Table of contents

1. Introduction ........................................................................................................................................ 1
   1.1 Background ................................................................................................................................... 1
   1.2 Scope ............................................................................................................................................ 2
   1.3 Purpose of this report ................................................................................................................... 2

2. Executive Summary ............................................................................................................................ 3

3. Information gathering ........................................................................................................................ 8
   3.1 Literature review ............................................................................................................................ 8
   3.2 Local Area Coordination (LAC) Forums ......................................................................................... 10
   3.3 Consultation with agencies in Western Australia ............................................................................ 11
   3.4 Consultation with agencies interstate and overseas ...................................................................... 14
   3.5 Consideration of available data relevant to people with disabilities who exhibit challenging behaviour .......................................................................................................................... 15

4. Framework for services ....................................................................................................................... 17
   4.1 Vision and principles ...................................................................................................................... 17
   4.2 Theoretical background and model ............................................................................................... 18
   4.3 Structure ....................................................................................................................................... 19
   4.4 Strategies for implementation of the framework .......................................................................... 22
   4.5 Evaluation ..................................................................................................................................... 23

5. Action plan for implementation of the framework ............................................................................. 25

6. Resource implications ........................................................................................................................ 26

7. References ........................................................................................................................................... 27

8. Appendix ............................................................................................................................................ 29
   Literature Review Executive Summary ................................................................................................. 29
1. Introduction

The West Australian Sector Health Check (SHC) on Disability Services in 2007 concluded that “challenging behaviour is a human rights and quality of life issue for individuals, primary carers and families.”

The SHC (2007) also identified that there is “limited capacity of the sector as a whole, with only a few providers having the knowledge and skills to manage challenging behaviour, and that this is compromising:

- the overall capacity of the sector to meet the needs of people with challenging behaviour
- people’s access to respite and accommodation options
- family integrity, with some families needing to exclude the person with the challenging behaviour
- cost effectiveness as costs are higher than would otherwise be necessary if the challenging behaviour was managed effectively”.

Effective management of challenging behaviour has the potential to improve quality of life and reduce the costs associated with support for some people, thereby releasing funding to support more people. The impact of challenging behaviour can be devastating, but effective behaviour management strategies are able to make significant improvement to people’s lives. The development and implementation of effective behaviour management strategies would also be a cost effective investment for the sector, in particular for the accommodation and respite support system.

As a result of the SHC (2007) findings and its recommendation 51, the Disability Services Commission (the Commission) established the current project, with the purpose of making recommendations on the development of a sector-wide strategy to respond to the needs of people with disabilities who sometimes exhibit challenging behaviour, and their families/carers.

The project has built upon significant work that has already been undertaken in this area.

1.1 Background

A project working group was established, comprising the Commission’s Director Accommodation Services Directorate and Director Metropolitan Services Coordination (MSC), the Manager for the MSC Individual and Family Support program, a Project Manager and a Project Officer. The working group has met regularly to provide ongoing feedback and advice on the progress of the project.

The project has gathered information relevant to the planning, development and implementation of a comprehensive and consistent, evidence-based approach to better respond to the needs of people with disabilities who exhibit challenging behaviour. This has been done through investigation of the literature, consultation with the WA disability sector and consultation with interstate and overseas services.

Forums with the Commission’s Local Area Coordinators (LACs) were also held, in order to gain information about the impact of challenging behaviour for individuals and families/carers, as reported by the individuals and families/carers with whom they work.
Individuals and families were purposely not consulted directly, as talking about the impact of challenging behaviour can be difficult and the exercise of doing so would not provide immediate tangible positive outcomes for them. Instead, it was felt that LACs were in a position to provide an overview of the issues families have consistently identified in relation to living with challenging behaviour.

1.2 Scope
The project has been scoped within an ecological framework. It focuses on the role and development of the disability sector, within the context of universal supports and services for individuals and families. All strategies are based on an agreed evidence base within a philosophical framework.

To assist in the initial scoping of the project, a focus group was held which included representation from the disability sector. There was strong support for the intent of the recommendation and the need for the sector to come together to develop collaborative responses around the issue.

As a result of this focus group work, it was agreed that the project would focus on the development of a framework and action plan that included the aims of:

1. establishing a philosophical underpinning for the management of challenging behaviour
2. developing an agreed framework of evidence to support approaches for the management of challenging behaviour
3. mapping the community’s (including universal providers) capacity to support people with challenging behaviour, including the gaps in service provision
4. facilitating planning and coordination of approaches across areas
5. strengthening family capacity
6. identifying the education and training requirements, including staff capacity and competencies.

This report provides an overview of the project work undertaken and recommendations for a framework and action plan, with a detailed description of the framework in section 4 and the action plan in section 5.

1.3 Purpose of this report
The purpose of this report is to make recommendations on a framework and action plan for services provided to people with disabilities who sometimes exhibit challenging behaviour.

The report is intended to inform future planning for the disability sector, in order to improve the coordination and provision of services to people with challenging behaviour.

Significant feedback from agencies has informed the development of this framework. Implementation of the framework will occur with the sector and this report is intended to be the initial building block for future planning.

The action plan emphasises the importance of ongoing sector involvement, with the establishment of a reference group as part of stage 1.
2. Executive summary

This report provides information regarding the Sector Health Check (2007) recommendation 51: That the Commission leads and facilitates sector engagement in the planning, development and implementation of a comprehensive and consistent, evidence based approach to better respond to the needs of people with disabilities who exhibit challenging behaviour.

A proposed framework has been described that focuses on the development of a sector-wide strategy for WA to respond to the needs of people with disabilities who sometimes exhibit challenging behaviour, and the needs of their families/carers and paid support workers.

Recommendations for strategies to implement the framework have been provided with an estimated timeframe and resource implications.

In order to be able to identify what is meant by the term challenging behaviour, the most commonly used definition is Emerson’s (2001), which is “culturally abnormal behaviour(s) of such an intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or result in the person being denied access to, ordinary community facilities”.

Most services consulted as part of this project accept this definition when developing programs and services to address the needs of people whose extreme behaviour creates concern for their families and caregivers. It is recognised that there can be some difficulty in the interpretation of this definition and, in reality, the severity of challenging behaviour is often measured by the impact of the behaviour on the person and others in their environment.

Therefore, this project has focussed on behaviour which seems to have the greatest impact on people with a disability and others in their environment. They include severe aggression and physical harm to others or objects, self harm, inappropriate sexualised behaviour, substance abuse, and behaviour which results in engagement with the Justice system, or has the potential for harm and abuse for the person with a disability.

A significant amount of the literature on challenging behaviour refers to people with intellectual disabilities and/or Autism Spectrum Disorder (ASD). Referrals for the Commission’s services and applications to the Commission’s Combined Applications Process (CAP) suggest that challenging behaviour is strongly related to intellectual disability and/or ASD.

