families.

2.1. Participants

Staff from the three service providers (CPL, SCCTC and MontroseAccess) engaged in program logic workshops at their respective sites, facilitated by the second and third authors. The majority of staff members present at the workshops were direct practice staff (including occupational therapists, speech pathologists, physiotherapists, social workers and family support workers); however managers also attended all three workshops. The participation of frontline staff and local area/team managers rather than regional/high level managers was encouraged as delivery of the early intervention programs rests with the individual organisational units. Professional practice staff and team managers were targeted as participants as they possessed in-depth knowledge of service delivery not necessarily possessed by higher level managers. Pre-assessment of participants' knowledge of service delivery did not occur as staff had been trained in the philosophy, principles and methods of program delivery when initially employed by the service provider organisations. Most participants were long serving staff members with a sound knowledge of their respective agencies and the EII policy. Staff had been working with their service provider for an average of four years, in some cases predating the current early intervention programs.

Most of the early intervention staff attended the program logic workshops, thus ensuring that participating staff were representative of the broader group of program staff. At SCCTC all 11 team members attended the workshop, including the director, therapists, family support workers and administrative staff. Eight of the nine program staff from MontroseAccess attended the workshop, representing both early intervention teams. Of the seven staff in attendance, five were therapists and two were social workers. One of the therapists was also a regional office supervisor who had worked on the team since the inception of the early intervention program.

Two workshops were held, at different locations, with staff from CPL, in recognition of the decentralised nature of the organisation, which may have resulted in regional variations in program delivery. Because attendance at the CPL workshops required travel from various regional offices, only a relatively small number of staff was able to attend the two workshops. However, a range of therapy, family support and management roles were represented in the workshop participants. Three managers and three direct practice staff from various regional offices in the south-east of the state attended the first (Brisbane) workshop and so were able to provide insight on program delivery at an inter-regional level. The second workshop, held in Toowoomba was attended by three therapists, a social worker, an early childhood educator and the team manager from that region. The draft (unverified) logic model from the Brisbane workshop was used as a starting point for the Toowoomba workshop, with new material added and contested material highlighted for further discussion. Thus, while two workshops were held within this organisation, just one program logic model was developed.

2.2. Procedure

Program logic was a key component of the preliminary phase of the Early Intervention Initiative evaluation. We began with

reviewing service providers' original funding submissions. Following this, initial interviews were held with each of the service providers to gain insight into their implementation process by discussing the programs currently offered at each site, how these services differed from what was proposed in the original funding submissions, and what would have happened to the provision of services in the absence of funding from Disability Services. Information from the interviews, the original funding submissions and additional documentation from the service providers was used to describe client services as well as the service delivery models employed. During the interviews with service providers, the program objectives identified were very broad. Given that the intended program outcomes needed to be defined prior to evaluation, program logic workshops were undertaken to clarify program objectives and assist in the development of program theories for the three early intervention services. Data gathered from each of the initial interviews was used to create a single "sample" activity and outcome stream for each agency; this was later used during the workshops to illustrate what a logic model might look like.

2.3. Program logic workshops

For each site information was provided on program logic and its applications and staff were asked to indicate their interest in attending a workshop to develop a logic map for their program. Invitations were forwarded to program managers; however attendance from at least six representatives from each service provider was requested, with the majority of these participants to be direct practice staff. Participation was encouraged by managers, but was not made mandatory. All participants who wished to be involved in the workshops were selected to attend, thereby optimising staff engagement in the program logic exercises. Our purpose was to develop the program logic inductively, from the perspectives of staff who were actually implementing the program. It was stressed that the program logic workshops would be a purely descriptive exercise, and that the research team would not be measuring identified outcomes given that the larger research project in which they were all involved was using common outcome measures which would be used across all service providers.

