

Attentional Problems in Children

DIAGNOSIS AND MANAGEMENT OF
ATTENTION DEFICIT HYPERACTIVITY
DISORDER (ADHD) AND ASSOCIATED
DISORDERS



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Ministerial Foreword

Attention deficit hyperactivity disorder (ADHD) is a behavioural syndrome in which symptoms of hyperactivity and/or inattention negatively effect a person's social, academic and/or occupational functioning. There are strong and diverse views in the community over ADHD, its prevalence, and the use of stimulant based medication to treat the disorder.

The prescription of stimulant-based medication is controversial as it often involves young children and the rate of prescription has increased significantly in recent years. The number of prescriptions dispensed for Dexamphetamine Sulphate in Western Australia is around four times higher per head of population than the Australian average.

The causes of ADHD are essentially unknown. Continued medical research is required, but current evidence suggests that many factors, including genetic and environmental are involved. Australian studies estimate prevalence rates in school-aged children ranging from 2 to 6 percent. Most studies indicate that there is a higher incidence of ADHD in boys than in girls.

Many of the broad range of symptoms and behaviours that comprise ADHD may occur from time to time in all children. The difference for those diagnosed with ADHD is that these symptoms and behaviours occur very frequently and interfere with the child's social and academic development. There is evidence to suggest that children whose treatment for ADHD is inadequate or delayed may become heavy users of mental health, juvenile justice, special education and welfare services in their adolescence and into adulthood. Research also suggests that there may be an association between substance abuse in adolescence and adulthood, and untreated ADHD.

Individual management plans should be developed that meet the needs of children diagnosed with ADHD and their families. These plans should address the use of medication where appropriate, behaviour management, family counselling and support, educational management and management of specific developmental issues. Associated problems such as learning difficulties, peer relationships, low self-esteem, family dysfunction and comorbid conditions should also be addressed as they relate to the child's system of care.

There is a need to ensure more effective monitoring of the use of psychostimulant medication to safeguard children prescribed with these medications. More effective monitoring will also result in better data collection to aid and inform research of the disorder.

The aim of this policy is to improve the health and life outcomes for Western Australian children who have behavioural and learning problems that are thought to be due to ADHD or who might be predisposed to developing this disorder.

Bob Kucera APM MLA
MINISTER FOR HEALTH



Executive Summary

ADHD is the most commonly diagnosed childhood developmental disorder in Western Australia. In the past decade, the number of children in Western Australia diagnosed with this problem has increased significantly.

This policy outlines key strategies to improve outcomes for Western Australian children diagnosed with ADHD and associated disorders. The service needs of adults diagnosed with ADHD will be considered at a later time as they are different to those of children.

Key strategies include:

- Enhancing the system of care through:
 - developing health promotion and illness prevention responses;
 - negotiating the roles and responsibilities of services central to the care of children with ADHD and associated disorders, to ensure services are working compatibly and without duplication;
 - developing a comprehensive range of services, preferably located at the regional level;
 - ensuring services are accessible; and
 - developing interagency mechanisms to provide seamless service delivery.
- Providing better services through the continuing development of more standardised, evidence based assessment and treatment practices, and the development of high quality services.
- Encouraging research and evaluation to increase the understanding of the aetiology of ADHD, to improve assessment and treatment responses and to improve the quality of service provision.
- Undertaking more effective monitoring with respect to the use of psychostimulant medication to safeguard children and young people prescribed with these medications.

This final strategy will incorporate a regulatory system that will result in:

- The removal of the existing *en bloc* authorisation, which currently allows authorised specialists to prescribe stimulants without individual patient authorisation.
- The review and strengthening of the Health Department Stimulant Treatment Guidelines to provide more direction on the use of specific diagnostic criteria and to encourage the use of behavioural assessments from a range of sources.
- The introduction of a patient notification system which will reinforce the need for specialist prescribers to comply with the revised diagnostic and treatment guidelines and will allow monitoring of diagnostic and prescribing patterns and the collection of the relevant demographic data.

- The establishment of an assessment panel convened by the Department of Health to consider applications from clinicians to prescribe stimulants to patients whose clinical needs differ from those addressed by the revised Stimulant Treatment Guidelines. This function was previously carried out by the Department's Stimulants Committee.
- An audit of the treatment approaches and clinical outcomes of those children prescribed stimulants for ADHD. This will be possible 18-24 months after the patient notification system commences. A Clinical Advisory Committee will be established to assist with the process of audit and analysis of outcomes.

ADHD Policy Reference Group

The ADHD Policy Reference Group was established as an expert committee to provide direction and advice to the Mental Health Division in the development of this policy.

Chairperson

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Committee Members

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Part 1 – Policy Statement

1.1 Introduction

The purpose of this policy is to improve the health and life outcomes for Western Australian children who have behavioural and learning problems that are thought to be due to Attention Deficit Hyperactivity Disorder (ADHD) or who might be predisposed to developing this disorder. ADHD is the most commonly diagnosed childhood developmental disorder in Western Australia. In the past decade, the number of children in Western Australia diagnosed with this problem has increased significantly.

Determining the prevalence of this disorder is difficult and estimates vary widely as a function of the diagnostic criteria used, the population sampled and whether ADHD without hyperactivity is included. Australian studies estimate prevalence rates of ADHD in school-aged children ranging from 2 to 6 percent. Over 4.2 percent of Western Australian children under 18 years are being prescribed stimulant medication with most of these young people being treated for ADHD. Although further research needs to be done, these figures provide some indication of the prevalence of the diagnosis of this disorder in the community.

ADHD is a behavioural syndrome in which symptoms of hyperactivity and/or inattention negatively effect a person's social, academic and/or occupational functioning. The cost of ADHD to the community in both social and economic terms is high. Children diagnosed with ADHD often have pronounced difficulties and impairment across multiple settings - at home, at school and with peers. There are often resulting long-term adverse effects on later academic, vocational, socio-emotional and psychiatric outcomes.

Families who have children diagnosed with ADHD can experience increased levels of parental frustration, marital discord and divorce. The direct cost of medical care can be substantial and represents a serious burden for the families. It is estimated that 70 percent of children diagnosed with ADHD will continue to exhibit symptoms of this disorder through to adolescence¹. A number of these children will retain symptoms of the disorder into adulthood.

At a community level, children diagnosed with ADHD can require a disproportionate share of resources and attention from school, health services, the criminal justice system and other social services agencies.

Conversely, children diagnosed with ADHD who are receiving effective treatment and support can live full and successful lives. There is much that can be done to reduce the risk these young people face and also to reduce the impact of the disorder and associated problems where they emerge.

It is essential that the families of children diagnosed with ADHD, or exhibiting symptoms of ADHD, have access to appropriate and effective services and support.

This policy outlines strategies to enhance the system of care for children diagnosed with ADHD and associated disorders within the context of the current child and adolescent health,

mental health and education services. The system of care encourages early identification of children with symptoms of ADHD, timely and comprehensive assessment, appropriate multimodal treatment options and integrated management of treatment. For those children who have persistent and severe problems, services should provide appropriate and accessible assessment, treatment and on-going support.

1.2 Policy Context

This policy does not seek to make an exhaustive statement about the framework to deal with health and education issues associated with ADHD, and as such must be understood in the context of other Government policies in the Departments of Health and Education. Some of these relevant policy documents such as the ICD-10 classification of ADHD and the Department of Education's Administration of Medication Policy and Procedures are included in the Appendices of this document.