The recommendations in this report are, therefore, likely to be most applicable to people with intellectual disabilities and ASD, although there may also be some relevance for people with other disability types, such as acquired brain injury and sensory and physical disabilities.

It should also be noted that where the cause of the challenging behaviour is considered to be related to a medical condition, mental health issues or degenerative diseases, such as multiple sclerosis, different solutions may be required and other more appropriate supports and services may already be in place.
Positive Behaviour Framework

This report presents a framework and action plan for endorsement by the SHC (2007) Implementation Committee¹. The report is divided into six major sections covering an introduction and background section; executive summary; information gathering section; framework for services section; action plan; and resource implication section.

References and an executive summary of the literature review have been attached.

While section 4 of this report provides a detailed description of the framework as a whole, the diagram below describes the structure that would be required for the framework to be implemented across Western Australia.

Strategies for the implementation of the framework are also described below.

¹ This report was endorsed by the SHC Implementation Committee in November 2008
Positive Behaviour Framework

Proposed structure

Universal Providers

Primary Providers

Tertiary Teams

Behaviour Support Consultation Team

Practice

Evidence

Communication

Practice

Evidence
Positive Behaviour Framework

Behaviour support consultation team
(Team of specialists in psychology, speech pathology, social work, occupational therapy, mental health professional).

Functions
• Management
• Practice development
• Research and policy coordination
• Training
• Restrictive practice coordination

Tertiary teams
A number of tertiary support teams, such as the current Positive Behaviour Team and Behaviour Support and Therapy Team within the Disability Services Commission. Future expansion of the tertiary model will be across the whole of the disability sector (focusing on non-government providers), with the development of further tertiary teams.

Primary service providers
MSC district teams; behaviour support in agencies across sector, eg practice leadership, direct care staff.

Universal service providers
Proactive, preventative parenting services and early intervention, eg Triple P, Stepping Stones, clinic nurses, Child Development Centres, Department of Health, Department of Education and Training.

Strategies for the implementation of the framework
1. The Commission takes the leadership role in the development of a framework of best practice, standards, organisational values and cultural training, to support services for people with disabilities who exhibit challenging behaviour, which engages the whole sector. The framework will be informed by ongoing monitoring and evaluation to ensure dynamic and contemporary evidence-based practice.

2. A Behaviour Support Consultation team is developed to support a centralised, coordinated approach to services. The focus will be on staff training and capacity building, clear practice guidelines, research and evaluation, and interagency collaboration, which facilitates improved planning and coordination of services. The team is responsible for ensuring a whole of systems and community approach, by maintaining and developing networks with other relevant government agencies, community supports and the tertiary education sector.

3. A streamlined continuum of services is developed, which reinforces early intervention strategies and early identification of the likelihood of the development of challenging behaviour. The development of this continuum will involve universal, primary and tertiary approaches to services.

4. Specialist services are available to support this continuum of services, which are adequately funded.
Positive Behaviour Framework

5. Training and qualifications for staff providing specialist services is explored further in order to emphasise the specific needs of intervention for people who exhibit challenging behaviour, eg an accredited post-graduate certificate in Positive Behaviour Support across the sector.

6. A sector-wide workforce planning and development, education and training program is developed, which acknowledges the wealth of accredited training and in-house training currently available in the sector and provides an interface of training options. The plan will need to reflect the range of training needs for direct care staff, supervisors, professional staff and Managers to strengthen skills at all levels. In partnership with key stakeholders, an analysis of current training within the sector will be required. The intended outcome will be a suite of options, targeting the needs of all staff at all levels, provided by qualified ‘educators’. The plan will be embedded in a systematic and ongoing competency-based training approach.

7. Through relevant training, information and education options for families, their direct care and informal support are investigated and developed, such as the ‘Beyond Behaviour Management’ booklet developed by the Autism Association of Western Australia.

8. Allocated funding is identified to enable flexible and timely responses for people who exhibit challenging behaviour. Funding options reflect individual need and the requirements of both initial and longer term supports.

9. Core service information is collated, collaboratively across the whole sector, in order to provide data to model future service design. It is essential that the sector is able to provide ongoing service information to the Commission to ensure that proactive planning occurs. This information will also inform funding and purchasing options for services.

10. In the context of a Positive Behaviour Support approach, it is acknowledged that restrictive practice may be included in behaviour support plans. Therefore, policy is developed to support processes to minimise the use of restrictive practice and ensure that such practice is consistent, transparent and contemporary.

It is essential that appropriate resources are allocated to the development of this framework, in order to provide ‘a comprehensive and consistent, evidence-based approach to responding to the needs of people with disabilities who exhibit challenging behaviour’, as recommended by the SHC (2007).

In order for an effective framework to be developed that meets the needs of people with disabilities who exhibit challenging behaviour, an implementation plan should be developed to determine the significant investment required to implement the model.

An immediate interim investment is required for Stage 1 (see Action Plan).
3. Information gathering

3.1 Literature Review

An extensive literature review was conducted as part of the project to investigate:

- definitions of challenging behaviour
- prevalence of challenging behaviour
- impacts of challenging behaviour
- evidence-based practice and service approaches relevant to challenging behaviour

An Executive Summary of this review is provided as an Appendix, but the findings indicate that:

- A range of definitions have been used in the past to describe challenging behaviour, but the most commonly used and accepted definition currently is that by Emerson (2001): “culturally abnormal behaviour(s) of such an intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or result in the person being denied access to, ordinary community facilities”. It is recognised, however, that there can be some difficulty in the interpretation of this definition, particularly when referring to prevalence figures and when comparing results of studies.

- In the literature, estimates of the prevalence of challenging behaviour in people with an intellectual disability ranges from 2 per cent to 88 per cent, depending upon the study or studies being cited, and a conservative estimate would suggest that at least 15 per cent of people with an intellectual disability have some form of challenging behaviour.

- In fact, Allen et al (2005) state that challenging behaviour is more widespread than caseload reports or available places in specialist teams would suggest, and found that between 10-15 per cent of people with learning disabilities in the UK may demonstrate severe behavioural challenges. Similarly Broadhurst and Mansell (2007) suggest that between 10-15 per cent of people with intellectual disabilities display behaviour that challenges carers and service agencies.

- Lowe, Felce and Blackman (1995) state that regardless of the different estimates of prevalence of challenging behaviour in populations of people with intellectual disabilities, it is sufficiently high to require planning for management in service delivery.

- The impact of challenging behaviour is significant for the person with a disability and those in the person’s environment. The literature describes a range of impacts for the person and their environment, such as:
  - “physical injury; exclusion; abuse and neglect; deprivation; restrictive practices; increased service costs; increased caregiver stress” (Allen et al., 2005; Emerson, 2001)
  - “physical injury, increases in stress, higher rates of emotional and physical health problems and reduced quality of
life” (Allen, Lowe, Moore, & Brophy, 2007) for family carers

- “increased stress; negative emotional reactions” (Snow, Langdon, & Reynolds, 2007); and “physical harm, all of which may result in high rates of absenteeism due to illness and less than effective (and potentially abusive) care practices” (Allen et al., 2007) for care staff.

