

Delivering Effective Services for Children and Young People with ADHD

Good practice guidance for commissioners and service providers across
Greater Manchester



Developed by the ADHD Project Subgroup
CAMHS Advisory Group
July 2015 and sections revised 2018



Seeing and hearing the
difference CAMHS will
make to children's lives

Connected
Care
Pathways

Access
and
Prevention

Strategy
to
Reality

Workforce

Leadership

Patient
and Parent
Partners

Data

Parity
of Esteem

Quality

Innovation



“Future in mind” report was launched in March 2015, following The Children and Young People’s Mental Health and Wellbeing Ministerial Taskforce established in September 2014. This has marked a pivotal step forward in recognizing the need for radical improvement in mental health services for children, young people and their families, fully supported by NHS England. One in ten young people have a mental health condition, but only a quarter of these are accessing appropriate services and it’s now well established that early intervention is crucial. One of the most common mental health conditions seen in our children and young people is Attention Deficit Hyperactivity Disorder (ADHD) with wide variability in service provision. We are delighted that Greater Manchester, Lancashire & South Cumbria Strategic Clinical Network has supported the following report and recommendations for integrated ADHD service provision in line with NICE guidance and Future in Mind but understanding the local landscape, commissioning challenges and most importantly the voice and needs of our families and young people.



Dr Sandeep Ranote
Strategic Clinical Network
CAMHS Clinical Lead / Consultant Child
and Adolescent Psychiatrist



Dr Mark Robinson
Strategic Clinical Network
CYP Clinical Lead / Consultant Paediatrician



Julie Cheetham
Strategic Clinical Network
Deputy Associate Director

Share your comments on Twitter
Twitter @GMLSC_SCNs #SCN ADHD



SCN Clinical Advisor and ADHD Project Lead



Dr Prathiba Chitsabesan works as a Consultant Child and Adolescent Psychiatrist in Stockport, Manchester (Pennine Care NHS Foundation Trust) and has a special interest in working with young people with ADHD (Directorate ADHD Lead). As the local lead consultant for 10 years, she has been involved in strategic management and service development. An honorary research fellow for the Offender Health Research Network (University of Manchester), she has helped to lead on the development of the Comprehensive Health Assessment Tool (2013) for the Youth Justice System. She has also contributed towards reports for the Youth Justice Board (Mental Health Needs and Effectiveness of Provision for Young People in the Youth Justice System, 2005) and Office of the Children's Commissioner (Nobody Made the Connection: the Prevalence of Neurodisability in Young People who Offend, 2012) on the needs of young people in the criminal justice system and the impact of neurodevelopmental disorders.

Acknowledgement

The project group would like to acknowledge a number of people who contributed to the development of this report including Barry Nixon (Children & Young People Improving Access to Psychological Therapies), Dr Bernadka Dubicka (Consultant Child and Adolescent Psychiatrist and Vice-chair Faculty of Child and Adolescent Psychiatry) and Dr Alison Jobling (Consultant Paediatrician). We wish to particularly thank all our service users and parents/carers who were passionate in their feedback and suggestions. The project group also wished to highlight their positive experience of networking and opportunities to work across professional and organisational barriers in developing services within this workstream. It has emphasized the importance of investing in clinical leadership, multi-agency collaboration and wider stakeholder engagement if we wish to realise the vision of Future in Mind (promoting, protecting and improving our children and young people's mental health and wellbeing) at a financially challenging time for the NHS and partner agencies.

Project Group Members

Name	Title
Noreen Ryan	(Consultant ADHD Nurse, Bolton)
Dr Rashad Nawez	(Consultant Community Paediatrician, Trafford)
Dr Louise Theodosiou	(Consultant Adolescent Psychiatrist, Manchester)
Sally Trowse	(ADHD Clinical Nurse Specialist, Stockport)
Dr Luisa Sanz	(Consultant Child and Adolescent Psychiatrist, Cumbria)
Alison Knowles	(Lead Practitioner in ADHD, South Manchester)
Dr Ruth Marshall	(Consultant Child and Adolescent Psychiatrist, Central Manchester)
Dr Lindsay Neil	(Clinical Psychologist, Manchester)
Sandy Bering	(Lead Commissioner, Clinical Commissioning Group, Manchester)
Andrew McCorkle	(Quality Improvement Project Manager, Strategic Clinical Network)
Beverly Drake	(Quality Improvement Project Support Manager, Strategic Clinical Network)



Key Messages

1. Informed co-commissioning and service planning to provide the required capacity to support a local ADHD Care Pathway (minimum requirement 3% of young people referred for specialist assessment, 1% requiring medication and 3% community support and interventions).
2. Development of a multi-agency stepped care pathway through local stakeholder events to consult and engage commissioners, service providers and key partner agencies outlining the contribution of different stakeholders to the pathway (see appendix 1).
3. Specialist ADHD services to support the provision of training programmes and access to consultation for primary care and community children's services to support a multi-agency stepped care model.
4. Through workforce planning and a workforce skills audit, service providers to assess the skills and capacity required within services to support the ADHD care pathway to meet the needs of children and young people with ADHD locally including:
 - Identification of staff skills and training needs required
 - Access to training programmes and supervision to ensure continuing professional development
5. Specialist ADHD services to be jointly delivered by CAMHS and paediatrics with a single point of access for referrals. Specialist teams should be multi-disciplinary and consider the role of specialist ADHD nurses to provide more cost-effective models of care. ADHD nurses should act as a named contact for community services in providing consultation and advice and supporting a stepped care model.
6. Assessment provided by specialist services should follow the good practice guidance outlined within the report. They should consider the use of a standardised assessment protocol and investment in objective psychometric assessments to aid reliability of diagnosis and standardise care.
7. Behavioural interventions including self-help information should be available as recommended for young people with ADHD and their parents/carers, and provided within a stepped care model.
8. Young people on pharmacological treatment should be monitored within specialist ADHD clinics. There should be local agreement between commissioners, specialist and primary care services regarding the role of each stakeholder in monitoring and prescribing through the use of shared care protocols – ensuring the needs of children and young people with ADHD are met.
9. Specialist services should monitor outcomes for young people on treatment through the use of validated symptom scales or routine outcome measures (ROM) as locally agreed with commissioners.
10. Transition must be discussed and planned in a timely (6 months prior) and collaborative manner that enables all young people to access the services they need, both to manage planned needs and support children in crisis.
11. The NICE ADHD guidance (2013) propose that 2% of adults will meet the criteria for a diagnosis of ADHD and subsequently commissioners must invest in the development of a local multi-agency ADHD care pathway across the lifespan with relevant stakeholders.



Background

1.1 Introduction

Specialist Attention Deficit Hyperactivity Disorder (ADHD) services in some boroughs within Greater Manchester, Lancashire and South Cumbria are provided only by Children and Adolescent Mental Health Services, while in others by paediatrics or a combination of both. Service delivery arrangements are frequently historical and not always reviewed in light of local changes to demand and capacity.

Delivering services for children and young people with ADHD was identified by the Strategic Clinical Network as a work stream within the wider 'integrated care pathways' of the CAMHS work programme. This was following feedback from a number of community CAMH services regarding increasing difficulties in supporting young people with long-term needs secondary to neurodevelopmental disorders (ADHD and Autistic Spectrum Disorder), as well as recognition of the need to consider more integrated models of care in supporting children's mental health and wellbeing (Department of Health, 2015).

The following report and recommendations have been developed by the ADHD Project Subgroup (CAMHS Advisory Group, Strategic Clinical Network). The project subgroup has included clinical (Consultant Child and Adolescent Psychiatrists, ADHD Specialist Nurses, Consultant Paediatrician and Clinical Psychology) and commissioning representation. Members of the subgroup have experience in developing and delivering ADHD services. Noreen Ryan is chair of the North West ADHD Nurse Forum and has also contributed to the development of the NICE Guidance (NICE, 2008) and NICE Quality Standards (NICE, 2013) as an advisory board committee member. Feedback from service users regarding their views on priorities for service delivery has also been key in developing the recommendations.

1.2 Aim

This report provides good practice guidance for commissioners and service providers across Greater Manchester, Lancashire and South Cumbria regarding ADHD service delivery for children and young people. These guidelines are designed to help manage some of the challenges in providing good quality services using cost-effective models of care that are sustainable and able to address unmet needs and increasing demand. This is all the more important as we enter one of the most financially constrained periods for the NHS. The report has incorporated; recommendations from national guidance including NICE Guidance (NICE, 2008, 2013), Future in Mind (Department of Health, 2015), recent developments in research as well as examples of innovative practice from services across the network to help support implementation and improve the quality of care provided to children and young people with ADHD.

The guidance should be reviewed every 2 years, or following any changes in national guidance or as research evidence for the assessment and treatment of children and young people with ADHD continues to develop.



1.3 ADHD in Children and Young People

What is ADHD?

ADHD is a persistent pattern of inattention, hyperactivity and impulsivity that is more extreme than is typically observed in individuals at a similar stage of development. It is evident at a young age and is pervasive across different settings e.g. home, school and with friends. Within the UK, ADHD is sometimes referred to as Hyperkinetic Disorder. ADHD affects about 3-5% of children and 2% of adults and is more common in males than females (4:1). Girls with ADHD may present with less hyperactivity than boys and subsequently may be less easily identified in primary care settings (NICE, 2008, 2013).

How might ADHD affect children and young people?