This policy document has been informed by a number of reports and consultations specifically focusing on ADHD. These include:

- *The National Health and Medical Research Council (NHMRC) Report on Attention Deficit Hyperactivity Disorder (1997)*ⁱⁱ.
- *The Report of the Technical Working Party on Attention Deficit Disorder to the Cabinet Sub Committee (1997)*ⁱⁱⁱ.
- *Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder Consensus Statement (USA) (1998)*^{iv}.
- *Report of the International Panel on Attention Deficit Hyperactivity Disorder to the Mental Health Division of Western Australia (1999)*^v.
- *Standing Committee on Constitutional Affairs in Relation to Petition Regarding Attention Deficit Hyperactivity Disorder (1999)*^{vi}.
- *National Institute of Mental Health Collaborative Treatment Study of Children with Attention Deficit Hyperactivity Disorder (MTA)*^{vii}.



1.3 Attentional Disorders and ADHD

Not every child who is more active and energetic than the average has ADHD. Many are simply very active children whose activity fits within the normal range for their developmental age. Other emotional, psychiatric, learning and developmental disorders also have associated attentional problems and conditions. This includes disorders and problems ranging from anxiety and depression to drug abuse, post traumatic stress, attachment disorder, reading difficulties, hearing and sight impairments, child abuse and Tourette's Syndrome. Only a percentage of the children presenting with attentional problems will have a resulting diagnosis of ADHD.

Core clinical symptoms for ADHD include a developmentally inappropriate level of attention and concentration, developmentally inappropriate levels of activity, distractibility, low frustration tolerance and impulsivity. Diagnostic criteria set down in ICD-10 (refer to Appendix One) and DSM-IV are almost identical and require that some hyperactivity-impulsivity or inattention needs to have been present before age 7 years and some impairment from the symptoms needs to be present in two or more settings. There must be clear impairment in social, academic or occupational functioning before a diagnosis of ADHD can be made.

The core clinical symptoms common to ADHD are central to mastery of the major developmental tasks of childhood. Therefore many children diagnosed with ADHD tend to perform poorly at school, are often disorganised and the impairment of cognitive functions is common. Specific delays in motor and language development are disproportionately frequent and these young people can have problems forming and maintaining relationships with parents, classmates, peers and teachers.

There is growing evidence that there is a genetic predisposition for ADHD. The development of this condition is the outcome of the interplay of this genetic predisposition and environmental influences.

Diagnosis and treatment of ADHD can be further complicated by the fact that ADHD is, in many cases, comorbid with other conditions including oppositional defiant disorder, learning disabilities, depression, anxiety, post traumatic stress disorder and conduct disorder. Recent research is indicating an association between substance abuse in adolescence and adulthood and untreated ADHD. Appropriate treatment in childhood including stimulant medication may reduce the risk of substance abuse in adolescence and adulthood.



1.4 The Client Group

The focus of this policy is primarily on children and adolescents up to the age of 18 years who have been diagnosed with ADHD, have symptoms of ADHD or are predisposed to developing ADHD. However, the boundaries between childhood, adolescence and adulthood are not solely determined by age. Developmentally, some young people over 18 years will be more appropriately served in a system of care for children and young people rather than one established for adults. As such there needs to be flexible consideration with respect to young people aged up to 25 years. The transition to adulthood for young people who have ADHD requires close cooperation between child and adult services.

The treatment and management of children diagnosed with ADHD has a strong interrelationship with normal growth and development and needs to occur in a different context to that of adults diagnosed with ADHD. Consideration of the service needs of adults diagnosed with ADHD will not be addressed by this policy.

1.5 Principles

- Children with symptoms of ADHD and their families require access to health and educational professionals who are able to undertake or advise on appropriate assessment and management of the symptoms, regardless of whether the final diagnosis is ADHD or some other behavioural, developmental or learning problem.
- Children diagnosed with ADHD and their families need to have access to a comprehensive array of services that address their individual physical, emotional, social, cultural and educational needs.
- A multi-disciplinary approach is usually required in the assessment, treatment and management of ADHD.
- More intense, complex and costly services should be prioritised to those children and families with the greatest need.
- Services should be accessible and recognise and respond to cultural and family diversity.
- Services should be population based, regionally planned and predominantly delivered in the community (preferably close to or in the family home).
- Treatment should be provided in the least restrictive settings that are clinically and socially appropriate.
- Clear and measurable standards of care should be developed that are based on clinical guidelines to ensure the provision of mental health care in a timely, effective, efficient and high quality manner to achieve optimal outcomes for children and their families.



- An intersectoral system of care should be developed to promote integrated service delivery.
- Services should be accountable through monitoring, quality improvement and evaluation.

1.6 Objective

To develop an effective and high standard system of care for children who demonstrate symptoms of ADHD and associated disorders that will:

- prevent, where possible, the progression of the symptoms of ADHD and associated disorders in children by way of ameliorating contributing environmental factors by appropriate early intervention and support;
- reduce the onset, severity, duration and recurrence of the symptoms of ADHD and associated disorders through early identification and intervention; and
- effectively treat, support and maintain continuing care for children diagnosed with ADHD and associated disorders to ensure optimum quality of life for themselves and their families.



1.7 Defining the System of Care for Children Diagnosed with ADHD

There are already an extensive number of educational, health and specialist mental health agencies providing services for children. It is within this framework of service delivery that a system of care for children diagnosed with ADHD will be developed.

Part 2 – Strategic Directions

2.1 Introduction

The objectives outlined in this policy will be progressed by the implementation of a number of key strategic directions. These include:

- enhancing the system of care;
- providing better services;
- monitoring care for better outcomes; and
- research and evaluation.

2.2 Enhancing the System of Care

It is important that children and the families of children who are diagnosed with, or are thought to have ADHD or associated disorders, have access to a range of services and treatments that meet their individual needs. This should occur within an integrated system of care consisting of services and interagency mechanisms that support clients over time, across a comprehensive array of health, education and social services and span all levels of intensity of care.

The roles and responsibilities of services central to supporting children diagnosed with ADHD need to be clarified. Formal referral pathways and interagency coordination mechanisms need to be developed. Accessibility of services needs to be enhanced and there is a need to identify where additional services or resources will be required to reinforce the current service delivery framework.

The following sub-strategies will be implemented to develop an effective and comprehensive system of care for children diagnosed with ADHD and associated disorders.



It is important that children and the families of children who are diagnosed with, or are thought to have ADHD or associated disorders have access to a range of services that meet their individual needs

2.2.1 Developing a Health Promotion and Illness Prevention Base

It is important that promotion and prevention strategies underpin the system of care developed for children diagnosed with ADHD and associated disorders. There is growing evidence that prevention and early intervention programs can be effective in reducing the onset of the symptoms of ADHD in childhood or reducing the severity of the condition^{vi}.

There is a strong National and State commitment to developing mental health and wellbeing promotion and prevention strategies. The Australian Health Ministers endorsed the Second National Mental Health Plan 1998-2003 in July 1998. This provides a five-year strategic agenda and plan of action for mental health promotion and prevention. Consistent with the National Plan, the Western Australian Department of Health has developed the Mental Health Promotion and Illness Prevention Policy^{vii}. The policy is a joint project between Mental Health, Public Health and the Office of Aboriginal Health. While this will have a whole of population focus, a significant component will be targeting children and young people.

The Mental Health Promotion and Illness Prevention policy primarily aims to:

- reduce the incidence and prevalence of mental disorders; and
- promote the mental wellbeing of Western Australians.

This will be achieved by:

- increasing understanding and knowledge of mental health and mental ill health, and the importance of maintaining mental health within environments and settings;
- increasing understanding of the mental health benefits of creating diverse, inclusive and tolerant environments and settings;
- improving the range, quality, effectiveness and reach of strategies that promote mental health among the Western Australian population;
- improving the evidence base for interventions aimed at promoting mental health and preventing mental illness; and
- increasing partnerships to foster strong mental health promotion and illness prevention activity across Western Australia.