We chose a layering approach to developing the logic models, identifying resources (inputs), activities (outputs) and three levels of outcome (immediate, intermediate and long term). We also found it useful to identify assumptions (beliefs staff have about the program, the people involved and how the program will work) and external factors that might interact with and influence the program (Taylor-Powell & Henert, 2008, p. 55). We considered a number of different formats, notably "column" formats (with inputs, outputs and outcomes each presented as a block with arrows indicating the direction of flow from inputs, through to long-term outcomes), and a more organic style, as suggested by Owen (2006, p. 206), with each item on the model linked with others by a series of "if" and "then" statements. We chose the latter, for two reasons. First, the strong blocks in the column model seemed to the research team to imply a level of certainty and simplicity that might not sit well with practitioners in the complex field of delivering services to children with disabilities and their families. Second, the members of the research team who had therapy backgrounds instinctively chose the more free-flowing format and expressed that it would be able to take account of the complexities of the work undertaken in this field. The series of "if...then" sequences also highlighted that outputs and outcomes are dependent on inputs (e.g. staff), and that if these inputs are not available the intended outcomes cannot be achieved. This format was in fact readily accepted by participants at all four workshops.

For the program logic component of the project, a one-off, 2-h workshop was conducted at each of the four sites. Workshops were facilitated by the same researchers for consistency. The second author, who was the main facilitator of the workshops, has an extensive knowledge of program evaluation methods and processes, including the program logic approach. The workshops followed a common format, with participants initially given a brief theoretical introduction to program logic. Following this, participants worked in small groups to identify inputs, outputs and two levels of outcomes for the program. We chose two levels at this stage in order to simplify the task, with the intention of teasing out the third level in the large group. At this stage, there was no pre-empting from the research team as to what might be included in each list. We also asked participants to focus on developing as full a list in each category as possible, rather than be constrained by the need to establish linkages across streams. The lists from all the small groups were then collated in a large group session and written on a white-board, with debate encouraged among the group members. It was only after this session that the sample outcome stream for that agency was presented. (At the second CPL workshop in Toowoomba, the draft program logic developed at the first Brisbane workshop was introduced at this point; until then, this group, like the others, had been working only with their own ideas.) For the remainder of each workshop, participants and facilitators worked together to translate the group's lists of resources, activities and outcomes into a draft logic model. All participants contributed to the group discussion, with changes to the research team's sample outcome stream, transfers from the small group lists, linkages between specific inputs, outputs and outcomes and any other additions made based on group consensus. We found the Wisconsin (Taylor-Powell & Henert, 2008) approach of conceptualising immediate, intermediate and long-term outcomes as learning, action and impact, respectively, to be extremely helpful in assisting the participants to differentiate the levels of outcome applicable to their activities. High staff

attendance and active participation in the workshops was indicative of a high level of engagement with staff during the program logic exercises.

Following the workshops, draft logic models were sent to early intervention service delivery managers for dissemination to their work groups, including staff who were unable to attend the workshops. At CPL, feedback on the draft model was also sought from staff in regions that were not represented in the workshops. Thus the verification process involved considerable back and forth of drafts between the various regions and the research team. Our purpose was to attain a consensus that the final model represented the practices and aims of all regional teams, at that time, in a format that was satisfactory to all.

3. Results

3.1. The program logic models

Information gathered during the program logic workshops indicated that while the three early intervention programs were being delivered in a manner consistent with the Early Intervention Initiative guidelines, the broad nature of these policy documents meant that the exact programs delivered varied considerably depending on the context of each service provider. For example, the funding gained from Disability Services allowed SCCTC to continue providing existing services, whereas funding resulted in the creation of new services at CPL and MontroseAccess. A summary of each of the verified program logic models follows and each is presented diagrammatically in Figs. 1–3.

3.1.1. Cerebral Palsy League

The Cerebral Palsy League (CPL) is the largest non-government organisation for people with a physical disability in Queensland. The organisation currently supports more than 3000 people with cerebral palsy and related disabilities.