- Hyperactivity - Unable to sit still, fidgety, fiddling with things and problems with sleep
- Inattention - Difficulties concentrating, disorganised, forgetful and struggle to complete tasks
- Impulsivity - Speaking out and acting without thinking, interrupting others, difficulties waiting their turn

While ADHD-like symptoms are found in many people some of the time, in people with ADHD they are severe, persistent over time and lead to clinically significant impairments in functioning. About two-thirds of young people with ADHD have another disorder, most commonly behaviour problems (oppositional defiant disorder and conduct disorder). Other associated disorders include; tics, obsessive compulsive disorder, depression, substance misuse, autistic spectrum disorders and learning difficulties (NICE, 2008, 2013). Impairments can impact on an individual in many ways including: low self-esteem, educational and occupational problems, problems in social interactions and relationships, antisocial behavior and the development of co-morbid psychiatric disorders (NICE, 2008, 2013).

Individual and organisational barriers exist in identifying and treating ADHD in children and young people. Lack of awareness of the condition amongst parents, health professionals and teachers; demographic factors; parental beliefs in the efficacy of treatments and how services are organised and delivered are important barriers to accessing care (Wright et al., 2015).

What causes ADHD?

ADHD is a neurobiological disorder linked to an imbalance of brain chemicals (dopamine and noradrenaline) with some evidence that there are also some structural brain changes in children and adults with ADHD (Purper-Ouakil et al., 2011). ADHD is partly genetic and therefore immediate or extended family members may have similar symptoms, although not always diagnosed.

Long-term outcomes

ADHD is associated with long term adverse outcomes for many young people (NICE, 2008, 2013). The disorder impacts upon the young person's development and ability to gain adaptive skills to help with independence in everyday living. There is increasing evidence that problems related to childhood ADHD can persist into early adulthood and that they can act as a risk factor for the development of additional problems including other psychiatric disorders, substance misuse difficulties and problems with employment and relationships. An increased risk of premature mortality has also been found in adults (Dalsgaard et al., 2015).

ADHD has also been shown to be associated with anti-social behaviour in both young people and adults. Prevalence rates of ADHD in young offenders was found to be high (12%-19%) in comparison to 3-5% in the general adolescent population (Hughes et al., 2012). There is also evidence that ADHD medication treatment can reduce the risk of reoffending in adults by a third (Lichtenstein et al., 2012).



ADHD is heritable and therefore children with ADHD are statistically more likely to also have a parent with the condition (NICE, 2008, 2013). Important childhood predictors of poor long-term outcomes include; significant impact on education and relationships, poor response to treatment, associated conduct disorders and mental health needs in carers (NICE, 2008, 2013). Early recognition and intervention in these high-risk groups may have a positive impact on long term outcomes (Steinhausen et al., 2003; Molina et al., 2009; Langley et al., 2010). This includes ensuring that parents of children with ADHD, who also present with ADHD symptoms, have access to appropriate assessment and treatment as this can impact on the implementation of parenting and behavioural strategies at home. Access to adult ADHD services and a lifespan approach to care (NICE, 2008, 2013) is therefore important and also contributes to the Support for Families government policy (Department for Communities and Local Government, 2015) in reducing transgenerational risk factors for antisocial behaviour.

The social and economic burden on society is significant (Barkley et al., 2002; Biederman et al., 2010; Arnold et al., 2015; D'Amico et al., 2014). A recent review of the cost implications of ADHD demonstrates that it is a common childhood disorder which imposes a substantial long-term cost on society, estimated at around £100,000 per case. About two-thirds of the cost takes the form of additional public expenditure on education and health care, with the remainder being reflected in reduced earnings (Khong, 2014). However, this does not include the cost of young people with ADHD within the criminal justice system which is considerably greater. The review also emphasises that the estimates given relate only to the measurable economic costs of ADHD and do not include an imputed value for the adverse impact of this condition on the quality of life of the individuals affected and their families. Arguably this is the most important cost of ADHD, but not one which can readily be given a monetary value.

The high costs of ADHD support an economic case for early intervention, as they imply that even relatively modest improvements in outcomes would yield significant financial returns. This case is further strengthened by a growing body of evidence which demonstrates the effectiveness of a range of interventions for the treatment of ADHD symptoms in childhood (NICE, 2008, 2013).

Treatment

NICE CG72 published in 2008 and updated in 2013 (NICE, 2008, 2013) highlighted that as well as medication and behavioural treatments, people with ADHD required integrated care that addresses a wide range of personal, social, educational and occupational needs to achieve the best outcomes (NICE, 2008, 2013). A recent systematic review (Shaw et al., 2012) evaluating young people on ADHD treatment in comparison to those without, has shown the benefit of treatment across a number of long term outcomes including academic, antisocial behavior, driving, substance misuse, obesity, employment, self-esteem and social function.

It is evident that ADHD is associated with significant financial and emotional costs to the healthcare system, education services, young person and their family and society as a whole. Providing effective treatment will improve the quality of life of individuals with ADHD, their carers and their families, and at the same time may reduce the financial implications and psychological burden of ADHD to society (NICE, 2008, 2013).



1.4 Key issues identified in service provision

Feedback from service users/carers and service providers has highlighted a number of issues in service provision for children and young people with ADHD within the region (2014 -15). Feedback was obtained from service users in clinics and parent support groups (written and verbal). Feedback from service providers has included feedback from members of the project group regarding ADHD services within their organisation as well as feedback from practitioners working in the region (ADHD CAMHS Directorate Group, Pennine Care; North West ADHD Nurses Forum and Living with ADHD Conference).

- Recognising unmet need for young people with ADHD (many specialist services currently treat about 0.5% of the local population in comparison to 3-5% prevalence of young people with ADHD in the community)
- Reducing workforce capacity within specialist health services as well as other agencies (social care and education) through reduced investment (commissioning)
- Increasing demand on specialist services for young people with severe mental health needs and risky behaviour
- Inadequate Information Technology (IT) systems to collect data on young people with ADHD within services, including prevalence of co-morbidity
- Lack of access to a skilled and trained multi-disciplinary workforce within specialist and community services
- Lack of standardised assessment process within and between ADHD services across the network
- Variability in behavioural interventions offered for young people and parents
- Increasing complexity and co-morbidity of young people with ADHD - increases demand on specialist services as well as need for multi-agency support
- Lack of a stepped care model - many young people directed towards specialist services due to lack of skilled workforce within primary care and community children's services
- Lack of provision of developmentally appropriate services for adults with ADHD

Similar themes have been identified nationally regarding services for young people with mental health needs by the Children and Young People's Mental Health and Wellbeing Taskforce (Department of Health, 2015). Consequently, the concerns identified by the subgroup and service users are likely to reflect more widespread issues regarding the complexity of current commissioning and provision arrangements to support children and young people's mental health and wellbeing nationally.



1.5 Key principles

The ADHD project subgroup with service users have identified a number of key principles of care and priorities which they feel are central to the development and provision of services for children and young people with ADHD and reflected in national guidance (NICE, 2008; Department of Health, 2015).

Key principles of care - person centred care (respect, understanding and consent), promoting access to effective support, transparency, empowering children and parents and developing a skilled workforce.

Key priorities for service development:-

- Service planning and transparency regarding unmet need - importance of clinical leadership and commissioning support
- Developing a multi-agency partnership and ownership of the ADHD care pathway with other key agencies (general practice, education, social care, 3rd sector and voluntary sector - importance of stakeholder consultation and engagement
- Developing a skilled workforce across community and specialist children's services
- Developing a chronic care pathway for young people with neurodevelopmental disorders – importance of stepped care model and integrated multi-agency approach
- Empowering children and families - young people and parents/carers should have access to information on diagnosis and management, including strategies and contribute to local ADHD service design and development
- Development of cost-effective models of service delivery for assessment and management
- Investment in the use of technology to improve data collection and provision of assessment and treatment services
- Evaluating practice through audit and implementation of outcome measures

Many of the priorities identified by the project subgroup were reflected in the recent recommendations made by the Children and Young People's Mental Health and Wellbeing Taskforce (Department of Health, 2015).

Summary themes from Future in Mind (Department of Health, 2015):

- Promoting resilience, prevention and early intervention
- Improving access to effective support – a system without tiers
- Care for the most vulnerable
- Accountability and transparency
- Developing the workforce



21. Service User & Inclusion

Coming soon!





2. Informed commissioning

Updated 2018

Commissioners and local specialist services should collect data on the projected prevalence of children and young people with ADHD within their borough and the current demand on services to help evaluate need locally (NICE, 2018).

Key points

- It is essential to know the needs of the local population (children, young people and adults) as well as demands on services. This data and information should be used to commission ADHD services across the lifespan.
- Specialist ADHD services should have IT/data collection systems to collect data on those referred to services for assessment as well as those open to treatment to ensure appropriate service planning.

Service planning requires an understanding of the needs of the local population as well as the demand on services. Inadequate IT systems and methods of data collection have been highlighted as a concern for children's mental health services (Department of Health, 2015). There are different ways in which service needs can be calculated based on national prevalence rates (3-5%) and local population figures. Public Health England's finger tips data is a useful tool for identifying need:

<https://tinyurl.com/FingerTipsADHD>

Services should also monitor current demand on services as this may vary across sites dependent on access, awareness and training. All specialist services (CYPMH/Paediatrics) providing care for young people with ADHD should have an IT system/information collection system that is able to collect data on young people referred to their service with ADHD and those within their service accessing treatment.