Other key prevention and promotion strategies include *Making a Difference*, a system wide plan for promoting mental health and wellbeing in schools and developing teachers' skills in this area and *Building Blocks*, a Western Australian Government interagency strategy to support parents of children under 2 years of age.



2.2.2 Defining Roles and Responsibilities

While there are many individuals and agencies involved within the system of care for children diagnosed with ADHD, several of these have more central roles. These include parents and caregivers, schools, paediatric services and specialist mental health services for children and young people.

2.2.2.1 Role of Parents or Primary Care Givers

In most instances it will be the parents or primary care giver that will be responsible for the primary management and treatment decisions affecting children diagnosed with ADHD. For school aged children, it will be within the family and school environments where most of the day-to-day management of ADHD will occur and where the burden of care will fall. Parents or primary care givers therefore need to be given access to and educated about the range of treatments and services available so they can make *informed choices* about their children's system of care.

To assist parents or primary care givers undertake their role effectively, they need access to information about the disorder and its symptoms, its long term prognosis, what is required for a comprehensive assessment and the range of treatments available for the condition based on the complexity and persistence of their child's condition.

Parents or primary care givers will need access to the appropriate services that can meet the individual needs of the child diagnosed with or exhibiting symptoms of ADHD. There is also a need to ensure parents or primary care givers have access to a range of support services including parenting programs, respite care and behavioural management workshops.

Importantly, there needs to be good quality liaison between the parents or primary care givers, schools and other secondary caregivers and clinicians.

As the children mature, they will increasingly need to make decisions about the management of their own condition and will need to be able to access appropriate information and support to undertake this role.

2.2.2.2 Role of Childcare Services

These services are well placed to advise on age appropriate developmental tasks and attentional problems. Staff in these services may also be responsible for day-to-day management of children diagnosed with ADHD and therefore need appropriate support and training to undertake this role. They may also need to participate in the administration of medication for children when directed and authorised by their parents to do so in accordance with the *Child Care Regulations 1988*^{*}.

Suggested roles for childcare personnel include:

- interaction with parents or primary care givers to share information about a child's behaviour and development;



- interaction with parents or primary care givers and other relevant professionals in the day-to-day management of children diagnosed with ADHD while at the childcare service; and
- assistance with administration of medication where directed and authorised in accordance with the *Child Care Regulations 1988*.

2.2.2.3 Role of Schools

As children spend a significant proportion of time in the school environment, schools can play a key role in assisting parents and clinicians identify and intervene in attentional and associated developmental problems. ***It is not the role of education professionals to determine a medical diagnosis of, or treatment for ADHD, but to be aware of developmental problems and share information about a child's behaviour and development.*** When a student is diagnosed with ADHD it will alert the teachers to the need to implement appropriate teaching and behaviour management strategies. ***The diagnosis of ADHD and prescription of medication where appropriate does not replace the need for effective and inclusive teaching.***

Recommended strategies for schools include:

Identification

Schools implement strategies that promote inclusive learning environments, monitor individual student progress and work with parents or primary care givers to identify those students who may be at educational risk.

Suggested strategies include:

- observing and monitoring student behaviour and progress;
- educational assessment; and
- referring information and reports.

Collaborative management

When concerns arise that levels of inattentiveness, impulsivity and/or overactivity are of high frequency and intensity and differ widely from peers or interfere with learning and relationships, the teacher is required to discuss these concerns with parents or primary care givers and may seek more specialised support. Western Australian Government Schools may access District Support Teams who will provide an educational assessment and may recommend referral to relevant professionals or agencies.

Suggested strategies include:

- nominating a case manager;
- working with parents or primary care givers and key stakeholders such as teachers, school administrators and student support staff, to develop collaborative management plans; and
- assisting allied professionals as required.



Educational Planning

School staff have the opportunity to observe each student's social, emotional, physical and academic development on a regular basis. Teachers are well qualified to make informed judgements about developmentally appropriate learning behaviours and appropriate educational programs.

Suggested strategies include:

- participating in professional development and training;
- designing appropriate educational accommodations;
- collaboratively developing and implementing individual education plans;
- assisting students to develop strategies and self management skills to deal with difficulties they may be experiencing; and
- assisting parents or primary care givers through case management to support their students in managing their learning programs.

Information systems

Addressing the needs of school-aged students diagnosed with ADHD is a shared responsibility that requires collaborative and coordinated services and support across the home, school and community setting. Quality information systems need to be maintained and appropriate educational information needs to be communicated to parents and allied professionals

Suggested strategies include;

- coordinating student admission, medical and management records;
- ensuring procedures are in place to support student transition;
- supporting links to interagency and allied professional information systems; and
- ensuring appropriate stakeholder confidentiality and security of information.

Medication

Children diagnosed with ADHD may need to take medication during school hours. This requirement must be included on each student's medical record and management plan. *The Education Department Administration of Medication Policy and Procedures* indicates that government schools are obliged to comply with reasonable requests for assistance in the administration of medication.

When the prescribed medication dose is varied, teachers may be asked to provide feedback regarding student performance and behaviours.



2.2.2.4 Role of General Practitioners

General Practitioners (GPs) are in the local community, regularly involved in mental health promotion and illness prevention and have access to all family members. GPs are often the first professionals the family approach when their children are demonstrating symptoms of ADHD and associated disorders.

The GP is in a position to gather information and refer to services while providing a link to the family. They are in a strong position to screen children and families who may present with ADHD symptoms and also to provide case management for many of the families whose children have ADHD.

2.2.2.5 Role of Paediatric Services

Paediatric service providers comprise of professionals who relate to others through a network. These providers have a role in:

- providing clinical assessment, treatment and management services;
- undertaking liaison, consultation and advocacy roles with parents, families and service providers;
- participating in multi-disciplinary teams working with children who have more complex or severe problems; and
- working with other agencies in a consultation and liaison role to ensure well established formal pathways are developed that progress a child seamlessly through the system of care in the identification, assessment, treatment and ongoing management of ADHD.

2.2.2.6 Role of Specialist Mental Health Services for Children and Young People

*Infancy to Young Adulthood: A Mental Health Policy for Western Australia*⁶ outlines a number of roles for specialist mental health services for children and young people. It is envisaged that specialist mental health services will undertake these roles with respect to service responses to children diagnosed with ADHD or exhibiting symptoms indicating ADHD. These include:

- taking a lead role in the development of multidisciplinary treatment services for children diagnosed with ADHD;
- undertaking clinical practice, including assessment, of the more severe, complex and persistent cases of ADHD;
- providing treatment and case management of the most severe, complex and persistent cases; and
- providing secondary consultation, education, training and support of other professionals working with children who have been diagnosed with ADHD and associated disorders.

2.2.2.7 Role of Juvenile Justice

There is growing recognition that untreated attentional problems are also a risk factor for offending behaviour. It is important that young people in the juvenile justice system have access to appropriate assessment and treatment options. There needs to be a recognition that children diagnosed with ADHD within the juvenile justice system are likely to have more severe ADHD, generally comorbid with other conditions. They can also be persistent offenders whose service needs are complex. It is likely that repeat offending behaviour will continue if underpinning health conditions are not assessed and treated appropriately.

This policy supports the development of protocols between the Ministry of Justice, mental health services and other relevant agencies, to ensure that young people with mental health disorders (including ADHD) are identified and receive assessment and appropriate treatment. Intensive psychiatric treatment programs developed as part of a comprehensive range of specialist mental health services for children, will need to be available and accessible to young people within the juvenile justice system.

2.2.3 Developing a Comprehensive Range of Services

The system of care for children thought to have, or diagnosed with ADHD, must develop within the context of existing education, health and specialist mental health services for children and young people.

In the past, there has been variability in service responses to the growing demand for assessment and treatment of children diagnosed with ADHD. It is important that services are accessible for this purpose and consistent in their response.