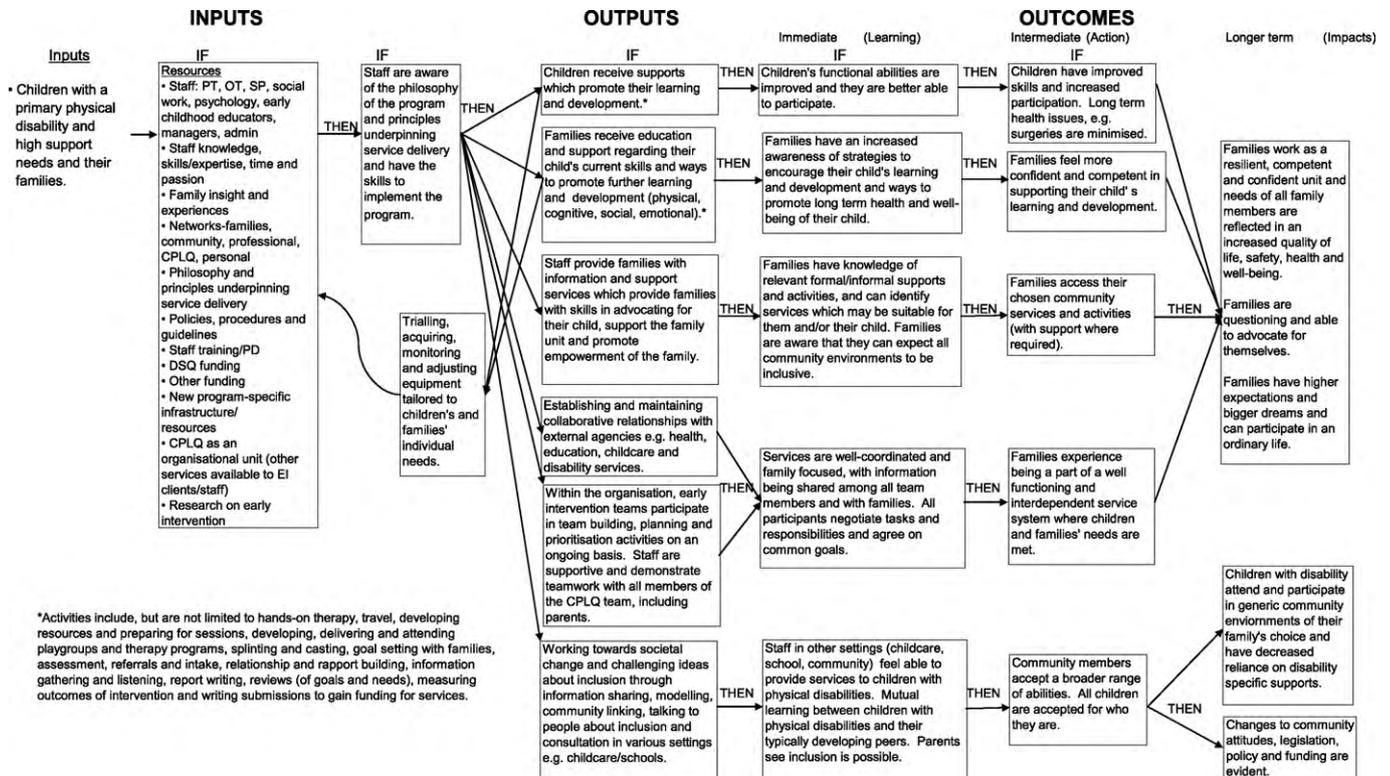


Fig. 1. Cerebral Palsy League of Queensland Early Intervention Program Logic Model.