- For service providers this often leads to increased staff turnover, increased service costs and placement breakdowns.

• Evidence based practice and service approaches relevant to challenging behaviour is described at length in the literature. Service approaches to managing challenging behaviour have included psychopharmacological, operant, humanistic, functional, cognitive-behavioural, multi-systemic therapy, person-centred planning, multi-component strategies, behavioural approaches, applied behaviour analysis and positive behaviour support.

Positive Behaviour Support (PBS) is a model that has evolved from behavioural techniques, including functional analysis and assessment functional models, basing intervention design on the understanding of causal and maintaining factors and person-centred planning, all of which are incorporated into a multi-component intervention.

The theoretical underpinnings for PBS have been firmly established, with extensive support available in the literature for the approach, eg. Carr et al (1999); Emerson (2001); McLean et al (2005); Snell, Voorhees and Chen (2005).

The emerging empirical evidence for the effectiveness of PBS demonstrates acceptability and durability across a range of settings and this approach to challenging behaviour is now the most widely accepted.

How PBS is used in service provision is important for outcomes for people with disabilities. Carr (2007) suggests that organisational management models that support PBS include: effective service delivery focused on interagency collaboration, wraparound services and flexible funding; a trainer of trainers approach to increasing personnel; team building where personnel are organised through structural reforms; staff motivation building to maintain behaviour change; accountability models that ensure delineation of roles, responsibilities and monitoring; and data management systems that facilitate and promote decisions based on evidence.

The literature also suggests that rapport building and skills training for staff in understanding the reasons for behaviour are central to interventions that reduce or eliminate behaviour. Staff capacity in delivering interventions, supervision processes, staff attitudinal change, and follow ups to staff training through the establishment of formal review mechanisms are important components of effective service delivery.

Studies have shown that in-situ workplace training, which clearly presents information, retains sensitivity to the values and attitudes of staff, and demonstrates applicability of methods while allowing opportunities for staff to practice.
and evaluate progress, to be most likely to be effective.

When considering interventions for people living at home with their family, the literature supports the importance of focussing on the family as a whole. Gavidia-Payne and Hudson (2002), in a review of behavioural supports for parents of children with intellectual disabilities and challenging behaviour, suggest the key components of effective support include providing parent training in positive programming and applied behaviour support approaches, adjunctive supports that enable the implementation of programmes and enhance the effect of parent training strategies, ‘behavioural marital therapy’ and problem solving training.

The concept of a tiered approach or continuum of services is also referred to in the literature. For example, Emerson (2001) suggests that a comprehensive and multi-faceted support strategy for people with challenging behaviour should include four overlapping components: prevention, early detection and intervention, practical emotional and technical support (that includes crisis management strategies) and the development of specialised community-based places.

3.2 Local Area Coordination (LAC) Forums

A range of forums was held with LACs to gain information about the impact of challenging behaviour on individuals and families/carers, as reported by the individuals and families/carers with whom they work. Individuals and families were purposefully not consulted directly, as it was felt that they could find the experience of sharing the impact of challenging behaviour difficult to do, particularly as the project was unable to provide immediate tangible positive outcomes for them. Instead, it was felt that LACs are in a good position to provide an overview of the issues families have consistently identified in relation to living with challenging behaviour.

During the forums, LACs reported that families state that challenging behaviour has a significant impact on family life and can result in isolation; depression; family breakdown; financial difficulties and feelings of helplessness, fear and guilt.

Extensive information on issues and suggested strategies were shared during the forums, with the major themes detailed in the following summary:

- the impact of challenging behaviour on family life is not always recognised or understood
- the impact of challenging behaviour on siblings is significant, eg fear, impact on peer relationships
- service interventions should consider the whole family, and recognise the importance of the health and wellbeing of the family in being able to sustain change
- more flexible funding options are needed in order for families to be able to access supports that make a difference, eg home cleaning, rather than traditional respite
- availability and choice of respite options are limited., Flexibility of options would assist, eg Shared Care model
• training and development of competencies of respite staff is needed
• regular education and training for families is needed
• timely access to specialist services with experience is needed.

3.3 Consultation with agencies in Western Australia

In order to address the needs of people with disabilities who exhibit challenging behaviour, services have been provided by a range of government and non-government organisations. A range of strategies, such as direct funding and competitive tendering is used to fund and purchase services on an individual basis and on a service or population basis. Sector design has reflected strategic and analytical approaches to its development, but it is recognised that a range of historical factors and events have lead to an element of fragmentation and inconsistencies in some services.

Current services available in WA include a range of government and non-government options, providing accommodation support, respite support, alternatives to employment and post-school options, which offer a range of individualised and service approaches to supporting people with challenging behaviour.

Specialist services are also available through the Disability Professional Services funded providers, including Therapy Focus, AAWA, Senses, Rocky Bay, Nulsen Haven, the Commission’s district teams, Positive Behaviour Support team, Behaviour Support and Therapy team and the psychology strategy for country WA. These services offer professional specialist support to primary service providers, individuals and their families/carers and direct support staff.

A range of disability service provider agencies providing services in Alternatives To Employment, Post School Options, Respite, Accommodation, Disability Professional Services (DPS) and Intensive Family Support in WA have been consulted in order to gain a picture of how services are provided across the sector and where there may be service gaps.

Information gained from agencies suggests that the sector recognises the importance of the model of Positive Behaviour Support and is contemporary in its approach to innovative strategies and services.

However, while this feedback and further consultation with other agencies interstate has confirmed that services in WA are contemporary and in line with services provided by other States, there has been little development of an overall framework for service development. Agencies identified the importance of a coordinated and consistent approach to providing services for people whose challenging behaviour causes concern, but indicated recognition that this did not occur in WA at this point in time.

Feedback provided by agencies described a range of issues, with reference to current strengths within the system and areas for improvement. While agencies mainly discussed issues relevant to their own situation and experience, several recurrent themes emerged through these discussions:
Early intervention and early identification of challenging behaviour
Agencies talked about the importance of early intervention and preventative approaches to identifying and responding to early signs of challenging behaviour. Some agencies referred to the importance of focusing on the person’s environment in order to prevent situations which result in challenging behaviour.

Whole of family approach when providing services to individuals living in their family home
Agencies providing services to families identified the importance of working with the strengths of the whole family and of exploring the possible barriers to successful change for both the past and the future. Families have reported that problem solving those barriers has enabled greater capacity for them to explore the reasons behind the purpose of the challenging behaviour and to find alternatives.

Systemic approaches
All agencies agreed that a systemic approach to services is needed if intervention is going to be successful. It was acknowledged that a person’s entire environment has an impact on challenging behaviour and that flexible and collaborative intervention approaches across settings and agencies is needed.