The majority of children diagnosed with ADHD can be effectively assessed, treated and managed by community based paediatric services both in the private and public sectors. A smaller number will need to access community based specialist child and adolescent mental health services and child development centres.

Through the implementation of *Infancy to Young Adulthood: A Mental Health Policy for Western Australia*^x specialist mental health services for children and young people are changing the way they work. It is a policy priority to work with children and young people with severe mental health problems.

Specialist mental health services for children and young people need to be organised in such a way to ensure pathways exist for the diagnosis, treatment and management of consumers with complex, severe and persistent ADHD symptoms.

2.2.4 Improved Access to Services

Good access to services requires adequate resourcing together with mechanisms and practices that ensure an effective use of service. Clear delineation of service delivery roles linked with community education will ensure better and more appropriate service usage and

professional education. As well, formal consultative links between service providers will facilitate more appropriate referrals.

As part of a broader service delivery framework for children and young people, regional planning needs to ensure services are located in child and family friendly settings. Accessibility will be improved if services that are collocated with other child and youth serving agencies have an outreach capacity and are located on public transport routes.

Referral pathways need to be flexible, simple and inclusive and based on formally developed intake guidelines. Where children and young people are not accepted for referral and assessment, the reasons should be communicated clearly and alternative service options identified.

When young people turn 18, they are required to access adult services. Formally negotiated pathways will need to be developed to enable these young people a seamless transition to adult services and access to continued appropriate assessment and treatment.

2.2.5 Regional Planning and Integrated Service Delivery

There must be a coordination of services for children diagnosed with ADHD to ensure services are accessible, flexible and responsive to local needs and allow children and their families to stay in familiar settings close to their social networks.

Through this policy, there is a strong intersectoral commitment to collaborative case management, shared care and service provision. Regional health services need to work cooperatively with schools and other child and youth services to identify local systems of care and to formalise appropriate referral strategies.

Integrated service delivery between regional paediatric and specialist child and adolescent mental health services is central to this process. Initiatives can include:

- joint specialist teams;
- collocation of services;
- secondary consultation and support; and
- shared care.

2.3 Providing Better Services

The availability of services alone is not enough to ensure children diagnosed with ADHD receive the treatment and support that will assist their development and safeguard their interests. Services must be of sufficiently high quality to achieve the desired outcomes.

Despite progress in assessment, diagnosis and treatment of ADHD, this disorder and its treatment have remained controversial. Some of the controversy is philosophically based with

professionals having different views as to what represents best practice. Of more concern is the existing variability, and in a small number of cases, inadequacies in practice responses to ADHD.

There is a need for standardised, quality clinical practice with respect to the assessment, treatment and management of ADHD in children and young people, to reduce the current variance in practice and to ensure better outcomes for consumers.

The following sub-strategies need to be implemented to improve the quality of service delivery to children diagnosed with ADHD.

Children thought to show symptoms of ADHD should generally be identified in primary settings



2.3.1 Community Based Information, Education and Training

There is significant misinformation and poor understanding within the community about ADHD. With the growing prevalence of children diagnosed with ADHD, it is important for consumers, primary care workers and others to have access to good information and advice about the condition, its diagnosis and management. Information about the system of care (the services and their roles) also needs to be readily available.

A range of information sheets will be developed for this purpose to be available in strategic locations as printed material and on the Internet.

This information needs to be supplemented by specialist child and adolescent mental health services, paediatric services and schools participating in information forums, training, seminars and other information and education strategies targeting parents or primary care givers, general practitioners, staff and other child and youth services.

2.3.2 Early Identification and Screening

It is important to establish processes that ensure children who are diagnosed with ADHD, or who have symptoms indicative of ADHD or associated disorders, are identified as early as possible. The mean age of onset is between 3 and 4 years^{xi} and it is generally recognised symptoms need to be present before 7 years of age to be diagnosed as ADHD^{xii}. However, it is also recognised that identification may occur during adolescent or adulthood. Children thought to show symptoms of ADHD should generally be identified in primary settings such as school, home, childcare, primary health services and other community based services.



Prior to referral for specialist assessment, children with symptoms associated with ADHD should be screened within these primary settings by appropriately skilled staff. These staff need information, training and support to identify attentional disorders and be able to distinguish ADHD from other developmental concerns. Specialist mental health and paediatric professionals need to support and train identified staff in primary services and assist them to develop their skills, information and knowledge base in this area.

After first level screening, children with indicators of ADHD should be referred to specialist services for a comprehensive assessment in accordance with agreed referral processes and protocols.

2.3.3 Assessment and Diagnosis

It is the right of all children with indications of ADHD or associated disorders to have access to comprehensive and timely assessment. Assessment of ADHD is complex and requires specialist skills. Criticism of current practices include the inconsistent use of standardised diagnostic criteria, limited use of standardised rating scales and failure to assess across settings, for example, obtaining feedback from both home, school and GP's. Concern has been expressed that there is sometimes a failure to evaluate all aspects of functioning where the child is having difficulty. Associated with this can be the absence of careful evaluation for comorbidity or failure to eliminate other conditions as the primary cause of the child's behaviour.

Also of concern is that the diagnosis of ADHD may be applied inappropriately to preschool children without due consideration of the normal variations seen in their development and temperament.

It is important to establish processes that ensure children and young people who have ADHD, or who have symptoms indicative of ADHD or associated disorders, are identified as early as possible



The diagnosis and treatment of ADHD should occur only after a comprehensive assessment has been undertaken. Service providers including paediatricians, child psychiatrists and psychologists in the private or public sectors can assess the majority of children. If the case is complex, a more comprehensive psychosocial assessment may be required from specialist multidisciplinary services. This type of assessment will require the input of a range of professionals working as a team, to evaluate various functional areas where problems may be occurring.

In recognition of the importance and complexity of a comprehensive assessment of ADHD, a comprehensive assessment framework relevant to Western Australia will be developed. This framework will be useful to guide clinicians when assessing children suspected of having ADHD. It will be used for obtaining systematic information from different settings that will address all aspects of functioning where the child is having problems and will assist in gauging treatment responses across a range of settings. This approach should enable a more accurate assessment of the child's treatment and support needs.

2.3.4 Treatment and Management

There is no single cure or treatment for ADHD. Multiple aetiological factors and the range of possible treatments make management complex. Modes of treatment can include the use of stimulant medication, behaviour management, family counselling and support, educational management and management of specific developmental issues and comorbidities. The management of the symptoms of ADHD without drug therapy should be considered and the range of treatment options discussed with the child and their family.

Concern has been expressed about the lack of systematic procedures for evaluating a child's response to treatment and being certain that treatment is actually targeting different aspects of functioning where a child is having difficulties. In some instances comorbid conditions are not being treated.

Some children will not respond to medication. It is important to reassess the diagnosis and provide appropriate alternative management.

Important questions remain unanswered concerning the conditions under which different sub-groups of children, for example, children diagnosed with anxiety or conduct disorder and with ADHD are likely to benefit from particular treatments.

The use of stimulant medication as the first line of treatment needs to be undertaken cautiously. The decision to place a child on this type of medication can result in a regime of daily medication for the child that may need to be continued for a significant period of time, sometimes well into adulthood. At a minimum, multi-modal treatment is required to obtain the most effective outcome at the lowest possible dose and it is important to encourage the child to develop internalising strategies to manage the negative effects of this disorder.

Professional colleges and bodies play a significant role in managing ongoing clinical practice standards within their professions in relation to ADHD. These bodies should be encouraged to develop appropriate clinical guidelines. The Royal Australian and New Zealand College of Psychiatrists and the Royal Australasian College of Physicians (Paediatrics and Child Health Division) are in the process of developing joint guidelines related to the assessment, treatment and management of ADHD. The Australian Psychological Society has already developed guidelines for this disorder.