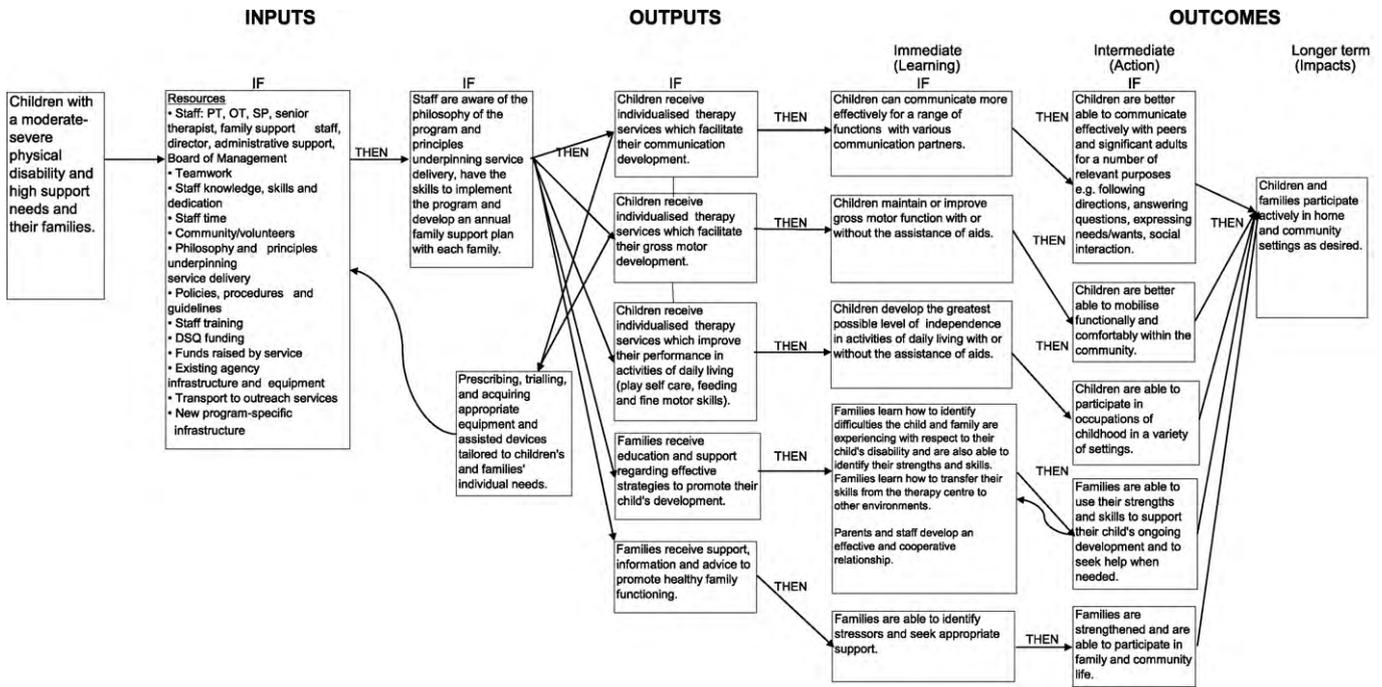


Fig. 2. Sunshine Coast Children's Therapy Centre Early Intervention Program Logic Model.

The mission of CPL is 'to provide services and advocate for people with physical disability to maximise independence and opportunities, promote physical and emotional well being, enhance social and economic participation and support the achievement of a fair and fulfilling life' (Cerebral Palsy League, 2009).

Clients identified as accessing the CPL early intervention program were children with a primary physical disability and

high support needs and their families. Participants at the Brisbane CPL workshop identified inputs as: staff, staff training/professional development, the stated philosophy and principles of the program, policies, procedures and guidelines, Disability Services and other funding, existing organisational and new program-specific infrastructure/equipment. Participants at the Toowoomba workshop took a broader view of inputs, adding family insight and experiences, networks (families, organisational, professional,