This is imperative to ensure ADHD services are planned and delivered to manage current and future demand (based on unmet need) with required capacity within the workforce (Department of Health, 2015). This information should be used by commissioners to contribute to a joint strategic needs assessment (JSNA) to assess unmet need locally from young people who are not accessing services for assessment and treatment (based on local needs and current demand on services). Commissioners need to ensure that local services are appropriately commissioned to meet the potential expected demand over time (minimum requirement for commissioning: 3% of the local population of children and young people requiring ADHD assessment, 1% on medication treatment and 3% requiring community support and behavioural interventions). Where there is identified unmet need this should be made transparent and alternative models and solutions considered locally e.g. support from community and primary care services.

Specialist services should undertake regular audits of those accessing treatment (ethnicity, gender and age of referral) to ensure that services provided are accessible and available across local population groups. Improved access can be supported through training within primary care. Special attention should be paid to groups of vulnerable young people who may be at increased risk of ADHD including those who are looked after, in the criminal justice system or within substance misuse services (NICE, 2018; Department of Health, 2015). This is important to reduce health inequalities and promote equality (Department of Health, 2015).





3. Multi-agency Pathway

Updated 2018

Need for consultation and greater stakeholder engagement in the development of a commissioner multi-agency care pathway for children and young people with ADHD. The care pathway should outline the role and contribution of health providers (primary care and specialist services) as well as other local stakeholders including education, social care and voluntary/3rd sector organisations (NICE, 2018; Department of Health, 2015).

Key points

- A multi-agency ADHD stakeholder group should include as a minimum representatives from:
 - Service users
 - Paediatric services
 - Children and Young People's Mental Health Services
 - Education services (schools and colleges)
 - Local authority or youth justice team
 - Commissioner (lead and support multi-agency collaboration)
- Members of this group should have a role in quality assuring delivery of the pathway
- Members of this group should take a lead in the communication of the pathway to relevant stakeholders

No single agency is able to meet the needs of children and young people with ADHD in isolation. In recognition of the high prevalence of ADHD, the chronic nature of symptoms and co-morbidity with other areas of needs (health, education and social) there should be commitment and ownership of a multi-agency pathway (NICE 2018) by all stake-holders, including commissioners (Department of Health, 2015).

Consideration should be given to the role of specialist health providers (CYPMH and Paediatrics) as well as primary care (GPs) and other children's community services in the pathway from recognition and referral to assessment and treatment (see appendix 1 for example of a suggested multi-agency ADHD care pathway). The current development of integrated children's services in a number of boroughs within the region can help to support a multi-agency stepped care pathway that is co-commissioned. Delivering a 'clear joined up approach' provides care pathways that are easier for young people and families to navigate, including those who are most vulnerable and helps to prevent young people falling between gaps in services (Department of Health, 2015).

The pathway should be developmentally appropriate and provided within a needs based stepped care model. Commissioners and service providers should be transparent and clear regarding the provision provided locally across the lifespan for children and adults with ADHD including identified gaps within services. Commissioners and service providers should consider the use of the CYPMH Tier 2/3 specification to clarify the specific role of CYPMH within the pathway (NHS England, 2015) to promote transparency and accountability (Department of Health, 2015). CYPMH and paediatrics should work collaboratively with the full range of multi-agency services to ensure that pathways work seamlessly into adult mental health services.

Different models of service provision should be considered to allow cost-effective delivery based on needs. This should include the role of different agencies such as primary care (GPs) in supporting and monitoring medication treatment for children and adults with ADHD with mild-moderate needs with support from specialist services. Additional resources may need to be agreed in some areas where unmet need is identified.





4. Training of Statutory Agencies

Updated 2018

Practitioners working in primary care and children's services should be supported to recognise ADHD in children and young people and know what support to provide and also when and how to refer young people for further specialist assessment (NICE2018). The ADHD lead/ADHD nurse should help to co-ordinate the cascading of training programmes locally.

Key points:

- Training should be provided to professional stakeholders within the ADHD pathway; particular attention should be paid to education establishments but also other stakeholders such as A&E staff.
- An annual training programme should be planned annually to meet the changing needs of professionals engaged in delivery of the pathway.
- The training materials that are used should be cognisant with the Greater Manchester training matrix (Appendix 2 and can be found at <http://www.tinyurl.com/GMADHDResources>)

Specialist services should develop universal and targeted training programmes for different agencies/ professionals working within community services, including education staff, GPs, social care, youth justice etc. (NICE, 2018).

This should include information on-

- What is ADHD, presentation of children and young people with ADHD, prevalence, co-morbidity and treatment recommendations.
- The local multi-agency ADHD care pathway for assessment and treatment of children and young people including methods of referral and information to be included on referral.
- Strategies to support children, young people and parents within community settings.
- Joint training with adult mental health services to ensure seamless transition and collaborative training

This training matrix can be used to review your materials against the templates and material can be utilised and adapted to meet local need.





5. Workforce planning

Updated 2018

Workforce design and planning is the foundation to any service development. Developing the workforce should consider; capacity, capability, competence and confidence of staff as well as the environment in which care is provided (Department of Health, 2015). The inclusion of a service model to support ADHD services should be included within the overall CYPMH workforce plan.

Key messages:

- The workforce plan should enable the delivery of the ADHD care pathway, ensuring safety and best value for resources.
- Utilisation of a workforce skills audit and workforce planning to assess the skills and capacity required to support delivery of the ADHD pathway

The workforce is an essential component of child and adolescent mental health care quality, access, and cost. The quality of child and adolescent mental health care is influenced by the skills of the workforce providing the care. Access to mental health care depends on the number of appropriately skilled providers available to provide care, among other things. The ability to secure a sufficient number of staff with the appropriate skills and deploying them effectively is a complex challenge. If services are to thrive and continue to strive to provide high quality accessible models of service provision, much of the scope for improvement lies in the workforce.

The mental health workforce is in flux, this is particularly apparent in services for children and young people. There is an increase in services and disciplines offering ADHD services to children and young people and therefore workforce planning cannot be the sole responsibility of individual organisations. It is only through a collective approach that children and young people can access appropriate support, now and in the future. Consideration should be given to a flexible approach to workforce planning that can enable the current workforce to evolve and adapt to the inherently unpredictable health care environment.

Key principles

- Ensure the workforce has the necessary compassion, values and behaviours to provide person-centred, integrated care and enhance the quality of experience through education, training and regular continuing personal and professional development (CPD) that instils respect for children/young people and parents/carers.
- Anticipate the numbers and capabilities of the workforce needed currently and for the future, ensuring an appropriate skill mix in teams able to deliver a range of recommended evidence-based intervention with a delivery model that best focuses the capacity of the service to meet the needs of the local population.
- Ensure the workforce is educated to be responsive to changing service models, innovation and new technologies, with knowledge about effective practice and research that promotes adoption and dissemination of better quality service delivery.
- Ensure there is sufficient staff educated and trained with the required knowledge and skills within teams. The skill set required in the team may be subject to change according to changes in local needs.
- Ensure that there is compliance with the recommendations of the Francis Report (House of Commons, 2013) and in particular the Duty of Candour (see glossary and acronyms).
- The workforce is the means of delivering effective services and need to be valued and supported in doing so. Acknowledgement of the interdependence between workforce well-being and positive outcomes for children, young people and families is essential.



Recommendations for delivery

- Services will need to work collaboratively and flexibly across disciplines and teams; to explore ways of working within services and across professional boundaries making best use of specialist staff group to meet the needs of children and young people with ADHD.
- Through workforce planning and a workforce skills audit, service providers to assess the skills and capacity required within services to support the ADHD care pathway to meet the needs of children and young people with ADHD locally:
- Audit of staff skills and competencies. Skills Audit Tool: <http://atlas.chimat.org.uk/IAS/CYPMH> and Integrated Workforce Planning Tool: <http://www.chimat.org.uk/CYPMHtool> (For further information please contact: barry.nixon@cmecic.org).
- Identification of training needs required.
- Investment in training and supervision to ensure continuous professional development of staff.
- Services offer evidence based treatments based on an appropriate skill mix drawn from range of appropriate disciplines and therapeutic backgrounds.
- Ensure systems are in place to provide evidence of outcomes of interventions provided.
- Consideration to enhancing existing roles and create new roles to support children and young people with ADHD across the pathway.
- Transitional arrangements from child to adult ADHD services are in place and, where required, to ensure the adequate training of adult mental health workers.





6. Single point of access to Paeds & CAMHS service

Updated 2018

There should be a single point of access for specialist services so that young people with ADHD are directed towards the most appropriate service for assessment (CYPMH or paediatrics) dependent on the young person's needs and associated co-morbidity (Department of Health, 2015).

Key points:

- Services should have a single point of access to specialist services .
- The pathway should be delivered by both paediatrics and CYPMH professionals with joint agreement regarding the most appropriate service for the young person based on the young person's needs.
- CYP and families should have access to the same quality of care including assessment and post-diagnostic support offer across specialist services

Services for young people with ADHD should be undertaken using a multi-disciplinary team approach with skilled staff (NICE, 2016). Within specialist services jointly delivered by CYPMH and Paediatrics there should be an appointed ADHD lead who supports service development including contributing to the development of a local multi-agency care pathway with all relevant stakeholders including other key agencies.

A specialist team made up of CYPMH and Paediatrics allows a range of professionals who are appropriately skilled to be involved in the assessment and ongoing reviews of children and young people with ADHD. This allows for a more cost effective model of service delivery where children and young people can access an appropriately skilled professional dependent on their needs. For example, not every young person may require assessment by a consultant child psychiatrist but this may be appropriate for young people with complex needs or risk.