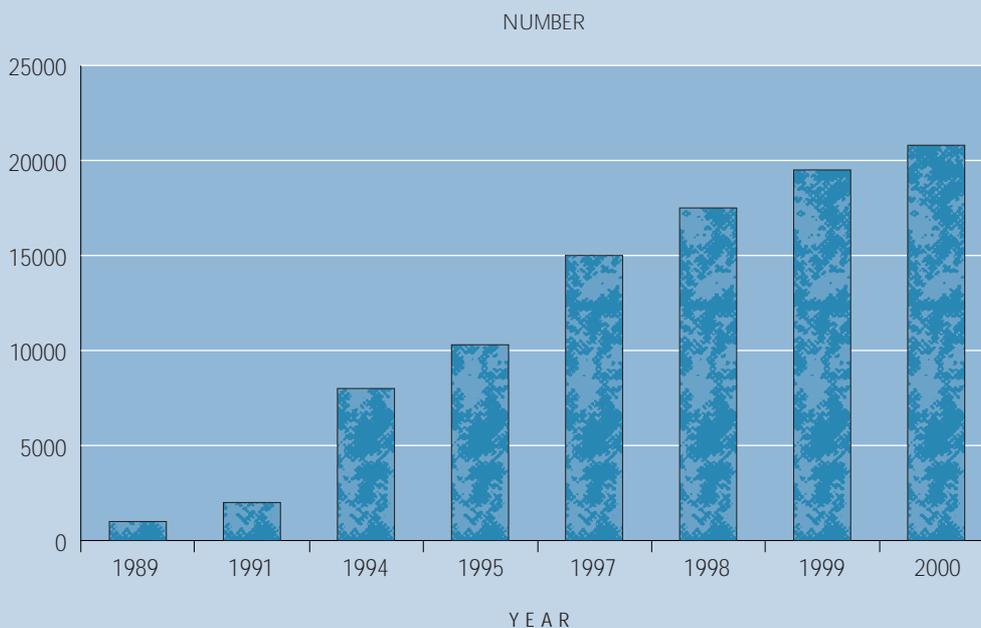
2.3.5 Stimulant Medication

Like all drugs, psycho stimulant drugs are potentially dangerous if misused. The National Drugs of Dependence Monitoring System began in 1970 following public concern about the increasing use of narcotics and other drugs of dependence in Australia during the late 1960's. It was generally considered that significant quantities of drugs illicitly consumed in Australia came from licit supplies diverted to the illegal trade. In January 1971, this monitoring system was expanded to include amphetamine, dexamphetamine, methylamphetamine, phenmetrazine and methylphenidate.

Concerns have been raised about the use of psychostimulant medication specifically in Western Australia.

As outlined in the table below, over the past decade there has been a rapid growth in the prescribing of stimulant medication for the treatment of ADHD. In 1989, 880 people were prescribed stimulant medication. By 2000 this had risen to 20648 people. It is estimated that between 85 to 90 percent of these people are children between the ages of 4 and 17 years or 4.2 to 4.5 percent of the child population in this age range.

FIGURE TWO: WESTERN AUSTRALIAN PATIENTS ON STIMULANTS



Source: MODDS DATABASE 2001

A 1995 study^{xiii} found that the level of stimulant prescribing in Western Australia was nearly double that of New South Wales and even more when compared with prescribing for children in Victoria.

It is unclear whether Western Australia is inappropriately diagnosing and over prescribing stimulant medication or whether the other states are under diagnosing and under prescribing.

Concerns vary, but include the over assignment of the ADHD diagnosis, the variance in dosage regimes and evidence that some children are being prescribed very high dosages of stimulant medication. Children under 4 years are being prescribed stimulant medication with little knowledge about how this will impact on the early or later years of development.

The issue of poly-pharmacy is also of concern where children are being prescribed a range of drugs, in some instances at very high levels. The monitoring of treatment outcomes is variable, with some children receiving no monitoring after being prescribed stimulant medication. Concern is also expressed for the lack of use of other therapies.

As well as the need to address issues associated with assessment, multimodal treatment and appropriate management of ADHD, there will be considerable benefits if a more orderly approach to psychopharmacologic intervention is adopted. A more standardised approach will increase the safety of the children and young people involved and will provide data that will enable the monitoring of stimulant medication treatment outcomes.

With respect to variable dosage regimes, current guidelines provided by the Department of Health only provide minimal guidance as follows:

Patients should be commenced on a low dose that is titrated according to response and should not usually exceed:

Dexamphetamine (5 mg tablets)	1.0 mg/kg/day
Methylphenidate (10 mg tablets)	2.0 mg/kg/day

The Report of the International Panel on Attention Deficit Hyperactivity Disorder^v recommends medication algorithms relevant to Western Australia. Essentially they provide step-by-step medication decision trees. While there is some question about the appropriateness of the algorithms recommended in the report, the concept of medication algorithms is thought to be sound. Available research information and clinical experience will be used to further develop the algorithms recommended in the report specifically to be relevant and appropriate for Western Australian clinicians. This approach should also assist to reduce inappropriately high dosage levels and dangerous polypharmacy.

A more rigorous data collection process will also be implemented to ensure the safety of each child prescribed stimulant medication and also to determine over time, the outcomes of treatment.

There is also considerable debate surrounding the type of stimulant medication to be used to treat children diagnosed with ADHD. Two psychostimulant drugs are prescribed in Western

Australia to treat children diagnosed with ADHD - dexamphetamine and methylphenidate. Dexamphetamine is a cheaper drug than methylphenidate, whether or not prescribed under the Pharmaceutical Benefits Scheme. There are no convincing general differences between the two drugs for the treatment of ADHD other than evidence that dexamphetamine is longer acting. The Department of Health therefore recommends that if medication is thought to be required for treatment of the symptoms of ADHD, dexamphetamine should be considered as the medication of first choice. The Director General of Health or their delegate must have this recommendation clearly in mind when making a decision related to provision of drug treatment for ADHD.

2.3.6 Professional Training and Development

With the expanding knowledge base about the complexity of ADHD and associated disorders, there is a need for ongoing training and development.

Professionals and centres involved in the multimodal management of ADHD, have a responsibility to assist in community and professional development by personal contact, arranging seminars, lectures, media information and professional scientific updates.

In addition, childcare services, schools, paediatric services and specialist mental health services need to recognise the prevalence of ADHD and ensure that within these systems staff are adequately trained to respond to the symptoms of this disorder as a mainstream responsibility.

Paediatric services, schools and specialist mental health services for children and young people will provide resources for the professional development of their staff to ensure a coordinated and informed approach to children diagnosed with ADHD.

2.4 Monitoring Care for Better Outcomes

Currently the monitoring of care for children diagnosed with ADHD is limited to the monitoring of the prescribing of stimulant medication. Stimulant medication cannot be prescribed without authority under the Poisons Act. Regulations require that medical practitioners have prior authorisation of the The Director General of Health before prescribing oral methylphenidate and dexamphetamine. The exception to this situation is when paediatricians, paediatric neurologists and child psychiatrists undertake therapeutic trials of up to 30 days.

Currently, provided treatment is within the criteria described in the relevant guidelines, certain specialists have been issued with *en bloc* authorisations. These authorisations do not require specialists

A more rigorous data collection process will be implemented to ensure the safety of each child prescribed stimulant medication



to make individual applications to the Department Of Health to prescribe stimulant medication for their patients. General practitioners who share the care of a patient with ADHD are also authorised to prescribe for that patient on the application of the specialist.

There are concerns held about the appropriateness of assessment and treatment practices, which can be investigated by an enhanced system of monitoring of clinical management practices. In turn, this monitoring information can be used to guide best practice, professional development and research.