Timely, flexible and realistic funding for people who exhibit challenging behaviour
Agencies identified the importance of timely, flexible and realistic funding responses to people who exhibit challenging behaviour. Most agencies described the need for more intensive initial support when a person commences with their service, in order to focus on matching the environment to the person’s needs. This reinforces the importance of a systemic approach to services.

Staff training, recruitment and retention
Several innovative training strategies are already in place across the sector, although there is varied knowledge of what is available. Some agencies have developed a program of internal training options, as well as using external support. A few have also incorporated practice leaders into their system, in order to provide in-situ training and support. The benefits of the Challenging Behaviour Consortium for developing an understanding of best practice service models, principles and quality involved in the provision of services to people with challenging behaviour was discussed by some agencies.

Training supports that have been used by agencies include ‘SMARThinking’; ‘Beyond Behaviour Management’ and the NDS Disability Sector Training Information Resource for Disability Services.

The area of staff training was one of the most consistent themes generated through consultation with agencies.

It was agreed that staff training should have a focus on positive approaches and Active Support. In order to do this, it is essential that staff attitudes, beliefs, motivation, emotional state and values are considered in training, as much as pure skill development, and that any training should be embedded in the system itself, in order to be effective or accepted.

An analysis of current training and education provided across the sector is needed, in order to
be able to consider the development of accredited, evidence-based, whole-sector training in PBS for staff at all levels, which includes Active Support, communication and behaviour and quality assurance mechanisms.

The information gained in this type of analysis should inform the development of a strategic program for education and training across the sector. The aim of such a program, would be to build capacity in the sector for positive approaches to intervention for challenging behaviour and to contribute to workforce development and retention. A variety of approaches and strategies need to be explored, such as TAFE, online training and in-situ training.

Active Support ensures that people with a disability have opportunities to participate in meaningful and rewarding day activities through the use of structured planning and skill development (McVilly, 2002).
Positive Behaviour Framework

Consistent practice across the sector
All agencies referred to the need for positive approaches to intervention. Some felt that more consistency in practice across the sector was required, particularly when several agencies may be involved in a person’s life.

The issues of choice for consumers and capacity of agencies to provide services to people who exhibit challenging behaviour was also raised by a few agencies.

It was suggested that a wide range of choice of services across the sector for consumers is not necessarily supported by a wide range of agencies that have the capacity to provide services to people who exhibit challenging behaviour.

Specialist support
Several agencies talked about the need for different types of specialist support, such as psychology, speech pathology and social work, ranging from direct intervention to a consultative approach. It was recognised that with well trained support staff, a more consultative approach is most useful. Some agencies talked about difficulties in accessing specialist support due to waitlists and limited services.

Agencies emphasised the need for experienced qualified specialist staff, who are able provide support as needed and in a flexible way. For example, a telephone hotline was described as a useful strategy, which the Commission’s Behaviour Support Therapy Team has already successfully put in place for some service providers.

Agencies have tried to access private practitioners, but their experiences so far have been that private practitioners generally do not have relevant experience in providing intervention for people who exhibit challenging behaviour.

3.4 Consultation with agencies interstate and overseas
Communication with interstate services in Victoria, New South Wales (NSW) and Queensland has indicated a trend towards the development of a framework that provides a coordinated, centralised approach to managing service provision using the PBS model. The aim has been to develop a planned and consistent approach to service delivery. This has eventuated in the Centre of Excellence for Behaviour Support and Specialist Response Service in Queensland and the Office of the Senior Practitioner in Victoria and in NSW. These have been developed with an emphasis on research and evaluation, recognising the importance of providing centralised coordination of practice development, training, capacity building and workforce development.

Each State has also focussed on a continuum of service intervention and support, including government provided specialist State-wide and regional teams providing support to community teams and disability sector organisations.

Other examples of a centralised, coordinated approach to service design supporting a continuum of services are the Tizard Centre based at the University of Kent and the Special Projects Team (SPT) in South Wales, in the UK.

The Tizard Centre’s aims are, through research, teaching and consultancy, to:

- learn more about how to support and work with people effectively
Positive Behaviour Framework

• help carers, managers and professionals develop the values, knowledge and skills that enable better services
• help policy makers, planners, managers and practitioners organise and provide better services.

The South Wales SPT mission is “to promote positive behavioural support for children and adults with challenging behaviour through training, service development, research and evaluation.

Its four objectives are:

• to coordinate and further develop existing specialist tertiary services for challenging behaviour
• to develop a range of state of the art demonstration projects at primary and secondary service levels, in conjunction with partner agencies
• to improve significantly front line knowledge and competence in supporting people who challenge via the widespread dissemination of training and good practice at primary and secondary care levels
• to evaluate the impact of interventions and generally improve the knowledge base concerning people with intellectual disabilities and challenging behaviour.

Ongoing communication with these services will be essential as part of the developmental stage of implementation of the framework recommended in this report.

3.5 Consideration of available data relevant to people with a disability who exhibit challenging behaviour

When considering how many people in WA have a diagnosis of intellectual disability or ASD, available data has identified prevalence figures, as well as the number of people accessing services.

According to data collected by the Australian Institute of Health and Welfare during the period 2005-2006, there were 3.56 people with intellectual disabilities per 1000 people in the WA population recorded as accessing services recognised by the third Commonwealth State/Territory Disability Agreement. During the same period, there were 0.96 people with ASD per 1000 people in the WA population accessing these services.

From a prevalence point of view, however, a report from the Australian Advisory Board on Autism Spectrum Disorders (2007), using Centrelink data, estimated a prevalence of autism spectrum disorders across Australia of 62.5 per 10,000 for 6-12 year old children. On average, this means there is one child with an ASD in every 160 children in this age group. This is in line with international data, eg a study in the United States by the Centre for Disease Control and Prevention found a similar but slightly higher prevalence of 1 in 150 children among eight year olds.

Whilst it is important to know the number of people with disabilities who sometimes exhibit challenging behaviour and who are likely to access intervention when planning services, an accurate figure of prevalence of challenging behaviour in people with disabilities has been difficult due to different definitions of challenge, different interpretations of challenging behaviour and different methods of data collection.
Positive Behaviour Framework

There is no consistent data available in WA to suggest how many people with an intellectual disability and/or ASD may exhibit challenging behaviour or access services. However, the following data collected by the Commission provides an estimate of the number of people accessing Commission provided services for support for challenging behaviour:

- Referrals to the Commission’s Disability Professional Services (DPS) specialist services from July 2007 to June 2008 indicate that 217 people living in provided residential accommodation, people living in the community (North Metro suburbs only) and 46 people living in country areas received services during this period.

- Applications to the Combined Application Process (CAP) in 2005/2006, indicated that 451 applications out of a total of 689 were for people with an intellectual disability. Of these 451 applications, 357 (79%) cited challenging behaviour as a reason for the application.