An MDT approach may be delivered within a single clinic setting, but this may not be feasible or cost effective. Consideration should be given to the development of virtual ADHD teams where agencies can work collaboratively together to meet the needs of young people. Such environments can contribute to the development of more cost-effective and seamless services by sharing resources and expertise e.g. dedicated ADHD nurse time across CYPMH and Paediatric Specialist ADHD teams.





7. Referrals

Updated 2018

Use of a stepped care model, consistent with the iThrive framework (e.g. the coping quadrant) within primary care and children's community services. This should be supported by training accompanied by access to specialist consultation and advice from the ADHD team. Parents and young people should have access to behavioural interventions¹ and those with moderate-severe symptoms and impairment should be referred to specialist services for assessment (NICE, 2016). Referral can be made by a range of professionals who have had access to ADHD training and who contribute to the local multi-agency ADHD care pathway.

Key points:

- ADHD specialist services should accept referrals from a range of trained community professionals including education establishments, social care and youth justice teams.
- The referral process should be clear and transparent for referrers and families and easy to navigate to ensure services are accessible

Information on the multi-agency pathway for the assessment and treatment of children and young people with ADHD should be made available to primary care and community children's services, as well being accessible to service users. Information on the assessment process and waiting time to assessment should be available to promote transparency and clarity for referrers and families and within nationally or locally agreed standards. If specialist assessments of young people with ADHD are undertaken by both CYPMH and paediatric services within the borough, there should be agreement between both services regarding the nature of their respective roles and interface. This should be publicised to primary care agencies, either as part of a multi-agency care pathway or within referral criteria to limit unnecessary transfer of care between services following referral.

Referral information

Referrers should provide ADHD relevant information, ideally through standard approved forms e.g. School ADHD Proforma and/or ADHD Symptom Questionnaire. Referrers should have access to training to support the stepped care model (iThrive Framework) and referral process.

Parents/carers of the young person should also provide relevant ADHD information as part of the referral e.g. ADHD Symptom Questionnaire.

Primary care and children's community services should utilise a stepped care model before referral of a young person with possible ADHD for assessment in keeping with the coping quadrant of iThrive (Figure 1). They should consider support within the community for both parents and young people. This should be supported through training and access to specialist consultation from the local ADHD team who can act as a named contact for advice (NICE 2018; Department of Health, 2015). For children and young people with additional behavioural difficulties, parents should be supported to access local parent training programmes (NICE, 2016).

¹ Includes a range of strategies.

Figure 1: iThrive Model



Children should also be supported within educational settings to utilise strategies that limit the impact of their symptoms on their functioning and enhance their ability to access the curriculum. Schools can access training and additional support and advice through behaviour support services². It is recommended that schools implement an internal process / checklist of actions classroom teachers and the school should complete before engaging with other external agencies to ensure resources are being directed appropriately. An example of this can be found in Appendix 3.

Young people and parents should have access to support within the community based on needs rather than requiring a diagnosis.. Additionally many young people may present with sub threshold symptoms for a diagnosis that would still benefit from similar strategies and support within the community.

It is the recommendation of the project group that young people presenting with ADHD symptoms below the age of 6 years should access support within the community using the iThrive framework (coping quadrant), whereby children have access to strategies within school and parents are signposted to parenting groups. Those with mild symptoms should be monitored (watchful waiting) while those with moderate-severe symptoms should access community based strategies to support early intervention (Department of Health, 2015). Primary care services (GPs and schools) should monitor the response to these strategies initially and if symptoms persist seek advice through consultation with specialist services regarding further assessment.

The rationale for referring young people from the age of 6 years and above (age of 5 years in exceptional circumstances) for specialist ADHD assessments include:

Poorer reliability of diagnosis in pre-school children, particularly for those with other developmental needs. Research on preschool children suggests that some may manifest the symptoms of ADHD as part of that developmental period and that they may remain for periods of 3-6 months (Campbell, 1990; Palfrey et al., 1985). Additional information from teachers about the child's presentation in more structured classroom settings and outcome of the Early Years Foundation Profile (end of reception year) can provide valuable clinical information including information on co-morbid developmental needs.

Clinicians may be reluctant to diagnose ADHD in young children with other developmental difficulties which have not yet been identified, contributing to a delayed diagnosis and intervention.

Diagnostic uncertainty when working with children under 6 can lead to increased out-patient appointments during the clinical assessment process thereby reducing cost-effective service delivery.

SNAP-IV (Swanson, 1992) a frequently used ADHD symptoms rating scale in clinical assessment, has validity as an assessment tool for children from 6 years of age.

Qbtest (Qbtech Ltd) has been developed and validated for use with children and young people from the age of 6years (FDA; Ref- k133382).

Commonly used medication treatment for children with ADHD is licensed from 6 years of age (British National Formulary, 2017).

Therefore a stepped care approach using the iThrive framework (coping quadrant) ensures that pre-school and reception aged children presenting with symptoms of ADHD can access behavioural interventions early

² Including but not limited to, behaviour teams, education psychologist, community and voluntary services, CAMHS and Local Authority local offer web pages.

without delay, instead of waiting to access support only after referral and assessment by specialist services (Department of Health, 2015).

8

Assessment by specialist



Updated 2018

Assessment of young people with ADHD should be undertaken using a multi-disciplinary team approach with skilled staff (NICE, 2018). Within specialist services (CYPMH/Paediatrics) there should be an appointed ADHD lead who supports service development including contributing to the development of a local multi-agency care pathway with all relevant stakeholders including other key agencies.

Key points:

- If there is insufficient information on referral further steps should be taken to liaise with the referrer to obtain more information. Where appropriate additional training opportunities should be offered for referrers to support the referral process and a stepped approach to care.
- While a stepped approach to offering support is recommended, care should be patient centred and responsive to the young person's needs and risks.
- Questionnaires should not be used for the purposes of screening to divert children and young away from accessing a specialist ADHD assessment.

There should be consideration given to whether ADHD assessments are undertaken by the specialist MDT team (ADHD nurses/mental health practitioners with additional training) or the wider team. Assessments and diagnosis can be more accurately and rapidly made by professionals with specialist skills (e.g. ADHD nurses) thereby providing more cost-effective service delivery. The use of nurse led services to undertake this work is evident in service delivery models. Posts such as nurse consultants, advanced nurse practitioners and specialist nurses exist that can offer a range of assessment, diagnosis, prescribing medication and offering psychosocial interventions. The development of nurses to take on this advanced role safely would need to be supported within clinical practice, but the project group believes this may offer more capacity for appointments, timely access for patients for reviews face to face or by telephone and where nurses can prescribe quicker solutions to medication management issues (Mangle et al., 2014). The ADHD nurse should also act as a named contact in providing advice and consultation to community services regarding referrals (Department of Health, 2015).

An ADHD specialist assessment should include 4 key features;

1. a clinical assessment including direct observation
2. school information
3. the use of a validated ADHD symptoms questionnaire
4. an objective assessment measure (e.g. QbTest).

The clinical assessment should include;

- discussion with young person and parent/carer regarding referral information including reports and information from school and home (including validated ADHD symptoms questionnaire)
- the young person's and families reported experience
- observation of the young person
- clinical and developmental history
- psychosocial and psychiatric history
- family history (including history of parental mental illness and current presentation)
- observation of the young person
- an objective assessment measure (e.g. QbTest).



This should be collected using standardised and validated ADHD symptoms questionnaires (e.g. SNAP-IV questionnaires). SNAP-IV questionnaires are cost free and therefore should be considered as an initial option. School observations should be considered for young people with complex needs, or where information from different sources is inconsistent (NICE, 2018). School observations should not be conducted routinely on all young people referred for assessment as this is not a cost-effective process. School information can be obtained by teachers completing a standard proforma (see Appendix 4 for an example of a school information form) and a validated ADHD symptoms questionnaire (e.g. SNAP-IV).

Services should develop a care bundle which includes a standardised assessment process outlining the information to be collected (see Appendix 4). While practitioners with experience should use clinical flexibility where appropriate, the project group recommend a care bundle to help to ensure a standardised and evidence based approach is used by all practitioners. This is especially important if an ADHD assessment is being undertaken by the wider team as most teams include practitioners from a range of different professional backgrounds who may differ in their theoretical frameworks and formulation process. Alternatively, the project group recommends that practitioners consider the use of ACE - ADHD Child Evaluation (<http://www.psychology-services.uk.com/resources.htm>) which is a semi-structured interview to support the assessment and diagnosis of ADHD in children using diagnostic criteria (ICD-10 and DSM-V).

All practitioners involved in assessing young people with ADHD should have access to initial and ongoing training as well as regular clinical supervision with members of the ADHD specialist team/psychiatrist. Clinicians assessing and managing young people with ADHD should have a specialist interest and maintain their skills and knowledge through ongoing training (NICE 2018).