It is proposed that a new stimulants management system be established to enhance the clinical management of children with ADHD according to best practice guidelines. The two major elements of such a management system are a regulatory component and a monitoring component. The proposed new system would require:

- The review and strengthening of the Health Department Stimulant Treatment Guidelines, to ensure they provide more direction on the use of specific diagnostic criteria and to encourage the use of behavioural assessments from a range of sources.
- The introduction of a patient notification system, which will reinforce the need for specialist prescribers to comply with the diagnostic and treatment guidelines and will allow monitoring of diagnostic and prescribing patterns.
- The removal of the existing *en bloc* authorisation which currently allows prescribing specialists to prescribe stimulants once they have managed at least 20 patients with ADHD.
- The establishment of an assessment panel convened by the Department of Health to consider applications from clinicians to prescribe stimulants to patients whose clinical needs differ from those addressed by the revised Stimulant Treatment Guidelines. This function was previously carried out by the Health Department of WA Stimulants Committee.
- An audit of the treatment approaches and clinical outcomes of those children prescribed stimulants for ADHD. This will be possible 18-24 months after the patient notification system commences. A Clinical Advisory Committee will be established to assist with the process of audit and analysis of outcomes. This audit will be very valuable in providing research information for practitioners that will result in more effective clinical practice.



2.5 Research and Evaluation

ADHD is currently one of the most prevalent, costly and long-term developmental disorders in children in Western Australia. The cost to families and the community is high in both human and economic terms. The long-term prognosis for this disorder is poor with an estimated 70 percent of children diagnosed with ADHD still having symptoms through to adolescence. It is important and cost effective to continue to improve the standards of care available to children with this disorder and to improve treatment outcomes for this group. Research and evaluation are required to advance these outcomes.

Key areas identified for research include:

- the Report of the International Panel on Attention Deficit Hyperactivity Disorder^v refers to possible research strategies underlying the perceived prevalence of ADHD in Western Australia;
- need for research into the aetiology and prevention of ADHD;
- advancing practice in the assessment, diagnosis and treatment of ADHD; and
- need for research into the education techniques for coping with ADHD.



Appendix 1

ICD-10 Classification of ADHD

Hyperkinetic disorders

ICD - 10 (The criteria for diagnosis of ADHD in DSM-IV are almost identical to the following)

The research diagnosis of hyperkinetic disorder requires the definite presence of abnormal levels of inattention, hyperactivity and impulsivity that are pervasive across situations and persistent over time, and which are not caused by other disorders such as autism or affective disorders.

G1 *Inattention* At least six of the following symptoms of inattention have persisted for at least 6 months, to a degree that is maladaptive and inconsistent with the developmental level of the child:

- 1) often fails to give close attention to details, or makes careless errors in school work, work or other activities
- 2) often fails to sustain attention in tasks or play activities
- 3) often appears not to listen to what is being said to him or her
- 4) often fails to follow through on instructions or to finish school work, chores or duties in the workplace (not because of oppositional behaviour or failure to understand instructions)
- 5) is often impaired in organising tasks and activities
- 6) often avoids or strongly dislikes tasks, such as homework, that require sustained mental effort
- 7) often loses things necessary for certain tasks or activities, such as school assignments, pencils, books, toys or tools
- 8) is often easily distracted by external stimuli
- 9) is often forgetful in the course of daily activities.

G2 *Hyperactivity*. At least three of the following symptoms of hyperactivity have persisted for at least 6 months, to a degree that is maladaptive and inconsistent with the developmental level of the child:

- 1) often fidgets with hands or feet or squirms on seat
- 2) leaves seat in classroom or in other situations in which remaining seated is expected



- 3) often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, only feelings of restlessness may be present)
- 4) is often unduly noisy in playing, or has difficulty in engaging quietly in leisure activities
- 5) exhibits a persistent pattern of excessive motor activity that is not substantially modified by social context or demands.

G3 *Impulsivity.* At least one of the following symptoms of impulsivity has persisted for at least 6 months, to a degree that is maladaptive and inconsistent with the developmental level of the child:

- 1) often blurts out answers before questions have been completed
- 2) often fails to wait in lines or await turns in games or group situations
- 3) often interrupts or intrudes on others (eg butts into others' conversations or games)
- 4) often talks excessively without appropriate response to social constraints.

G4 Onset of the disorder is no later than the age of 7 years.

G5 *Pervasiveness.* The criteria should be met for more than a single situation, eg the combination of inattention and hyperactivity should be present both at home and at school, or at both school and another setting where children are observed, such as a clinic (evidence for cross situationality will ordinarily require information from more than one source; parental reports about classroom behaviour, for instance, are unlikely to be sufficient).

G6 The symptoms in G1 - G3 cause clinically significant distress or impairment in social, academic or occupational functioning.

G7 The disorder does not meet the criteria for pervasive developmental disorders (F84,-) manic episode (F30,-), depressive episode (F32,-) or anxiety disorders (F41,-).

Appendix 2



The Administration of Medication Policy and Procedures: Education Department of Western Australia

Principals

District Superintendents

Directors of Operations

Managers

Administration of Medication - Procedures Introduction

School personnel have asked for clarification of their responsibilities in relation to handling requests from parents who seek assistance for their children with the administration of medication.

Procedures have been developed to assist school staff in instances where there is no registered nurse, or other qualified health professional available to assist the student who is unable to administer their own medication. Where a school nurse is stationed at the school it is appropriate to refer requests for assistance to this person.

Documentation of all administration of medication action plans, and agreements to perform the necessary functions, (e.g. listing times, doses, dates of medications, outcomes) is required. The preservation of these records is required for legal and medical reasons. These functions must be carried out and recorded on standard notification forms (see Appendix 1 and 2) whenever school staff undertake to administer medication to students.

Legal opinion offered by Crown Law is that, "given the education of the child has become compulsory, whereby the crown assumed authority over the child by force of a statute, the crown, or its agent, the school authority, thereby comes to assume the majority of the obligations of the child's parents whilst the child is in the care and control of the school authority". School staff are accordingly required to comply with reasonable requests for assistance for the administration of medication while the child is under the authority of the school.

Assistance for students who require administration of medication, which can be offered by the school, will depend on:

- a) The ability of the school staff to meet the particular needs of the student.
- b) The contribution toward care which may be provided by the student (as in self-administration), parents, teachers and other staff, school community nurses, and other community assistance organisations.





The Department recognises that:

- Some students have a need to access medications on a regular basis for medical conditions.
- The presence of quantities of drugs in the school can be a problem and needs to be monitored.
- Available school and staff resources will govern assistance, which can be offered.
- A student self-care concept (where the student is capable of self-administering medication) is preferable if this is a viable option.

1. Responsibilities

Principal

Ensure communication occurs between parents, school staff and appropriate health professionals (e.g. nurse, family doctor). Provide approval for school staff to administer or supervise the administration of medication to students. Ensure safe and confidential storage of records relating to the administration of medication.

School Staff

Liaise with parents and principal. Administer prescribed medication where there is an agreement between staff and parents, and written instructions as per Appendix I have been provided by the parent(s) or guardian. School staff are responsible for student welfare and need to know if a student has a valid medical reason for carrying prescribed medicine to school.

Student

The students should self-administer their own medication where capable of doing so and have authorisation for the taking of medication. The student may be supervised/assisted by school staff in administering their medication where there is an agreement to do so.

Community Nurses in Schools

Community nurses based in schools may independently administer drugs to students in accordance with the Poisons Act 1964 and Poisons Act Regulations (WA).

Nurses are encouraged to have knowledge of the storage features of the drug being administered, indication and contra-indications for use of the drug, side effects or the drug, the general recommended dosage and how to recognise overdose or underdose of the drug.

Prescription drugs are administered with written direction from a medical practitioner or a parent/guardian.