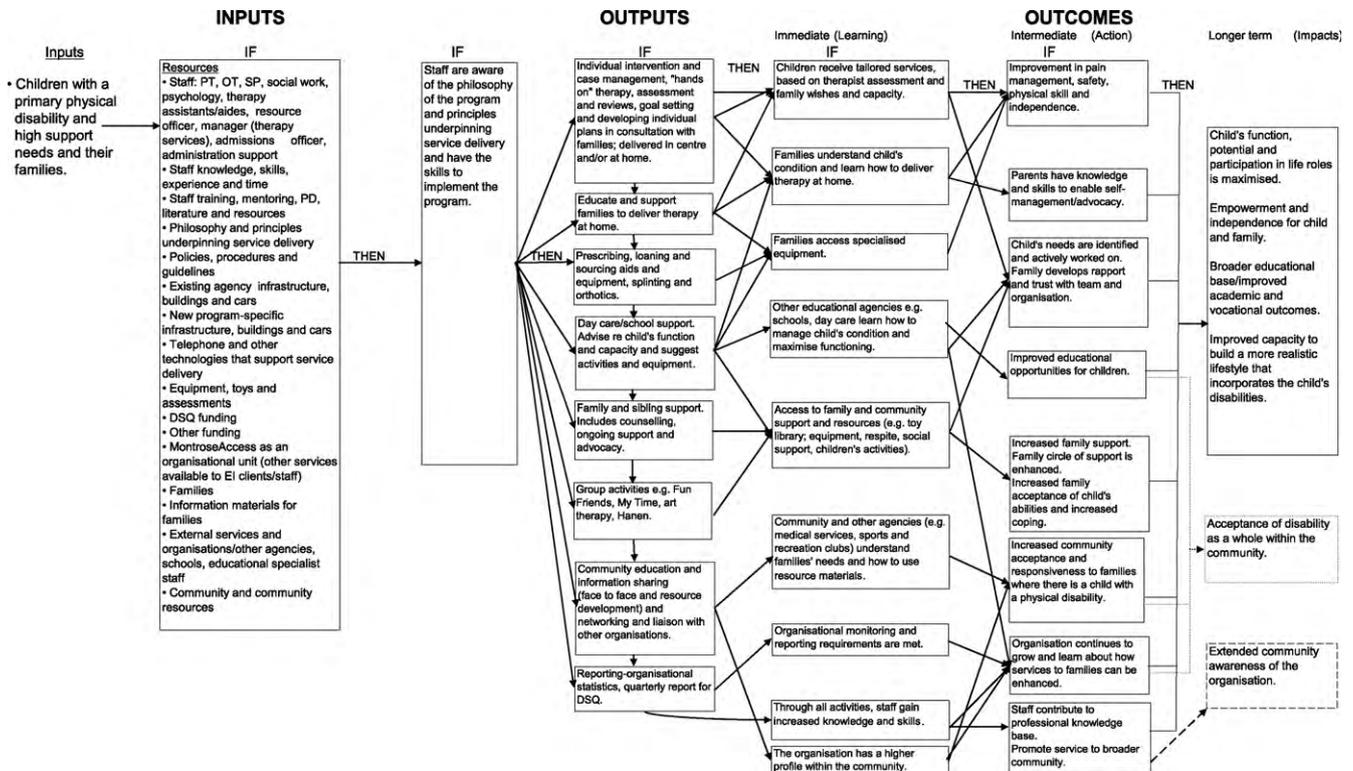


Fig. 3. MontroseAccess Early Intervention Program Logic Model.

community and personal) and existing research/data on early intervention.

Participants at the Brisbane workshop identified five major activity (output) areas: the provision of therapy services to children; education and support for families to be able to provide therapy at home; family support in the form of linking with formal and informal support services and the direct provision of counselling, support and advocacy; the development and maintenance of strong interagency relationships; and team maintenance activities (including staff and parents) such as team building, planning and support. This group rejected the research team's "sample" output (and the attached outcome stream) in relation to developing children's communication capacity, on the basis that, given the agency's multidisciplinary focus, it did not make sense to separate different types of therapy. Consistent with their more expansive view of service delivery, Toowoomba participants added a further activity in relation to challenging existing ideas in the community about inclusion and working towards societal change. Pertinent activities undertaken to achieve this goal included information sharing, modelling, talking to people about inclusion and providing consultation in various settings, e.g. childcare/schools.

There was extensive discussion in relation to equipment; the processes of trialling, acquiring and adjusting equipment tailored to children's and families' individual needs were time-consuming for therapists. Eventually, the group decided to link equipment to both inputs (as a resource) and outputs (as a major activity within the program).