In 2006/2007, 504 applications out of a total of 782 were for people with an intellectual disability. Of these 504 applications, 383 (75%) cited challenging behaviour as a reason for the application.

It is expected that figures for 2007/2008 will reflect similarly high numbers of applications citing challenging behaviour as the reason for application for funding.

The exact number of people with disabilities who are likely to exhibit challenging behaviour and access services within WA is not clear. However, the above data suggests that there is a significant percentage of the population of people with disabilities who may be referred for services to address challenging behaviour. The development and implementation of effective behaviour management strategies would, therefore, be a cost effective investment for the sector, particularly when considering the CAP data.

More robust data collection is needed to identify the need for services to address challenging behaviour in WA. Core service information needs to be collated that is collaboratively undertaken across the whole sector in order to provide data to model future service design. It is essential that the sector is able to provide ongoing service information to the Commission to ensure that proactive planning occurs. This information will also inform funding and purchasing options for services.
4. Framework for services

The agreed scope of this project by the original Focus Group was to develop a framework and action plan that:

1. Establishes a philosophical underpinning for the management of challenging behaviour
2. Develops an agreed model of evidence to support approaches for the management of challenging behaviour
3. Maps the community’s (including universal providers) capacity to support people with challenging behaviour, including the gaps in service provision
4. Facilitates planning and coordination of approaches across areas
5. Strengthens family capacity
6. Identifies the education and training requirements, including staff capacity and competencies.

A proposed framework is described in this section which refers to vision and principles, theoretical background and model, structure, strategies for implementation and evaluation. The action plan is described in section 5.

All elements of this framework are applicable to services across WA, but implementation strategies may need further adaptation for rural and remote areas, to ensure that they effectively meet the needs of people with disabilities. For example, access to specialist services in country areas can be varied, which may lead to the development of creative and innovative options and require more emphasis on working collaboratively with universal service providers.

4.1 Vision and principles

Vision

The vision for this framework is:
“The community has an active role in enhancing the life opportunities and quality of life of people with disabilities whose behaviour causes concern and isolation from everyday activities”.

This framework reflects the Commission’s overarching vision of:
“All people live in welcoming communities which facilitate citizenship, friendship, mutual support and a fair go for everyone”.

Principles underlying framework

All services:

- are based on human rights and subsequently focus on quality of life, citizenship and participation, reflecting person and family centred practice
- reflect an overarching model of PBS, with a focus on comprehensive functional assessment
- are coordinated across the State by a centralised approach
- are based on a continuum of support with a focus on early intervention
- are provided with consideration of the needs of Aboriginal and Torres Strait Islander people with disabilities and their families and carers
are provided with consideration of the needs of individuals, families and carers from culturally and linguistically diverse backgrounds

- seek to maintain the safety and dignity of all individuals and their family/carers and paid carers
- employ the least restrictive approach.

4.2 Theoretical background and model

It is recognised that the most effective model for addressing challenging behaviour exhibited by people with intellectual disabilities and/or ASD is Positive Behaviour Support (PBS). Carr et al (2002) explain that PBS is an empirically-based problem solving approach that has evolved from behavioural techniques, person centred values and the normalisation/inclusion movement.

The theoretical underpinnings for PBS have been firmly established, with extensive support available in the literature for the PBS approach, eg Carr et al (1999), Emerson (2001), McLean et al (2005), and Snell, Voorhees and Chen (2005). Feedback from service providers indicates that this model is considered to be best practice.

The PBS model uses a range of strategies that reinforce a positive approach to intervention. The key features of PBS include systemic, multi-element interventions in a team approach, with a focus on thorough functional analysis that considers communication and sensory difficulties.

Other strategies, such as Family Systems Therapy and Cognitive Behaviour Therapy are also used when required as part of the PBS model.

Because PBS is a systemic approach, which concentrates on quality of life as much as the challenging behaviour, it is applicable across a range of settings and is most effective when implemented in all settings of a person’s life. This means it is applicable to and effective in residential accommodation, respite services, Alternatives to Employment, Post School Options, family homes and community settings.

In 2008, the Australian government ratified the United Nations Convention on the Rights of People with Disabilities. Articles 14 and 15 of the Convention state that countries ratifying the Convention agree to ensure that persons with disabilities enjoy the right to liberty and security and are not deprived of their liberty unlawfully or arbitrarily (Article 14). Countries must protect the physical and mental integrity of persons with disabilities, just as for everyone else (Article 17), guarantee freedom from torture and from cruel, inhuman or degrading treatment or punishment, and prohibit medical or scientific experiments without the consent of the person concerned (Article 15).

It is essential that any approach to the management of challenging behaviour reflects basic human rights, as required by the United Nations Convention. Therefore, the recognition of a person’s basic human rights should be considered to be the fundamental philosophical underpinning to any provided service. This naturally leads to the need for services that focus on quality of life, citizenship and participation within a family-centred and person-centred practice approach.
4.3 Structure
The diagram below describes the structure that would be required for the framework to be implemented across WA.

![Diagram of Positive Behaviour Framework]

- **Universal Providers**
- **Primary Providers**
- **Tertiary Teams**
- **Behaviour Support Consultation Team**
- **Communication**
Behaviour support consultation team

(Team of specialists in psychology, speech pathology, social work, occupational therapy, mental health professional).

Functions

• Management
• Practice development
• Research and policy coordination
• Training
• Restrictive practice coordination

Tertiary teams

A number of tertiary support teams, such as the current Positive Behaviour team and Behaviour Support and Therapy team within the Commission. Future expansion of the tertiary model will be across the whole of the disability sector (focussing on non-government providers), with the development of further tertiary teams.

Primary service providers

MSC district teams; behaviour support in agencies across sector, eg practice leaders, direct care staff.

Universal service providers

Proactive, preventative parenting services and early intervention, eg Triple P, Stepping Stones, Child Development Centres, clinic nurses, Department of Health, Department of Education and Training.

This structure consists of a Behaviour Support Consultation team taking on a centralised leadership role and providing support to a continuum of service provision.

The functions of this team are described below:

Behaviour support consultation team

Functions

Management/leadership functions

• Establish and maintain ongoing management of the team.
• Liaise with all relevant government departments and disability sector organisations in order to establish a consistent approach to service responses.
• In particular, foster partnerships with key stakeholders, such as mental health services, justice services and universal child health services.
• Build partnerships within the sector in order to provide integrated services.
• Liaise with and develop positive working relationships with the relevant professional bodies and tertiary organisations, particularly Universities.

Practice development

• Provide leadership
• Advise on, develop and ensure the maintenance of consistent and best practice service options for people with disabilities.
• Develop standards and continuously improve practice across the sector based on policy development
• Facilitate the establishment, maintenance and ongoing review of a
Positive Behaviour Framework

model of PBS for people with intellectual disabilities and/or autism.