Although, as yet not reviewed by NICE, there is growing evidence for use of validated objective assessment tools in the initial assessment of young people with ADHD through research studies and local service audits. Continuous performance testing assesses selective and sustained attention and impulsivity. QbTest (QbTech Ltd) combines infra-red motion detection (assessment of motor activity) with continuous performance testing and has FDA approval (US) to supplement standard clinical assessment and treatment and augment clinical decision making (FDA; Ref-k133382). It demonstrates good psychometric properties (see Hall et al., 2014). Individual performance is compared with other children matched for both age and gender (normative population). One study within the UK has found that QbTest used with clinical judgement provides better reliability of diagnosis in comparison to clinical judgement alone (Vogt & Shameli, 2011). Audit data also suggests the implementation of QbTest in ADHD clinics (Medway, Kent) can reduce the time to diagnosis by 30% (Selby, Conference Presentation, 2015) and similar positive results have been found in audits by other local services (Stockport, Blackpool and Salford). The use of QbTest can also offer an opportunity to enhance the quality of care for patients by increasing clinical confidence in diagnosing ADHD, particularly in situations where the pervasiveness of symptoms across settings is difficult to elucidate or in the presence of other differential diagnoses (Vogt & Shameli, 2011). The AQUA trial evaluating the role of QbTest in clinical assessment through a multi-site randomised control trial found positive results (Holis et al, 2018); 'Qbtest may increase the efficiency of the ADHD assessment pathway allowing greater patient throughput with clinicians reaching diagnostic decisions faster without compromising diagnostic accuracy'.

Additionally, a number of pilot projects evaluating the use of Qbtest in specialist ADHD services in the North West region (e.g. Blackpool, Salford and Stockport) have demonstrated their valuable contribution to assessment and treatment care pathways. These include a) initial assessment; particularly for girls and those presenting with co-morbid/complex needs, b) monitoring response to medication treatment and c) supporting the dialogue with young people, families and other agencies about diagnosis and treatment response due to the objective nature of the test.



The project group therefore recommends that all young people assessed for ADHD by specialist services should have a validated objective assessment measure (e.g. QbTest) as part of the routine assessment process (1 of the 4 key features of assessment). This should be undertaken within two appointments of their ADHD assessment process starting. The use of objective assessment measures early in the assessment process can be helpful, particularly where there is complexity or conflicting information from different sources to avoid delays in diagnosis. Rating scales and objective assessment measures should not be used in isolation to assess a young person for ADHD, but used in conjunction with clinical information as part of the clinical assessment process.

There is research evidence that young people with ADHD are at increased risk of a range of other co-morbid needs including; other neurodevelopmental disorders (e.g. learning difficulties, motor co-ordination disorders, autism spectrum disorders and Tourette's), mental health needs (e.g. mood disorders and substance misuse) as well as physical health needs (e.g. epilepsy and hearing loss). Consequently, services should consider local care pathways for the assessment and treatment of these co-morbid needs, for example the interface with the assessment pathway for young people with autistic spectrum disorders/ Tourette's or access to Cognitive Behaviour Therapy (CBT) for young people with Obsessive Compulsive Disorder (OCD) and depression. This is imperative to ensure that all needs of children and young people with ADHD are appropriately assessed and supported including physical health and learning needs (NICE 2018).

Diagnosis should follow DSM V or ICD – 10 criteria and the severity (moderate or severe) should also be documented based on functional impairment (NICE 2018). Parents should have confirmation of the diagnosis in writing.

Written information (leaflet or clinic letter) should outline follow-up arrangements provided locally (NICE, 2018). It should include information on who is providing follow-up, frequency and purpose of appointments and expectations of families (for example attendance at regular medication clinic reviews) to provide transparency regarding the roles of service providers and service users. With parental consent, schools should also be informed in writing of the outcome of the assessment with information regarding management strategies within the classroom (NICE, 2018).



Updated 2018

Practical advice and support regarding strategies including environmental changes provides young people and their families with the tools to enable them to thrive and harness and channel the positive aspects and effects of ADHD. Young people with ADHD and their parents/carers should have access to support and advice including self-help information (NICE, 2018). This should be provided within a stepped care model delivered through community services and settings where possible. Improving access to effective support - a system without Tiers (Department of Health, 2015), in accordance with iThrive framework.

Key points:

- Service users should be offered a range of information and support, across multiple platforms (online, written, face to face etc.).
- It is recommended that links to helpful resources, are made available via the local offer page as well as provided to service users. Some of the useful resources are attached in the appendix.
- Parenting support and advice groups should be made available to those that wish to access them, co-delivered between health professionals and parent/carers. Such sessions should be offered both in and out of traditional office hours, in an accessible community setting.
- ADHD services should support the delivery of at least 12 parenting support and advice workshops in their locality annually. This can be through open drop-in sessions , newly diagnosed workshop, short closed group sessions or a combination of these.

Parent based interventions	Parenting programmes for preschool children Triple P or Incredible Years (for parents of school age children with ADHD and comorbid conduct disorder) Sleep strategies Principles of healthy diet Group sessions/workshops on strategies (see post diagnostic support)
Children and Young people interventions	CBT based strategies for comorbid mood/anxiety Group social skills or problem solving training School based behavioural strategies

Information and signposting

Parents and young people should be provided with age appropriate information about the diagnosis, support and advice (medication, parenting programmes, a healthy diet and self-help strategies) (NICE, 2018). Information should also be provided on local and national support organisations. Many children enjoy and benefit from hearing the views and perspectives of other children with ADHD. This information should be provided to each service user via a range of formats and platforms: e.g. online, video, leaflets.



Information for parents/ young people should be available and local services may already have resources:

- Medication – should address common side effects and treatment choices covering methylphenidate, dexamphetamine, atomoxetine and guanfacine
- Parenting programmes – should cover “the principles of child behaviour management, increase parental competence and confidence in raising children and to improve the parent/carer-child relationship by using good communication and positive attention to aid the child’s development. These programmes are structured and follow a set curriculum over several weeks; they are mainly conducted in groups, but can be modified for individual treatments. Examples of recognised programmes are the Triple P (Sanders et al., 2004) and Webster-Stratton (Webster-Stratton, 1981). The focus is primarily with the child or young person’s main caregiver although some programmes add a child-directed component based on the principles of social skills training.” (NICE, 2018).
- Healthy diet – principles of healthy eating
- Self-help strategies – “for example, national and local parent organisations, parenting books, manuals, video or DVD and materials from the internet”. (NICE, 2018)

Behavioural strategies

While effect sizes for behavioural management interventions are smaller than those reported for pharmacological interventions for ADHD symptoms, they can be helpful with other areas of functioning for the child and young person (NICE, 2018). Klassen et al. (1999) suggest that this may be at least partly due to the difficulties in applying manualised therapy packages to children with such a range of individual needs. For young people with co-morbid conduct and antisocial behaviour, practitioners should reference NICE guidance on Antisocial Behaviour and Conduct Disorders in Children and Young People (NICE, 2018) which emphasizes the role of parenting programmes, as well as multimodal and multi-systemic interventions.

Parent based interventions

Parent training in the use of contingency measures has a limited impact on observed behavioural symptoms of ADHD for school aged children (Zwi et al., 2011), but greater impact on ADHD symptoms for pre-school children. Such programmes however, have shown to reduce conduct problems and enhance peer relationships (Steer, 2005; Tarver, et al., 2015). In summary, there is evidence that parenting programmes can be effective for: i. School aged children with ADHD and co-morbid behavioural or antisocial problems (NICE, 2018) ii. Preschool children with ADHD symptoms (NICE, 2018).

For school aged children, a parent training programme that is manualised and based on social learning theory such as Triple P (Sanders, 2008) or the Incredible Years (Webster-Stratton & Reid, 2010) for 8-12 sessions has shown to be effective (NICE, 2018). Such programmes aim to promote parent-child interactions, understanding of a child’s needs and behaviour and parental confidence. Programmes are usually accessible via a range of children’s community services. The intervention itself should support parents to keep instructions short and clear, remain calm, plan ahead and provide positive reinforcement rather than harsh punishments (Hill, 2015). Efficacy of these parenting programmes were not found to depend on the mode of delivery (individual or group sessions) and therefore parents should be offered group based parenting programmes initially as a more cost-effective option.

For pre-school children, parenting programmes can include information on ADHD and active learning, but again do not significantly benefit from an extended parenting programme.

For primary school aged children, parents can be directed towards self-help material including specific parenting strategies e.g. Step by Step based on the New Forest Parenting Programme (Thompson et al., 2009). We recommend that groups are co-delivered with parents and service users as using the experiences of those with lived experience promotes person centred care and co-production is important to support effective service delivery



Post diagnostic support

Open groups (run by parent support groups, VCSE organisations with support from an ADHD nurse/local ADHD Specialist Services) can be helpful for parents of children with ADHD to meet and access information and support from other parents and professionals. There has been positive feedback from many parents within the region accessing such groups. Where possible the sessions should be more frequent. Drop in formats, different community settings and out of hours can increase accessibility for parents. Support provided to parents in open groups and an ongoing basis may be more effective in ensuring adherence to strategies long term, understanding of ADHD, strategies to manage at home and within the community and promotes the role of parents as partners and experts; endorsed in national reports (Department of Health, 2004; Department of Health, 2015).

Options outlined below describe different ways in which the post-diagnostic support can be provided within localities and the capacity required to support delivery.

Option 1: A programme of four sessions delivered over a month.

Feedback after each session is recommended.

It is required that at least two people co-deliver each session, with one being a parent/carer of a young person with ADHD.

Session 1	New diagnosis of ADHD and dealing with stigma
Session 2	Sleep and Diet
Session 3	Emotions and Executive functioning
Session 4	Parenting/Behavioural guidance and education support
Timings	2 hours during the evening or weekend every week for four weeks Ideally run as set sessions for parents to attend from Session 1 to 4 to get full benefit. These sessions to be run during each school term (total 12 sessions)
Capacity on average	VCSE Provider (18 hours in a month, three times a year) Volunteer parent (18 hours in a month, three times a year) ADHD nurse (18 hours in a month, three times a year)

Option 2: Monthly open sessions

It is recommended each session is on a different topics, with one session every 12 weeks focusing on the needs of those with a new diagnosis of ADHD.