Immediate outcomes were identified in relation to each of the six activity areas. At the intermediate level, the activities (and associated immediate outcomes) related to interagency relationships and intra-team cohesion coalesced into the one intermediate outcome: families experience being part of a well functioning and interdependent service system where children and families' needs are met. The intermediate outcomes then led to two streams of long-term outcomes, though arguably these are interdependent: families maximising their and their child's participation in all levels of activity, to the extent that they wish to, and changes in community attitudes and legislation. As one participant said, her hope was that families would have "bigger dreams". See Fig. 1 for the program logic summary model for CPL.

Program delivery at CPL was based on the assumption that families and children were individuals and that families need to be supported within the context of their specific skills and resources. The relationships developed between staff and families were paramount to achieving this. The success of the program also relied on the assumption that parents had the capacity and desire to be actively involved in therapy and intervention and that the natural environments in which services are delivered were the most optimal environment for supporting children and promoting their development.

3.1.2. Sunshine Coast Children's Therapy Centre

The Sunshine Coast Children's Therapy Centre (SCCTC) provides therapy and family support services to approximately 80 children with intellectual, physical and sensory disabilities and their families who are living in the Sunshine Coast/Gympie region. Children from 0 to 18 years are eligible for services; however priority is given to those under nine years of age. SCCTC's mission is to 'support each child in realising their potential' (Sunshine Coast Children's Therapy Centre, 2008).

Clients in the SCCTC early intervention program were identified as children with a moderate to severe physical disability and high support needs and their families. The list of resources (inputs) generated by the workshop participants included staff, staff training/professional development, the philosophy and principles

of the program, policies, procedures and guidelines, funding from Disability Services, funding from other sources (e.g. internal fundraising), existing organisational and new program-specific infrastructure/equipment (including vehicles used for outreach visits) and volunteers and community members. As with CPL, equipment was a key issue identified by participants and a similar solution was reached, with equipment linked to both inputs and outputs.

Participants identified five activity (output) streams, four of which related to therapy services. Direct therapy for children was grouped by developmental area (communication, gross motor, activities of daily living), thus creating three activity streams. Education/training for families to enable them to promote their child's development constituted another activity. Finally, family support services involved the provision of support, information and advice to promote healthy family functioning. Participants identified immediate and intermediate outcomes in relation to each activity area. They then coalesced the streams into one long-term outcome, for children and families to participate actively in home and community settings as desired. See Fig. 2 for the program logic model for SCCTC.

Assumptions guiding program delivery at the SCCTC included the belief that many children and families would require ongoing services/support and that parents have the capacity to learn how to promote their child's development.

3.1.3. MontroseAccess

MontroseAccess provides therapy, family support, recreation, accommodation and respite services to hundreds of Queensland children and young adults with physical disabilities. MontroseAccess aims to 'provide support services to clients with physical disabilities and their families to assist these clients to achieve their maximum individual potential for participation in the community' (MontroseAccess, 2008).

As for the other agencies, MontroseAccess staff identified their early intervention service client group as children with a primary physical disability and high support needs and their families. They identified their resources (inputs) as: staff and their knowledge, skills, experience and time; staff training/mentoring/professional development; families; the philosophy and principles of the program as well as its policies, procedures and guidelines; Disability Services and other funding; existing organisational and new program-specific infrastructure/equipment; the MontroseAccess organisation (i.e. other services within the organisation available to early intervention clients and staff); information/resources for families; external services/organisations/agencies and community resources; and research on early intervention.

As at CPL, the MontroseAccess teams modified the example logic model which originally depicted outcome streams based on developmental areas. MontroseAccess staff identified eight major activity (output) areas: the provision of therapy and case management services; education and support to enable families to provide therapy at home; group activities such as Hanen and My Time, prescribing, loaning and sourcing aids/equipment/splinting/orthotics, family and sibling support, consultation to other agencies, e.g. day care and schools, community education, information sharing and networking/liaison with other organisations and completion of statistical and reporting activities.