Research, evaluation and policy functions

- Develop a research capacity which engages with the sector in order to monitor and evaluate best practice.
- Provide support to and receive advice from government and non-government disability service providers.
- Establish links with the tertiary education sector to plan and undertake research to inform policy and practice.
- Develop policy for the sector.
- Collect relevant data for sector design.
- Identify gaps in service delivery, where a focus may be needed on interagency specific work, eg Mental Health, Justice.

Training and workforce development functions

- Develop and provide or organise relevant professional development and expert training for care staff, specialists and families.
- Liaise with relevant university faculties and schools to ensure that undergraduate and post-graduate students are introduced to and are well equipped to resource the disability sector.
- Develop accredited, evidence-based, whole-organisation training in PBS for staff at all levels, which includes Active Support, communication and behaviour and quality assurance mechanisms. This training must include in-situ training to be effective.
- Provide ongoing education and training in positive approaches and least restrictive options.

Restrictive practice coordination functions

- Develop policy, guidelines and processes for the use of restrictive practice in Behaviour Support Plans.
- Collect data for monitoring of restrictive practice.

Continuum of services supported by the behaviour support consultation team

Universal services

These services are generally provided universally across a range of government and community agencies as part of early childhood and parenting education.

The aim of these services is to provide early intervention and prevention as part of universal approaches to parenting and education. The possibility of ‘screening’ strategies in order to predict the likelihood of challenging behaviour becoming part of a child’s development may be an option to be developed.

Primary services

These services are provided by both government and disability sector organisations providing support to the individual with a disability and those in their environment, eg family/carer, paid carers and school staff.
The aim of these services is to build capacity within the person and their environment.

**Tertiary services**

These services provide support to primary service providers, paid carers and individuals and families. Current services include the Positive Behaviour team, Behaviour Support and Therapy team and the Country Psychology strategy. The aim of these services is to build capacity both within the primary provider and the person and their environment.

### 4.4 Strategies for the implementation of the framework

1. The Commission takes the leadership role in the development of a framework of best practice, standards and organisational values and cultural training to support services for people with disabilities who exhibit challenging behaviour, which engages the whole sector. The framework will be informed by ongoing monitoring and evaluation to ensure dynamic and contemporary evidence-based practice.

2. A Behaviour Support Consultation team is developed to support a centralised, coordinated approach to services. The focus will be on staff training and capacity building, clear practice guidelines, research and evaluation, and interagency collaboration, which facilitates improved planning and coordination of services. The team is responsible for ensuring a whole of systems and community approach by maintaining and developing networks with other relevant government agencies, community supports and the tertiary education sector.

3. A streamlined continuum of services is developed which reinforces early intervention strategies and early identification of the likelihood of the development of challenging behaviour. The development of this continuum will involve universal, primary and tertiary approaches to services.

4. Specialist services are available to support this continuum of services, which are adequately funded.

5. Training and qualifications for staff providing specialist services is explored further, in order to emphasise the specific needs of intervention for people who exhibit challenging behaviour, eg an accredited post-graduate certificate in Positive Behaviour Support across the sector.

6. A sector-wide workforce planning and development, education and training program is developed that acknowledges the wealth of accredited training and in-house training currently available in the sector, and provides an interface of training options. The plan will need to reflect the range of needs in training for direct care staff, supervisors, professional staff and managers, in order to strengthen skills at all levels. In partnership with all key stakeholders, an analysis of current training within the sector will be required. The intended outcome will be a suite of
options aimed at targeting the needs of all staff at all levels, provided by qualified educators. The plan will be embedded in a systematic and ongoing competency-based training approach.

7. Relevant training, information and education options for families, their direct care and informal support are investigated and developed, such as the ‘Beyond Behaviour Management’ booklet developed by the Autism Association of Western Australia.

8. Allocated funding is identified to enable flexible and timely responses for people who exhibit challenging behaviour. Funding options reflect individual need and the requirements of both initial and longer term supports.

9. Core service information is collated, which is collaboratively undertaken across the whole sector, in order to provide data to model future service design. It is essential that the sector is able to provide ongoing service information to the Commission to ensure that proactive planning occurs. This information will also inform funding and purchasing options for services.

10. In the context of a Positive Behaviour Support approach, it is acknowledged that restrictive practice may be included in behaviour support plans. Therefore, policy is developed to support processes to minimise the use of restrictive practice and ensure that such practice is consistent, transparent and contemporary.

4.5 Evaluation

Sector wide evaluation and research strategies, including partnerships with Universities, will be developed in order to model future service design and contribute to evidence-based practice.

The literature review revealed that there has been extensive evaluation and review internationally on models of practice for addressing the needs of people with challenging behaviour of concern. A number of evaluation studies that reflect the Western Australian context will, however, be important to inform future direction from the perspective of government policy, the disability sector and the general community.

Evaluation needs to address the short, medium and longer term issues, and should include an evaluation of outcomes at the individual, family and service level. Both value for money and efficacy should be evaluated at all levels. Ideally three stages of evaluation are necessary:

- short term (6-12 months)
- medium term (2 – 3 years)
- long term (5 years plus)

Short term evaluation would focus on considering the outcomes for the individual and family over the period of their engagement with the service/intervention. Quality of life, inclusion and participation would be the major factors to consider. In addition, the capacity of the service to meet the agreed goals of its involvement (for example, the family’s access to respite provision) would be included. Single case study design would be one method of evaluation for short term projects, although broader service-level evaluation should also be considered.
Medium term studies would address the longer term impact of training and development initiatives on service related questions, such as access to services for people with challenging behaviour, staff recruitment and retention, and service-level outcomes in line with the Commission’s Quality Management framework. Follow up on the longer term outcomes for individuals and their families, including their quality of life, would provide useful data to inform policy and funding for the future. Comparative studies that include consideration of the costs of a challenging behaviour strategy versus current ad hoc responses would assist in informing future direction for intervention.

Western Australia is ideally placed to take advantage of opportunities to undertake longitudinal studies of the longer term impact of a Challenging Behaviour framework. Consideration of the impact of the framework and practice on the need for Out of Home care for people, for example, will include both financial impact and quality of life consideration.

As a major strategy, collaborative partnerships with non-government agencies and universities will be required. Partnerships provide the vehicle by which funding applications through bodies such as Healthways and the Australian Research Council can be facilitated. Universities need partnerships with the non-government sector and government agencies to ensure their research topics remain relevant to industry, and to maximise the research funding that is available. In addition, partnerships with universities can be useful in attracting graduates in the sector (recruitment and retention), and raising the profile of the needs of people with disabilities with the general public and the universities themselves. This will increase interest in the need for more research into ‘best practice’ to meet the needs of people with challenging behaviour of concern, and as such increase the knowledge and evidence base for the sector, leading to ongoing service improvement.

Research design, evaluation questions and models, as well as the resources required to undertake good evaluation, are issues that would require further development, in partnership with the disability and the university sectors.