Feedback after each session is recommended.

It is required that at least two people co-deliver each session, with one being a parent/carer of a young person with ADHD.

Session 1	New diagnosis of ADHD and Stigma Every 12 weeks
-----------	----------------------------------------------------

Session 2	Sleep/diet/Emotions/Executive functioning Parenting/behavioural guidance and education support On a rolling basis every month on the different topics
Timings	2 hours for each session evening or weekend Parents can attend the initial new diagnosis group and then the rolling sessions each month
Capacity on average	VCSE Provider (4.5 hours/month) Volunteer parent (4.5 hours/month) ADHD nurse (4.5 hours every month)



Key Principles are:

- Run by VCSE sector overseen by local ADHD specialist services
- Accessible at suitable family friendly schedule and time.
- Covers fundamentals of ADHD and behavioural management
- Tackle stigma/sleep strategies/education support
- Monitoring for associated mental health difficulties such as anxiety, self-harm or low mood.
- Collect feedback and outcomes from these sessions.

Sleep strategies

Lack of sleep can exacerbate symptoms for young people with ADHD and contribute to carer stress. As poor sleep is frequently a problem, the project group recommends that parents should be provided with information on sleep routine strategies, supported by a written information leaflet. A recent randomised controlled trial in Australia has shown promising results for a brief behavioural intervention (two face-to-face and one telephone contact) specifically targeting sleep in children with ADHD aged 5-12 years (Hiscock et al., 2015).

Diet

Some recent studies suggest that some children with ADHD may respond to dietary interventions or removal of food colourings or polyunsaturated fatty acids supplementation. However, further research is needed before these interventions become routine therapeutic options (NICE, 2018; Gillies et al., 2012; Sonuga-Barke et al., 2013)

Young person based interventions

All children and young people with ADHD should have access to behavioural interventions as clinically indicated.

Specialist services

While there is currently limited evidence that specific CBT programmes are a cost-effective treatment intervention for all children and young people with ADHD. It may be effective in older adolescents and young adults (NICE, 2018). Adherence to psychological programmes can be a common problem as many young people with ADHD by the nature of their symptoms (executive function deficits) may struggle to sit, retain and implement these strategies unaided. Interventions including mindfulness and metacognitive therapy have a small evidence base, from mostly non-randomised studies of adult populations (e.g. Noose & Saffron, 2010; Braham et al., 2008; Solanto et al., 2010). However, there is evidence that CBT based strategies can be effective for those with co-morbid mood and anxiety disorders (NICE, 2018) and should be considered in these specific situations. Additionally, there is some evidence for the effectiveness of CBT programmes for adolescents and adults with ADHD and co-morbid antisocial behaviour (Young & Ross, 2007), although further research is still required in young people.

Community children's services

NICE, (2018) recommend that children and young people with moderate ADHD impairment are offered a referral to a group treatment programme (behavioural strategies), for example social skills or problem solving skills training, with the aim of improving their relationships and daily functioning (solving problems, developing listening skills, coping with and expressing feelings). Such group programmes can be helpful for many young people with ADHD in their daily functioning and can be most easily accessed within community settings (schools) and supports a stepped care approach to treatment.

Challenges such as transition from primary to secondary school, and increasing homework demands can be difficult for young people with ADHD. Empowering young people, improving self-efficacy as well as harnessing digital technology is a recommendation from recent national reviews and guidance (Department of Health, 2015; Wolpert et al., 2014). Portable technology e.g. smart phones and tablets are popular with most young people and may provide a useful way of supporting young people with ADHD in improving time management and organisational skills. Kirby (2012) provides a useful summary of the different apps available to help with homework. Although there is not yet a robust evidence base to support the use of apps at this time, it will be important to continue to review the role of technology in improving services for young people in the future.



School support - classroom based strategies

ADHD symptoms can significantly impact on a young person's presentation and progress within an educational setting including learning, behaviour and social relationships. All young people with ADHD benefit from the use of school based strategies which supports the young person and limits the impact of their symptoms on their functioning (NICE 2018). Schools should have access to training on ADHD and strategies within the classroom setting (NICE, 2018; Department of Health, 2015). Access to specialist advice (ADHD specialist team / Behaviour Support Services) is helpful for young people with complex and co-morbid needs. Specialist ADHD services should work closely with schools to ensure there is a co-ordinated multi-agency approach in supporting young people with ADHD, for example liaison through clinic letters, telephone contact or meetings to provide information on a young person's needs and care plan.

Stepped care approach

Young people with moderate impairment

In accordance with NICE (2018), young people and families should be directed towards community support to consider parenting advice and educational strategies within school as appropriate (see above). Eligibility to structured parenting programme should be considered. Utilising a stepped care model, children should be stepped down to community services with clear advice to primary care and community services regarding their diagnosis, needs, strategies and when and how to re-refer. Children should be re-referred to specialist services if behavioural interventions are ineffective or symptoms increase in severity or impact. The ADHD nurse should act as a named contact in providing advice, training and consultation to community services to help support a multi-agency stepped care approach and to support children with ADHD in community settings.



Updated 2018

Medication treatment should always form part of a comprehensive treatment plan that considers educational and behavioural advice and interventions as clinically indicated (NICE, 2018).

Key messages:

- Medication is indicated for those who are severely impaired by their ADHD, or for those who moderately impaired by their ADHD and who have not responded to non-pharmacological interventions.
- Shared care protocol to be followed and local arrangements should be in place to meet the relevant guidance in the protocol. The specific guidance for each medication can be accessed on <http://gmimg.nhs.uk/>
- Medication reviews to be done every 6months with height/weight/blood pressure and pulse rate done on centile charts and annual review of ongoing medication use. For under 10s on medication they need to have their physical checks completed every 3months,
- Comorbid conditions should be actively assessed and relevant evidence based treatment accessed as appropriate.

10.1 Severe impairment or moderate impairment which has not responded to psychological/behavioural interventions or where young people and families choose medication

A number of studies provide evidence that medication treatment can lead to a substantial reduction in ADHD symptoms and less impairment in functioning during periods of treatment (NICE 2018). While there is inconsistent evidence for the long term advantage of medication treatment beyond ADHD symptom control, some studies do support long term benefits with the continued use of medication by lowering the risk for later antisocial behaviour, self-harm, substance misuse and accidents (Lichtenstein et al., 2012; Groenman et al., 2013; Dalsgaard et al., 2015). The long term benefit of medical treatment is more likely to be realised when combined with other therapies and support (Shaw et al., 2012). Once medication has been started, behavioural orientated medical management with regular and good quality review of the

child's progress (actively seeking feedback from the parent, teacher and child) is likely to ensure better outcomes in the short and long-term.

Medication management

i) Practitioners should discuss with the young person and family different medication options, as well as the benefits and side-effects of medication (NICE, 2008). Information on medication should also be provided within a written format or families directed to web-based sources.

It is important to obtain the young person's views on their symptoms and treatment options. The Voices Report (2015) by ADHD Voices (<http://www.adhdvoices.com/adhdreport/>) gives advice on common concerns that children with ADHD have about their disorder and medication and may be a helpful starting point for professionals in discussions with young people regarding treatment

ii) if medication is being considered practitioners should complete an ADHD pre-medication check (NICE, 2018) and undertake physical measurements (height/weight/blood pressure/pulse). Height, weight and blood pressure should be recorded on a centile chart. A cardiovascular examination and/or ECG should be undertaken if clinically indicated.



Services should ensure that practitioners have access to the necessary equipment and room to undertake these physical investigations or alternative arrangements should be discussed and agreed with local stakeholders including GPs and acute services (Paediatrics). If there are any concerns regarding physical health parameters e.g. hypertension or ECG abnormalities consider access to specialist guidance as appropriate.

iii) If a trial of medication is clinically indicated, practitioners should take into account the needs and views of parents/young people - if there is an equal choice between stimulants (methylphenidate and dexamfetamine) and atomoxetine - then methylphenidate should be considered as first line as the most cost-effective option (NICE, 2018). The recommendation from NICE guidelines is the first line should be Methylphenidate (short or long acting), second line either lisdexamfetamine or dexamfetamine and third line atomoxetine or guanfacine

Practitioners should use once daily prescribing (extended release preparations) where possible to increase compliance (NICE, 2018). A placebo trial of medication is not routinely recommended.

iv) A medication trial should utilise a fixed term incremental approach as clinically indicated (see NICE, 2018 and Department of Health 2015) for further guidance.

Practitioners should request symptom and side-effect questionnaires to be completed by parent/carers and school and returned for the medication review appointment within 6 weeks ideally, but minimum of 3 months after starting medication (NICE, 2018).

v) If there is no clinical response or if the patient reports significant side-effects to the medication practitioners should consider compliance and dosage or an alternative medication preparation (different Methylphenidate/Dexamfetamine preparations or Atomoxetine).