Enrolled Nurses

A small number of enrolled nurses are employed by the Health Department of Western Australia to work in Education Support Schools. Under the Nurses Act they can only be employed to work under the direct supervision of a registered nurse. Enrolled nurses may only administer medications to students under the direction of the registered nurse.

2. Medication

Minor Analgesics

Analgesics are non-prescribed pain suppressants (e.g. aspirin and paracetamol) and can have undesirable side-effects. Aspirin must never be administered to students without a medical practitioner's written instruction because of the possibility of the development of Reye's Syndrome (a potentially fatal disease of childhood).

Student complaints, such as headaches, which may result in requests for analgesics could have underlying medical or psychological causes requiring professional investigation. School staff must not administer analgesics such as paracetamol to students without written instructions from the student's parent/guardian. The parent/guardian is responsible for the supply of any medication to be administered by school staff. School response staff who are made responsible for students on medication, should be fully informed of students particular needs in the administration of analgesics, and of the needs of the student who carries medication for self administration.

In Student Hostels

In student hostel situations it is advisable to ask the parent/guardian to complete a request form to allow staff to administer panadol for cold/flu situations. If panadol is administered as above at the initiation of hostel staff, the manufacturer's instructions as to correct dose, frequency and necessary precautions must be strictly followed. If there is no improvement or symptoms persist medical advice or assistance must be sought.

Prescribed Medication

The potential hazards involving the misuse of prescribed medications can be severe.

If a student is required to carry and self-administer prescribed medicine while at school, parents must advise the principal of all relevant details, e.g. what form the medication takes, the correct dose and the symptoms associated with misuse, overuse, or under use as indicated by the treating doctor. Parents should complete a medication record form, (see Appendix 1). For short term conditions such as dental treatment or period-pain where analgesic tablets or antibiotics are self-administered by the student, completion of medication record forms are not required.

School staff are not expected to administer prescribed medication or treatments which require specialist training, such as giving injections.



If the student is determined to be incapable of self administering prescribed medication, for whatever reason, discussions between the principal, school staff and parents or guardians should take place to attend to the following details:

- a) parents/guardians must provide written authority for the school staff accepting responsibility to administer the prescribed medication;
- b) parents/guardians are responsible for the submission in writing of any requirements of the student for medication including details from the medical practitioner (see Appendix 2) of the circumstances for the appropriate use and application of the medication;
- c) school staff should only administer prescribed medication in accordance with instructions or advice of a medical authority; and
- d) principals must ensure the medical information for the student is available to all staff who have the student under their care.

3. Emergencies

Emergency situations requiring the administration of prescribed medication.

Emergency situations include those arising from asthma, diabetes and serious allergic reaction. It is the parents'/guardians' responsibility to provide the school with adequate information regarding the details of the child's medical condition which may require specific action and/or treatment under emergency conditions. If a school is notified by a parent of such a medical condition the school should:

- a) develop an emergency action plan;
- b) develop procedures agreed to by the parent and school to reduce the risk of an emergency situation arising, eg, the wearing of footwear at all times during activity on grassed areas for children who suffer from a serious allergic reaction to bee stings. Ensure the provision of extra carbohydrate (to be supplied by the parent to school staff who will ensure it has been taken), for diabetics prior to strenuous activity; and
- c) ensure the child, parents and school staff are aware of all emergency procedures.

Developing an Emergency Action Plan for Students with Medical Problems.

An emergency action plan must be developed for students with medical problems by the school in consultation with the parents, the family doctor and school nurse if applicable.

The action plan should take into consideration the following:

- a) all school activities including excursions and camps;
- b) all students likely to require assistance with a medical condition;
- c) predetermined levels of treatment to be administered by school staff and the availability of a medical service;



- d) appropriate transportation arrangements to the nearest centre for medical treatment;
- e) annual revision and update of the plan as required;
- f) written approval from the parent to implement the plan;
- g) copies of the action plan should be provided to the student's teacher/s and be displayed in the staff room and principal's office so as to be readily accessible to staff.

Note: It is not expected that school staff without training give injections. However, emergency situations, as described above, may occur on excursions or in other situations where medical help is not available. In such circumstances the school staff are legally covered (the Education Department of Western Australia, as employer, becomes vicariously liable for its employees) provided he/she:

- prior to administering an injection to a student has checked the label and dosage of the injection and the identity of the student (and cross checked these details with a second adult person where practicable), to ensure that the injection is given in accordance with directions from the student's parent/s or guardian or doctor;
- is acting within the agreed emergency plan;
- provides all reasonable assistance without impeding the help offered by more qualified persons (eg. first aiders, doctors, nurses etc.);
- has received adequate instruction by a qualified medical practitioner, nurse or parent trained in how to administer the medication; and
- promptly documents all actions taken.

If school staff planning excursions do not feel confident in carrying out the action plan in these circumstances, or other risk situations, the exclusion of the child may need to be considered.

A school staff member involved in administering medication to a student should make a record each time, clearly giving details of medication given, time/date administered and by whom (for possible future reference). This will enable the school staff to clearly establish the medication given on a particular day and that procedures agreed to by the parents were followed. Further medical advice or assistance should be sought immediately after the administration of medication in an emergency situation.

4. Records

Preservation of Records

All recorded data should be kept in a secure place. All agreements to the administration of medication and all records of medication given need to be held by the school. Crown law has offered the opinion that legal questions regarding the administration of medication can arise. A consequent requirement is that all records of medication given to a student are retained for





the period up to that person's 25th birthday. These records are deemed to be of a confidential nature and their collection, storage and security are the responsibility of the school principal.

If the student's school closes, the record is to be transferred to the student's new school. If the student has completed their schooling or shifted to an interstate school their record remains at the last school attended in Western Australia till that student's 25th birthday. If the student is transferring between schools within the State the record should be transferred to the new school to be attended by the student. After the student's 25th birthday their record may be returned to them on request, or disposed of, by any method, which will not leave their details identifiable.

5. Storage of Medication

Safe Storage

Staff

Prescribed medication, which is to be administered by staff, must be stored safely, in a lockable compartment or cupboard, which can only be accessed by authorised persons. Medications, which are required to be refrigerated, should be under the care of the staff member who is responsible for the student for whom the medicine is prescribed. All medication must be in a properly labelled container, which shows the name of the drug, name of the student, the dose and frequency.

Medication, which is not labelled correctly, shall not be accepted for use. It is the parent's/guardian's responsibility to ensure that the medication is clearly labelled, is not out of date and is provided in sufficient quantities for the child's needs.

Students using self medication

All prescribed medication, which is to be self administered by students, must be clearly labelled with the student's name and should be securely stored ie. on their person or in a lockable cupboard or drawers.

Students should not bring bulk supplies of any drug to school (prescription or general) unless they are deposited in safe storage.

Any queries should be directed to the Risk Management Unit (9264 5121).

Appendix 1 Student Medication Request/Record

Appendix 2 Medication Instructions From Prescription - Doctor



Appendix 1 – Student Medication Request Record

To be confidentially stored until the student is 25 years old.

Year document destroyed (Year)

NOTE: Where possible student medication should be self administered by the student or be administered by parents at home at times other than during school hours. If the Principal of the school is to approve of school staff administering or supervising the administration or medication to a student then the following requirements must be met.

The doctor prescribing the drug must be aware that the school will supervise or carry out administration of medication on the instructions provided. It is therefore desirable that the doctor provide instructions – as per 'Medication Instructions From Prescribing Doctor (See Appendix 2). These instructions are a mandatory requirement if special arrangements are necessary for the school staff to administer the drug or monitor the student after drug administration.

Drugs for administration should be delivered to the schools into the care of the designated staff member, who will prepare a student medication record and store the drugs in a locked cupboard. All drugs should be contained in properly labelled containers showing the name of the drug, the name of the student and the appropriate dose and frequency. Unlabelled drugs will not be administered.