The Commission’s Quality Management Framework will also be an important component of the strategy.
Positive Behaviour Framework

5. Action plan for implementation of framework

It is recommended that a staged approach be employed for the implementation of the framework.

Stage 1

This stage would require the recruitment of the Behaviour Support Consultation team, comprised of a Manager and five team members drawn from professional backgrounds, including speech pathology, psychology, social work, occupational therapy, and mental health professional groups such as Learning Development nurse or Mental Health nurse. The initial role of this team during the developmental stage would be to engage with the sector to further develop the framework and implement the recommended strategies described earlier. A reference group with representation from across the sector will be formed as an essential part of stage 1.

Investment in stage 1 would result in:

- service mapping to gain an as accurate as possible picture of all those people known with an intellectual disability and ASD who exhibit challenging behaviour, and their current placements and service needs
- identification of target groups for initial focus (e.g. anecdotal information and information in the literature supports the need to focus on young males who have an ASD, with or without a diagnosis of intellectual disability, between the ages of ten and eighteen years in order to reduce out of home placements)
- establishment of contacts with key stakeholders, including universities, universal service providers, disability sector
- initiation of an analysis of current training within the sector
- development of a communication strategy.

Stage 2

This stage is largely dependent on the work of Stage 1, but is likely to involve strategies including:

- focus on target group(s) identified in implementation stage
- recruitment of staff in tertiary and primary services to support intervention for target group(s)
- development of a training and education strategy
- development of partnerships with key stakeholders identified in stage 1
- development of documentation to support policy, standards and best practice
- development of evaluation and research strategies.

Stage 3

This stage will depend on outcomes from the previous stages, but will implement all of the recommended strategies for implementation of the framework in section 4.4 and the evaluation strategies in 4.5. Full recruitment to tertiary and primary services will be required.
6. Resource implications

It is essential that additional resources are allocated to the development of this recommended framework for Western Australia, in order to provide ‘a comprehensive and consistent, evidence-based approach, to better respond to the needs of people with disabilities who exhibit challenging behaviour, as recommended by the SHC (2007).

In order for an effective framework to be developed in WA that meets the needs of people with disabilities who exhibit challenging behaviour, an implementation plan should be developed to determine the significant investment required to implement the model.

An immediate interim investment is required for Stage 1.

Based on all feedback received and research to date, the risk of recurrent funding not being committed to the implementation of this framework will perpetuate the historical fragmented and inconsistent approach to service design and delivery.

A strategic approach is needed in order to better redress the needs of people with disabilities who exhibit challenging behaviour, and the needs of their families/carers and paid support workers.
7. References


8. Appendix

Literature Review

Executive Summary

Purpose
The purpose of this paper is to inform the development of a sector strategy following the Disability Services Sector Health Check (2007) Report recommendation 51 “That the Commission leads and facilitates sector engagement in the planning, development and implementation of a comprehensive and consistent, evidence-based approach to better respond to the needs of people with disabilities who exhibit challenging behaviour”.

Structure
This paper is in five major sections, subdivided as required, with relevant study reviews included in each section.

Definitions of challenging behaviour
There have been many terms used in the past to describe the unusual behaviour frequently shown by people with severe intellectual disabilities. Over the last decade the term ‘challenging behaviour’ has largely replaced these related terms. Challenging behaviour can include physical aggression, destructiveness, self-injury, stereotyped mannerisms, overactivity, bizarre mannerisms or speech, breath holding, non-compliance, running away, disturbed sleep patterns, pica (the eating of non-nutritive or inappropriate substances), inappropriate social conduct such as persistent screaming, inappropriate sexual conduct, regurgitation of food and smearing of faeces, among others, yet broad definitions often utilised are aggression, property destruction and self-injury. The Emerson et al (2001) definition of challenging behaviour has been widely used in the literature and describes challenging behaviour as “culturally abnormal behaviour(s) of such an intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or result in the person being denied access to, ordinary community facilities” (p. 16).

In terms of this paper, it is proposed that challenging behaviour be defined as: Behaviour that challenges services, staff, families and members of society in meeting the needs of the individual with intellectual disability, due to risks of danger to the individual and others (both physical and emotional); behaviour that confronts belief systems and attitudes; and behaviour that thereby impacts on the quality of life of the individual and those with whom they have contact.

Causes of challenging behaviour
Causes of challenging behaviour include developmental delay, communication difficulties, biological/neurological causes, deficits in emotional understandings, family adjustment and the quality of family environment, life events (both positive and negative), psychiatric disorders and operant conditioning.

Prevalence
The presence of challenging behaviour increases as IQ decreases, while certain syndromes show propensity for specific challenging behaviour. Challenging behaviour is more likely to be displayed in people who have: hearing and vision impairments, difficulty with speech, poor social skills, mental health problems, disturbed sleep, and who have severe intellectual disabilities combined with significant mobility impairment. In Australia in 1998, 0.3 per cent of children under the age of 15 reported autism and related conditions. Many individuals
with autism also have a learning disability. Children with autism are particularly at risk for the development of challenging behaviour and people with acquired brain injury frequently display challenging behaviour.

Children with an intellectual disability are 2-3 times more likely to demonstrate challenging behaviour, and the prevalence of severe challenging behaviour in people with intellectual disabilities has been variously estimated from 2 per cent to as high as 88 per cent. In 1998, 2.7 per cent of Australians had an intellectual disabling condition, with 1.6 per cent of the total population having a profound intellectual disability. Based on these figures, a conservative estimate would suggest that at least 15 per cent of these people will have some form of challenging behaviour that requires planning for management in service delivery.

Impacts on individuals and agencies
There is a range of negative outcomes for people with intellectual disabilities and challenging behaviour that includes social deprivation, physical injury, exclusion, abuse and neglect, restrictive practices, increased caregiver stress, increased staff turnover and placement breakdowns, reduction in dignity, reduced access to social and health services, and quality of life impacts for the individual and those in contact with them. Further, they are at risk of being avoided by staff, having their needs neglected, and having their behaviour either ignored or responded to negatively or punitively. Care staff report strong negative emotional reactions, such as sadness, fear, helplessness, disgust, anger and despair in response to challenging episodes. Impacts on carers can include physical injury, stress, emotional and physical health problems, and negative emotional reactions, all of which may result in high rates of absenteeism and less than effective care practices.

Agencies involved in the purchase or provision of services can face significant difficulties in dealing with people with challenging behaviour. Service characteristics identified as being associated with placement breakdown include inadequate specialist support, client access to an advocate, service support for clients to express their feelings and support from residents. Also, there is the degree of restrictiveness of the setting; location of the challenging behaviour occurrence; smaller size setting; low resident engagement in activities; low staff numbers; poor inter and intra organisational communication; ineffective use of resources; public policy; and staff numbers, competence, stress and fatigue. Factors that contribute to a lack of access to behavioural support include poor management procedures, lack of organisational efficiency commitment and leadership, inefficient care environments, conflicts between service ideologies, conflicts between personal and practice beliefs, lack of understanding and knowledge, and insufficient resources.