If two/three different medication preparations have been tried with limited effect, practitioners should review the formulation and diagnosis (NICE, 2018).

vii) Practitioners should consult with another Consultant Child Psychiatrist/ Paediatrician or tertiary centre (within the SCN footprint) in the following circumstances (NICE 2018):

- If considering higher than British National Formulary limits of licensed medication
- If considering combination medication
- If considering unlicensed medication - parents/carers should also be informed if medication usage is unlicensed and consent documented in notes

ix) Objective validated measure such as Qb Test could be used to evaluate treatment effectiveness, particularly when there are unclear treatment responses. They can also guide titration to the optimum dosages of medication.

x) For those on medication for over 1 year, practitioners should review the need for ongoing medication use annually with the young person and parents/carers. Children and families should be aware that they can contact clinicians if there are concerns or difficulties before their scheduled appointments. Drug holidays are not routinely recommended as long as there is evidence to support the benefits of ongoing medication treatment, for example through the impact of missed or reduced medication doses (NICE, 2018).

XI) Co-morbid conditions such as depression, anxiety, self-harm, oppositional defiant disorder, developmental delays autistic spectrum disorder, tic disorders and substance misuse are common amongst children and adolescents. Hence, during treatment review, care should be given to actively elicit these difficulties so that relevant evidence based treatment pathways for these co-morbid conditions can be accessed. When prescribing ADHD medications in children and young people who have substance misuse needs, non-stimulant medications should be considered first.



XII) Clinicians should follow local (GMMMNG) shared care guidance on prescribing and monitoring ADHD medications (www.gmmmg.nhs.uk). Patients should be reviewed as clinically indicated, but within a 6 month period with clinical letters to GPs specifying any changes in medication. Height/Weight/Blood Pressure/Pulse to be checked as clinically indicated but at least 6 monthly (3monthly for those under 10years) and documented in notes on centile charts (NICE, 2018). It may be appropriate to request that the GP or school nurse is able to provide additional physical monitoring between outpatient reviews. Clinic review forms can ensure a standardised approach to ADHD medication reviews for different members of the MDT (see Appendix 5 for example).

XIII) With parental consent, schools and other professionals working with the family should be updated about the outcome of the outpatient review including medication and follow-up arrangements to ensure there is a co-ordinated multi-agency approach in providing support.

XIV) Occasionally young people with ADHD are transferred between specialist services while on treatment e.g following a house move. Practitioners should ensure that appropriate information is passed to future services (specialist services and GP) promptly with consent from the young person/parent or carer (project group recommendation). This should include a copy of the initial assessment letter confirming diagnosis, relevant background information and history of treatment. Information on current needs, risk and physical observations (copy of growth chart/BP monitoring form) should also be provided.

XV) ADHD specialist services will need to work with other relevant stakeholders and commissioners regarding ongoing multi-agency support for patients with ADHD (NICE 2018). Specialist services will need to develop and plan services based on projected local needs and required workforce capacity to support this. No one service will have sufficient capacity to provide treatment services for young people with ADHD and therefore different stakeholders and commissioners must work collaboratively to plan local service delivery.

XVI) Consideration should be given to options that provide cost-effective models of service delivery including the use of ADHD clinics, role of ADHD nurses and integrated healthcare models that include CYPMH, paediatrics and GPs to provide medication monitoring with adequate specialist support. For example, a stepped care model from primary care (mild needs), paediatrics (moderate-severe needs) to CYPMH (severe needs/risk) for young people with ADHD who have increasing needs, complexity and risk. ADHD nurses should work across services to ensure a consistent and seamless approach in service delivery locally.



Updated 2018

Validated outcome measures should be used routinely throughout the assessment and treatment pathway to continuously assess the CYP needs and goals and inform care planning and service delivery.

Key messages

- Services should collect routine outcome measures (ROMS) including patient reported outcome measures (PROMS) as in line with recommended practice nationally (NHS England) and locally (GM).
- Services should use outcome measures to inform patient care as well as service delivery and commissioning.
- Qb tests should be considered to evaluate treatment effectiveness, particularly for those with complex or co-morbid needs.

During outpatient review appointments, the young persons' goals of care should be understood and regularly reviewed. Additionally, practitioners should obtain written feedback from the young person's school, and family about their ADHD symptoms and general progress. Standardised and validated questionnaires including; ADHD symptom scales (e.g. SNAP-IV and Connors), general emotional and behavioural rating scales (SDQ; Strengths and Difficulties Questionnaire - Goodman, 1997) or quality of life questionnaires (WFIRS; WEISS Functional Impairment Rating Scale) should be regularly used to support the implementation of routine outcome measures (ROM). This is important to demonstrate treatment response and general progress (Department of Health, 2015).

Measures used should be agreed locally between service providers and commissioners and may include Children & Young People's Improving Access to Psychological Therapies programme (CYP IAPT) or CORC (Childhood Outcome Research Consortium) data set.

The aims of these measures are to understand the young person's needs and goals and to adjust treatment accordingly. The following measures are recommended for use:

ADHD specific measures:

To be completed annually as minimum:

SNAP-1V

Side effect rating scale (Appendix 6)

General outcome measures:

Strengths and Difficulties Questionnaire -SDQ (referral and on discharge)

Goal based outcomes (referral and on discharge, or annually)

Session rating scales (session by session)

Outcome rating scales (Session by session ORS > 13 yrs. /CORS <13 yrs.) e.g. ORS and CORS)

Experience of Service Questionnaire CHI (annually and on discharge)



Updated 2018

Through consultation and engagement with all stakeholders, a co-commissioned multi-agency care pathway should be developed across the lifespan (children and adult services). This should include investment in training and workforce development across community and specialist services. Transition from children's services requires careful and collaborative planning.

Key points:

- Service users should receive continued and co-ordinated care as they transition from CYPMH to adult services.
- Transition processes should be cognisant with GM transition of care protocol.
- The process should commence 6 months before the point of transition to adult services by reviewing the young person's needs and support required following transition. Information should be communicated to all relevant agencies (primary care and specialist services) including details of the young person's needs, risk and care plan. If needs are severe or complex, the care programme approach should be considered (NICE, 2018).

Transition into adulthood is a period of significant change for young people. Alongside the many physical and emotional changes, transition also involves changes in roles, relationships and expectations; within family, amongst friends and within the wider community. For many young people, leaving school or leaving home at this life-stage can mean considerable changes in the environments where they live and spend their days. Transition may be particularly challenging for young people with mental health needs. A number of recent national reviews have highlighted concerns about current transition arrangements between children's and adult services for these young people; the high numbers of young people not able to access appropriate services and lack of support and poor continuity of care through the transition process (Care Quality Commission, 2015; Department of Health, 2015).

The NICE ADHD guidance (2018) proposes that 2% of adults will meet the criteria for a diagnosis of ADHD. This illustrates the need for ADHD services into adulthood and consideration of a lifespan approach to care.

Current guidance

NICE Guidance (2018) recommends:

Young people with ADHD receiving treatment and care from CYPMH or paediatric services should normally be transferred to adult services if they continue to have significant symptoms of ADHD or other coexisting conditions that require treatment. Transition should be planned in advance by both referring and receiving services. If needs are severe and/or complex, use of the care programme approach should be considered. The Model Specification for Transitions from Child and Adolescent Mental Health Services (NHS England, 2015 [i]) notes that:

1. The mental and physical health of young people in transition should not decline during the process of transition.
2. Young people should be assisted to maximise their health and life opportunities.
3. Young people should be treated as far as possible within their own community and close to home.
4. Commissioners will need to ensure that appropriate plans are in place for young people in crisis.
5. Services should work together in integrated and coordinated ways in the best interests of children and young people.

The document also notes that transition can have multiple components, but is ultimately an ongoing process.



Good practice guidance on planning transition

- Young people should be reviewed prior to transition from children's services with regard to their needs and risk (NICE, 2018). The project group recommends that this process should commence 6 months before transition.
- If ongoing needs are identified, professionals need to identify which services and support is required and from which agency (education, health, social care, youth justice, substance misuse etc.). This should be documented within an agreed care plan and shared with the family and all relevant agencies (primary care and specialist services).
- If health needs are identified, for example due to ongoing ADHD medication monitoring or the existence of co-morbid mental health needs, practitioners must ensure that young people are transitioned to the appropriate service. Consequently, practitioners should be aware of mental health services provided locally by different community and specialist service providers including voluntary and 3rd sector organizations for this age group.
- Where it has been agreed that the young person would benefit from continuing on medication and there are available local ADHD services, practitioners should write to the Consultant Adult Psychiatrist (ADHD Lead) or Sector Consultant Psychiatrist in line with local policy, with relevant clinical information requesting transfer. Practitioners should use non Care Programme Approach (CPA) / CPA documentation as appropriate to review needs and risk and agree the care plan with the young person and family prior to transition (NICE 2018). Licensed medication preparations should be used where possible.
- If no adult ADHD service is available locally to provide specialist medication monitoring, the project group recommends that practitioners must contact the GP to establish if the GP is able to provide ongoing monitoring (with suggested dosing regime and time period for continuation) or whether medication needs to be stopped.
- Support within education and college is a common priority for young people with ADHD on transition. In keeping with the Department for Education (2015) Special Education Needs and Disability (SEND) guidance, practitioners should liaise with college/apprenticeship providers to highlight the young person's needs and request additional support if required. The development of an Education and Health Care Plan can be helpful to ensure ongoing support post transition (up to the age of 25 years) for young people with complex needs. Transition can be a stressful time for young people and families. Where possible joint meetings between services and families can ameliorate this anxiety and agreed crisis plans should be shared with all services prior to transition, including primary care (GPs). In keeping with the principles of the Crisis Care Concordat (HM Government, 2014), ADHD practitioners should develop individualised care plans that can be sent to GPs and where appropriate Adult Mental Health services during periods of crisis.