I _____ parent/guardian of
student (name) _____ (class)

request (name of school) _____

to administer the following drugs as prescribed by Dr _____

for the purpose of _____ (condition)

Name of drug _____

Dosage to be given _____

Time to be given _____

Replacement date of drug (if appropriate) _____

Comments _____

Date

(Signature of Parent/Guardian)

Note: Any additional information may be attached.



Appendix 2 – Medication Instructions From Prescription – Doctor

To be confidentially stored until the student is 25 years old

Year document to be destroyed (Year)

These instructions are requested from the prescribing doctor to enable the school to maintain its duty of care when administering prescribed drugs to students whose condition would otherwise preclude attendance at school.

Dr _____

Address _____

Telephone _____

I have prescribed the drug _____ for

(name of student) _____ to treat the condition of

(name of medical condition) _____ This drug needs to be

administered _____

(dose)

(frequency/time)

Are special arrangements necessary to administer the drug or monitor the student after drug administration? Yes No

If so, provide details below. _____

Date _____

(Signature of prescribing Doctor)

Appendix 3



Health Department Stimulants Treatment Guidelines

Stimulant Treatment Guidelines (Form SC1) (May 2000)

Criteria for Issue of Authority under the Poisons Act to prescribe Dexamphetamine or Methylphenidate for children or adolescents

The Poisons Regulations require a medical practitioner to have the prior authorisation of the Commissioner of Health before prescribing oral methylphenidate and dexamphetamine except for therapeutic trials of up to 30 days when initiated by a paediatrician, paediatric neurologist or paediatric psychiatrist. These regulations also restrict the use of the drug to the treatment of specific conditions including ADHD.

Stimulant medication is an effective part of the management of attention deficit disorders. At present in Western Australia, it cannot be prescribed without an authority under the Poisons Act. These controls acknowledge individual differences in responses and dosage requirements, concern about inappropriate prescribing, differing professional approaches to diagnosis and management, and evolving scientific study in this field.

Stimulant prescribing is monitored by a Stimulants Committee established for this purpose. This Committee consists of medical specialists who provide a variety of professional experience and perspectives in the diagnosis and management of ADHD and stimulant treatment.

Diagnosis of attention deficit disorder does not imply that stimulant medication must be used. Attention and learning problems require comprehensive assessment and management involving various professional approaches to the whole child and family. Specific learning and intellectual disabilities, behavioural or conduct disorders per se are not indications for stimulant use, though they may coexist with attention deficit disorders. The symptomatology of inattention, poor concentration and distractibility should be investigated neurologically and by thorough assessment of cognition, language and hearing.

Assessment

Initial authorisation will be granted only to a paediatrician, developmental paediatrician, paediatric neurologist or psychiatrist. Such specialists who have become familiar with these Guidelines have been issued with an en bloc authorisation and do not have to apply for individual patients provided treatment is in line with the criteria described. Where the specialist feels that prescribing by the patient's general practitioner is appropriate then a joint general practitioner/specialist authorisation can be issued at the specialist's request, with review of the patient by the specialist at intervals considered by the specialist to be appropriate for the individual case. Such shared-care cases remain the responsibility of the specialist, who must ensure that adequate feedback is received from the general practitioner. Renewals of joint authorisations will require that the general practitioner provide evidence of continued supervision of the management of the child by the specialist (eg: a copy of a recent report).



Criteria for routine granting of authority

[When a diagnosis once made is considered to require the use of stimulants.]

Diagnostic Criteria

Symptoms must be of at least 6 months duration, manifest before 7 years of age and significantly affect the child's behaviour and performance at school and/or home. Other causes of inattention, eg abuse (emotional, physical or sexual) and intellectual, visual, auditory or other medical impairments must have been considered. Consideration should be given to the DSM IV criteria in making a diagnosis.

Supportive evidence eg reports by education psychologists, teacher's reports on the behaviour of the child, or behaviour checklists (eg Child Behaviour Checklist, Connors) are helpful.

Age Criteria

Not younger than 4 years to commence nor beyond the 18th birthday to commence or continue therapy with stimulants. Authority for persons younger than 4 will be approved only on the recommendation of the Stimulants Committee, which may require additional information. Patients who are 18 or older should be referred at the earliest opportunity to a psychiatrist for assessment for adult attention deficit disorder.

Caution

Caution should be exercised if the following are present: Tics, dyskinesia, history of Tourette's disorder, autism.

Dosage

In general, the dose should always be the lowest possible and should be given only as many times per day as is necessary to achieve adequate management. Patients should be commenced on a low dose, which is titrated according to response and should not usually exceed:

Dexamphetamine (5mg tablets): 1.0mg/kg/day

Methylphenidate (10mg tablets): 2.0mg/kg/day

Dosage exceeding the recommended levels will only be considered with details of specific effects at different doses, which demonstrate the inadequacy of the lower dose.

Prescribers are reminded that dexamphetamine is a much cheaper drug than methylphenidate, whether or not prescribed under the Pharmaceutical Benefits Scheme. There are no convincing general differences between the two drugs for the treatment of ADHD but individual patients may respond better to one than the other. It should be noted that dexamphetamine is longer acting and this has social benefits for children in the school setting. The Health Department therefore recommends that in general dexamphetamine should be the drug of first choice.



Prescribers should also be aware that the Approved Product Information for methylphenidate (Ritalin) states "Ritalin should not be used in children under 6 years, since safety and efficacy in this age group have not been established". If Ritalin is to be used in children under 6, it is strongly recommended that informed consent be obtained from the child's parent(s) and documented.

Substance Abuse

If there is a history of regular use of illicit drugs or alcohol misuse then routine granting of authorisation is NOT possible and individual application must be made.

Applications not meeting criteria for Routine Granting of Authority

If the full criteria for routinely giving authority are not met then an application on Form A together with a detailed clinic report will be needed; wherever possible include more than one professional assessment of the child.

These applications will usually be referred to the Stimulants Committee. This Committee meets quarterly. A thorough report with specific details of indications, assessment and medication effects may allow an interim authority to be granted pending subsequent consideration by the Committee. This should minimise disadvantage to children who obtain significant benefit with individual dosage regimes outside the criteria.

It is strongly recommended that patients/parents are advised when treatment outside of these Guidelines is contemplated and that consent for such treatment is documented.



Notes

1 Decisions to continue medication will be based on:

- a) Patient's parent and/or teacher's account of definite benefits from medication and desire that it continues; the child's opinion may be significant.
- b) Clear description of the child's deterioration when the drug has been suspended at intervals. A brief trial off medication once a year is usually adequate.
- c) Absence of significant side effects eg emotional lability, depression, tics, growth falling away from appropriate percentiles, withdrawal symptoms.

2 Medication Supervision

Parents should be advised that children or adolescents with this condition should not be expected to be adequately responsible to take these drugs unsupervised, and parents should speak to the school principal to request medication administration by school staff. Government schools have a policy covering this.

3 Prescriptions

Because of increasing public concern regarding amphetamine abuse in the wider community, parents should be urged to consider having their pharmacist hold the prescriptions.

4 Replacement Prescriptions

Prescribers should exercise caution where there are repeated requests for replacement prescriptions for lost or stolen tablets or prescriptions. The possibility of diversion by the patient, relatives or others should be borne in mind. If losses are reported, the prescriber should consider having the pharmacy of the family's choice hold the repeat forms rather than the patient, or by issuing prescriptions on a monthly basis. Supervised drug administration at school can also help prevent these problems.

Address Applications and Further Enquiries to:

Department of Health, Government of Western Australia
Drugs and Poisons Section
PO Box 8172
PERTH BUSINESS CENTRE WA 6849
Telephone: 9388 4985



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