Service management variables, such as the use of procedural guidelines, training and professional advice, and the extent of support for staff, will impact on the success of placements for people with intellectual disabilities and challenging behaviour.

Challenging behaviour can be exacerbated by: staff responses, individual staff views, the characteristics of the employing organisation and the capacity of the staff to implement interventions. Rapport building and skills training of staff in understanding the operations of
behaviour is central to interventions that reduce or eliminate behaviour. Capacity of direct care delivery of interventions, supervision processes, staff attitudinal change and adjuncts to staff training through the establishment of formal review mechanisms are important components of effective direct care delivery. Studies have shown in-situ workplace training that clearly presents information, retains sensitivity to the values and attitudes of staff, demonstrates applicability of methods while allowing opportunities for staff to practice and evaluate progress, combined with ongoing management attention, to be most likely to be effective.

Models, approaches and service models

Approaches to managing challenging behaviour have included psychopharmacological operant, humanistic, functional, cognitive-behavioural, and multi-systemic therapy; person-centred planning, multi-component strategies, behavioural approaches applied behaviour analysis and positive behaviour support. Positive Behaviour Support (PBS) is a model that has evolved from behavioural techniques and applied behaviour analysis (which views behaviour that is challenging as arising through operant conditioning), functional models basing intervention design on the understanding of causal and maintaining factors and utilising functional analysis (hypothesis testing of the motivation behind a behaviour) and functional assessment (which does not test hypotheses with experimental manipulation), and person-centred planning, all of which are incorporated into a multi-component intervention. The key identified components of PBS are: assessment-based interventions; reduction of punishment approaches; inclusion of all relevant stakeholders; use of multi-component interventions; a long term-focus; prevention through education, skill building, environmental redesign, enhanced opportunities for choice, staff development, resource allocation, provision of incentives, systems change; improved quality of life involving robust and significant person-centred outcomes for the individual, their family and other stakeholders; ecological and social validity and contextual fit.

PBS has consistently been found to be effective in reducing challenging behaviour from baseline levels. Specifically, interventions based on functional assessments are more likely to result in reductions in challenging behaviour. The magnitude of outcome success is greater when typical intervention agents implement the intervention and procedures involving systems change increase the likelihood that interventions will be successful. PBS has also been found to increase service user skills.

Peripatetic (travelling), multi-disciplinary teams have traditionally been utilised to provide intensive, individually-tailored specialist support. However, due to the prevalence of challenging behaviour in the target population, specialist teams can only offer support to the small subset that demonstrates severely challenging behaviour. Staff training will improve access to interventions for people with challenging behaviour. Using PBS principles, staff/student training has been associated with increases in knowledge, changes in attributions and emotional responses. Person-focused training (an aspect of PBS) was found to be cost effective in comparison to ongoing specialist support, provide better service coverage, be an effective model to equip staff to design effective behavioural support plans associated with significant reductions in the frequency of
challenging behaviour, reduce management difficulty and behaviour severity, and to have changes maintained six months after implementation. Active Support Training (a train the trainer apprenticeship model) has also been found to be an effective method of provision of support for service users.

Conclusions
Factors associated with higher frequency of implementation of evidence-based practice include decentralised management, staff collaboration in decision making, positive staff attitudes towards an intervention, adequate staff skills, adequate training time, support of colleagues, and incentives such as financial bonuses or vacations. However, challenges regarding the implementation of interventions include poor adherence to treatment protocols; personnel lack of communication, training or motivation; cost of implementing a practice, or organisational barriers existing to new practices. These factors can mean that current practice does not embody the principles of evidence-based, best practice in incorporating behavioural support into treatment plans. Further, despite the extensive empirical evidence of effectiveness, only a small percentage of those with challenging behaviour will have a written, behaviourally-oriented, treatment plan.

Organisational management models pertinent to PBS include effective service delivery focused on interagency collaboration, wraparound services and flexible funding; a trainer of trainers approach to increase personnel; team building, where personnel are organised through structural reforms; staff motivation-building to maintain behaviour change; accountability models that ensure delineation of roles, responsibilities and monitoring; and data management systems that facilitate and promote decisions based on evidence.

The research literature demonstrates that, contrary to key PBS aims, across setting assessments and interventions were rare, functional analysis and subsequent interventions were usually in hospital or inpatient settings, there was little use of inclusive collaboration with typical intervention agents (ie parents or teachers) in assessment design or implementation, with researchers most often the primary participants in assessment and intervention, ecological and social validity and contextual fit were not reflected, and there was little focus on skills replacement, parent/teacher skill training, team building, lifestyle change, improved quality of life, or system redesign.

PBS, even with demonstrated efficacy, is only received by a small percentage of this group of service users, many of whom are treated with medications. Factors operating against the implementation of PBS include lack of staff training, labour requirements, lack of fit between plans, abilities and resources of intervention agents and settings; and prejudice against the use of planned and structured approaches in the human services.
Recommendations
Recommendations from key authors include:

- An approach that incorporates behavioural, biological/medical and quality of life understanding of people with disabilities
- Widespread and consistent implementation of positive behavioural supports
- Clearly defined interventions that leave little room for staff interpretation
- Broadening of functional assessments to include analysis of establishing operations, physiological variables and rule-governed behaviour
- More research into the reliability and validity of assessment tools such as informant reports, experimental techniques and the ability of interventions to be applied across settings, users, and forms of challenging behaviour
- The provisions of intensive, preventative interventions as soon as challenging behaviour begins to emerge
- The development of higher-volume, low-cost strategies for PBS training, with a system wide-focus. In order for widespread adoption of positive behavioural supports to occur, it is important that behavioural concepts are communicated in order to shape policy formulation and implementation
- Key stakeholders must be identified and alliances built between groups.

Information regarding the efficacy of behavioural approaches must be transmitted in terminology that is understood by each group, and that addresses key concerns of each group

- Answers are needed to questions of what proportions of people with a particular challenging behaviour are likely to benefit from a particular intervention, what social and economic benefits are there for reductions in challenging behaviour, and what resources are required to provide behavioural supports to people with challenging behaviour?

- There needs to be a solid bedrock of service framework that informs the internal management of community services in organisational behaviour management

- Infrastructure needs to focus on pre-service issues such as university courses in PBS, in-service development and organisational change

- A set of standards should be developed for procedural integrity and quality control, while incorporating the knowledge bases of other disciplines and sciences into the field of PBS

- Interventions should include strategies to ‘support the supporters’ such as access to skilled advice, skill development opportunities, pre-service and in-service training, regular team meetings, mentor availability, rostering and leave arrangements, respite opportunities and effective crisis support strategies.