Following this, workshop participants identified immediate and intermediate outcomes in relation to the eight activity areas. The various streams then converged to form a series of longer term outcomes for children and families. With respect to children, the long-term outcome was to ensure that children's function, potential and participation in life roles was maximised and that they experienced improved academic and vocational outcomes. The goal for families was for them to develop realistic lifestyles

that incorporated the child's disabilities but also reflected high expectations. A final longer-term outcome was for both children and families to experience increased empowerment and independence. This goal resulted in the MontroseAccess teams adopting a more consultative approach to support than the other service providers. See Fig. 3 for the program logic model for Montrose.

Assumptions guiding program delivery at MontroseAccess included the belief that many children and families would only require services/support for a discrete time period, e.g. an average of 1–2 years. This assumption in turn guided estimates of the number of children and families Montrose could support at any given time.

3.2. External factors

External factors influencing the programs were identified at the interview stage and clarified during the workshops. A number of common themes emerged from these discussions, namely staffing difficulties (recruitment, retention and experience of staff) and large numbers of referrals for children with severe disabilities and complex and/or high needs requiring significant follow-up. Issues around containing program costs were identified, including costs associated with making generic organisational services available to children and families in the early intervention programs and hidden program costs, e.g. office accommodation, mentoring and support for early intervention staff. CPL identified difficulty finding suitable sites for new, larger offices in high growth areas such as the Gold Coast. MontroseAccess had additionally found it difficult to accurately predict service demand in satellite (outreach) areas, with the result that some such services had been terminated and others commenced in the relatively short time that the early intervention program has been operational.

4. Discussion

The three funded agencies were charged with delivering services congruent with the goals of the Early Intervention Initiative. Services were broadly aimed at enhancing families' capacities to promote their children's development. This was achieved through education regarding strategies to enhance developmental attainments and support in implementing therapy programs at home. Improved participation of children and families in home and community settings was targeted through the provision of therapy services for children (which aimed to improve their functional abilities) and information and support for families regarding strategies for community engagement. All three service agencies funded positions for therapy and family support staff as a means of addressing these goals. Services sought to provide individualised support in collaboration with significant people in the child's life such as their families, relevant service providers and the local community. By providing families with information on their child's condition and assisting them to identify their child's strengths and difficulties, staff aimed to enhance the ability of families to respond to their child's individual needs.

While the early intervention programs shared many commonalities there were also a number of differences in their identified inputs, outputs and outcomes. However, it is acknowledged that logic models depict the theory, rather than the reality of a program (Owen, 2006; Taylor-Powell & Henert, 2008); hence, the models developed may not be a complete representation of the programs as they are delivered.

Program participants identified by the early intervention teams were similar across service providers, except that children and families accessing early intervention services at SCCTC had a moderate–severe physical disability and high support needs,

whereas children and families accessing the other services had high support needs but unspecified disability severity. Within each service there were differences in the types of conditions with which children presented; this was due to historical factors rather than current differences in eligibility criteria.

Identified inputs were similar across providers, although early intervention teams at each of the services differed with respect to the mix of professional staff working on the teams. Across all service providers, teams consisted of physiotherapists, occupational therapists, speech pathologists, social workers, managers and administrative support. Additionally, at SCCTC, teams also included a senior therapist and family support workers, MontroseAccess teams included a psychologist and CPL teams included psychologists and early childhood educators. Due to difficulties with staff recruitment and retention, the funded and actual composition of early intervention teams may differ significantly over time, resulting in further implications for program delivery.

At SCCTC and CPL, equipment was identified as an important issue linked to both inputs and outputs, whereas at MontroseAccess equipment was identified as an activity area (output). All service providers identified outputs related to therapy support (direct therapy for children and education/training for families) and family support. Staff at CPL further identified outputs related to the maintenance of a well coordinated service system (both within and outside the organisation). The CPL Toowoomba based team and MontroseAccess teams also identified additional outputs in relation to providing support and education for day care and school staff, other organisations and the community. At SCCTC, therapy support outputs were grouped by developmental area (communication, gross motor, activities of daily living), whereas staff at CPL and MontroseAccess tended to group issues more broadly (i.e. therapy support was not broken down into developmental areas).

Participation of children and families in home and community settings was a common long-term outcome identified by all early intervention teams. At SCCTC this was seen as the single ultimate goal of the early intervention program, whereas the other service providers also identified other long-term goals. Staff at both CPL and MontroseAccess identified longer term goals in relation to empowerment and either aiming for a reduction in families' reliance on disability specific support services (at CPL) or aiming for discharge from the early intervention program (at MontroseAccess).

These variations in the way the Early Intervention Initiative was being implemented by the different service organisations can be considered in light of contextual variations. These include the model of service delivery adopted, the program's ability to access the infrastructure and resources of the wider organisation, staff mix, location of services and client eligibility criteria.

The three service providers differed considerably with respect to their service delivery approaches. For example, SCCTC offered a largely centre-based service, CPL tended to provide services across a range of settings, and MontroseAccess had the greatest focus on providing services in the community. Another difference in service delivery related to the focus of service on direct therapy or family support. For example, in some offices CPL and MontroseAccess teams tended to focus more on family support and only provide therapy support on an "as needed" basis, whereas all families accessing services through SCCTC received fortnightly therapy appointments unless on the waiting list.

Whether or not services were delivered from a regional office or provided via outreach (home visits) also had implications for service delivery. While all service providers offered both service options within their early intervention programs, of the two state-wide services, CPL operated more from regional offices, whereas

MontroseAccess relied solely on outreach services outside of the Brisbane metropolitan area.

All three service providers have demonstrated that they are innovative organisations with staff that are motivated and committed. While the goals of the Early Intervention Initiative were very broad, the specific goals of each organisation were clear and well articulated. All organisations were nevertheless affected by factors such as funding, resources and the ability to access the infrastructure and facilities of the wider organisation. In addition, recruitment and retention of staff were common difficulties, especially in relation to experienced staff.

5. Conclusion

Engaging early intervention staff in program logic exercises provided a rich way of understanding the manner in which services were being delivered by different organisations through the Early Intervention Initiative for children with physical disabilities and their families. While each of the agencies provided services and identified outcomes that were congruent with the EII goals, staff were able to interpret the broad policy goals in light of their particular organisational context, hence there were both similarities and differences in the means by which they sought to achieve the goals of the initiative. We have described here an inductive process of documenting the program logic of each agency and suggested a number of contextual factors that may contribute to the differences between them.

5.1. Lessons learned

Knowledge of the ways in which individual service providers interpret broad policy initiatives is necessary if we are to make accurate assumptions about program effectiveness and how programs work, understand variations in program delivery and identify essential program components. Policy initiatives also need to be cognisant of contextual variation when examining these initiatives and evaluating their effectiveness. We further suggest that information derived from program logic exercises can also be used to inform government bodies about barriers and facilitators to policy implementation.

A strength of employing program logic to document the goals of these three early intervention services is that it provides a systematic process for identification of “implicit knowledge” about the program which may not be achieved through a simple description of the service. The staged process of asking participants to identify resources (inputs) and then activities (outputs) prior to detailed discussion of outcomes also enhanced this process. For example, the consideration of a more expansive list of inputs and activities at the Toowoomba workshop was reflected throughout the outcome levels; thus participants’ hopes that their clients would have “bigger dreams” were explicitly grounded in day to day practice. Similarly, extensive discussions about equipment and whether it fitted as an input or an output both validated the importance of this time-consuming aspect of service delivery (that is often regarded as merely an adjunct of therapy) and enabled participants to link it explicitly to outcomes.

Further, this approach facilitated the identification of assumptions and external factors which may contribute to possible discrepancies between the program’s stated and observed objectives/outcomes. A limitation of the present study is that program logic exercises were undertaken as a descriptive exercise only, and there was no opportunity to compare stated program objectives with documented outcomes. Ideally this baseline information allows for such an evaluation to occur at a later stage.

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