Guidance for adult services on transition

NICE guidelines (2018) note the need for adult services to reassess young people following transition. This can provide an opportunity to identify new co-morbid difficulties, discuss medication choices and direct young people towards advice regarding other issues, for example substance misuse services or family planning etc.





Updated 2018

The below links and documents have been rated by the SCN service user feedback group with a minimum of 70% approval. Some are in the process of their formatting being updated.

1. Website on 'Living with ADHD' from Janssen-Cilag: <http://livingwithadhd.co.uk/#>

2. Leaflet by Stockport NHS: Weight gain info sheet



Advice to how to
gain weight on med

3. Website article: ADDitudemag.com Wake up and smell the Calmness



Routines.pdf



Teenages &
Sleep.pdf

4. Fact Sheet Better health channel Teenagers and sleep

5. Bury HYM, Information sheet on ADHD medication – Methylphenidate and Atomoxetine from Pennine Care.



ADHD Atomoxetine-Strattera.pdf



800_Methylphenidate11.pdf

6. Leaflet, Shire ADHD learning styles



Shire - A Guide To
Learning Styles.pdf

7. Leaflet , Shire, ADHD and exams



Shire & Pennine A
guide to studying at

Webpage on ADHD from NIH (National Institute for Mental Health). <https://www.nimh.nih.gov/health/topics/attention-deficit-hyperactivity-disorder-adhd/index.shtml>



Multi-Agency ADHD Care Pathway

Within all of the Greater Manchester Clinical Commissioning Group localities, there is now a standardised training syllabus available for a range of multi-agency staff, including education staff, GPs and A&E. It is hoped that this will inform referrers. This is a guide and all stakeholders need to consider patient choice.

Referral received from all locally authorised referrers both internal (eg. from fellow mental health services) and external referrers (e.g. GPs, schools, youth workers, YOS etc)

Single Point of Access for the specialist ADHD team (CAMHS and Paeds)
Consultation and supervision with specialist ADHD

Specialist Clinical Assessment

Include 4 key features;

- 1) a clinical assessment including direct observation
- 2) school information
- 3) the use of a validated ADHD symptoms questionnaire (NICE, 2008, 2016) SNAP
- 4) objective psychometric measure (eg. Qb Test).

Formulate Feedback

ADHD

ADHD - Moderate
Impairment

ADHD-Severe Impairment/Significant Co-Morbidity
Refer to psychiatrist

Not ADHD

iThrive 'support services within coping quadrant.

Multi agency community services
(within iThrive 'getting help' services')

- Discharge to GP
- ADHD Nurse Clinic
- Community services
- Behavioural Interventions
- New diagnosis support services and resources

ADHD Medication
Clinic



Appendix 2:

GM Training Matrix: www.tinyurl.com/GMADHResources



Training Matrix (no
example powerpoints

Appendix 3: *Under development*



Appendix 4:

ADHD Referral Paperwork From Schools

Please complete for:

Name of Child:

D.O.B.

School:

Name of person completing form:

Name of Teacher:

Date Completed:

I am aware of my role regarding data protection and have adhered to best practice guidance

--	--

I will also include SNAP when providing information to the ADHD service

7

Address for ADHD service

1. Behaviour in Classroom

Compared to other children of the same ability:

- a. Attention span/distractibility/forgetfulness
- b. Fidgeting/standing up/ wandering around/ doodling/fiddling/exaggerated movements
- c. Interrupting others/shouting out/doing things without thinking
- d. Ability to follow instructions
- e. Organisational skills

- f. Behaviour towards other children and teachers

2. Behaviour at lunchtime/playground

3. Relationship with peers and adults

Oppositional/aggressive behaviour

Any exclusions (details)

4. Academic Ability

Formal Testing (SATs, psychometrics etc)

meeting / exceeding year group expectations

e.g. spelling / reading age (accuracy / comprehension), WRAT tests,

Strengths

Weaknesses

Gross-motor skills/co-ordination (sports/ball games)

--

ACADEMIC PERFORMANCE	Well Below Grade Level	Somewhat Below Grade Level	At Grade Level	Above Grade Level	Well Above Grade Level
READING					
a) Comprehension					
b) Fluency					
WRITING					
c) Handwriting					
d) Spelling					
e) Written composition					
CLASSROOM PERFORMANCE	Well Below Average	Below Average	Average	Above Average	Well Above Average
Following directions/instructions					
Organizational skills					
Assignment completion					
Peer relationships					
Classroom Behaviour					

5. School Support or EH&C / Statement

If Educational Psychology assessment or LSS assessment has been completed please send copy of report and or any other reports regarding support-behaviour/ support services/learning mentor etc.

Details



CAMHS ADHD Clinic Review

Location:							
Type of appointment:	Routine Outpatient			Non CPA		CPA	
Name of Patient:				Date of Review:			
				Time:			
D.O.B:				Practitioner:			
RT Number:				School:			
Present at Interview:							
Diagnosis		1.			4.		
		2.			5.		
		3.			6.		
	HT	Centile	WT	Centile	B/P	Centile	Pulse
Physical							
Observation							
Current Medication	1.				4.		
	2.				5.		
	3.				6.		
Medication Compliance			Therapeutic Response				

Side Effects		
Feedback Patient		
Feedback Parent/Carers		
Feedback School/Other		
Summary Key Points:		
Risks/Concerns:		
Action Plan	1.	4.
	2.	5.
	3.	6.

Signature:

Name:

Designation:



Appendix 6

ADHD MEDICATION SIDE EFFECTS QUESTIONNAIRE

Child's Name: _____ Date: _____

All medication has side effects; some are more troublesome than others. We want to make sure that children who are taking medication do not suffer side effects, even if their work and behaviour benefit from it. For each item, please tick in a box on each line how much that word or statement applies to your child over the last few weeks, according to what you have seen.

- 0 is not at all
- 1 is a few occasions only
- 2 is about half the time
- 3 is most of the time
- 4 is all the time

	0	1	2	3	4
Stares or day dreams a lot					
Talks less than usual with others					
Not interested in other children					
Poor appetite or fluid intake					
Irritable					
Complains of stomach ache					
Complains of headache					
Drowsy, tired or sleepy					
Looks sad, miserable or low mood					
Crying spells					
Looks anxious or tense					
Seems unsteady or dizzy					
Excited					
Has trouble getting off to sleep					
Has nightmares					
Expresses suicidal ideas					
Constipation					
Dry mouth					
Any change in menstrual cycle or sexual functioning in adolescents					
Displays twitches (tics)					

Is there anything else you would like to add?





ADHD is a common neurodevelopmental disorder associated with high levels of co-morbidity and impairment in functioning into adulthood (NICE, 2013). The health, social and economic burden on the young person and society is significant (Barkley et al., 2002; Biederman et al., 2010; Arnold et al., 2015; D'Amico et al., 2014). The high costs of ADHD support an economic case for early intervention, as they imply that even relatively modest improvements in outcomes would yield significant financial returns. This case is further strengthened by a growing body of evidence which demonstrates the effectiveness of a range of interventions for the treatment of ADHD in childhood (NICE, 2008, 2013).

Within Greater Manchester, Lancashire and South Cumbria, specialist services provided for young people with ADHD are variable and based on historical service provision arrangements, frequently struggling to manage increasing demand and reducing capacity.

This report provides good practice guidance for commissioners and service providers across Greater Manchester, Lancashire and South Cumbria regarding ADHD service delivery for children and young people. These guidelines are designed to help manage some of the challenges in providing good quality services using cost-effective models of care that are sustainable and able to address unmet needs and increasing demand. This is all the more important as we enter one of the most financially constrained periods for the NHS. The report has incorporated; recommendations from national guidance including NICE Guidance (NICE, 2008, 2013) and Future in Mind (Department of Health, 2015), recent developments in research, as well as examples of innovative practice from services across the network to help support implementation and improve the quality of care provided to children and young people with ADHD.

7.1 Key principles of care

Person centred care (respect, understanding and consent), promoting access to effective support, transparency, empowering children and families and developing a skilled workforce.

7.2 Key themes for service development

- Service planning and transparency regarding unmet need - importance of clinical leadership and commissioning support
- Developing a multi-agency partnership and ownership of the ADHD care pathway with other key agencies (general practice, education, social care, 3rd sector and voluntary sector) - importance of stakeholder consultation and engagement
- Developing a skilled workforce across community and specialist children's services
- Developing a chronic care pathway for young people with neurodevelopmental disorders – importance of a stepped care model and integrated multi-agency approach
- Empowering children and families - young people and parents/carers should have access to information on diagnosis and management, including strategies and contribute to local ADHD service design and development
- Development of cost-effective models of service delivery for assessment and management
- Investment in the use of technology to improve data collection and provision of assessment and treatment services
- Evaluating practice through audit and implementation of outcome measures



While there are challenges in implementing change within stretched services, there is a desire amongst commissioners and service providers to provide high quality and cost-effective services for children and adults with ADHD and many examples of good practice across the patch. Specialist services should be supported to change through investment in clinical leadership, multi-agency collaboration and networking and in partnership with commissioners.

7.3 Recommendations for Commissioners and Service Providers

1. Informed co-commissioning and service planning to provide the required capacity to support a local ADHD Care Pathway (minimum requirement: 3% of young people referred for specialist assessment, 1% requiring medication and 3% community support).
2. Development of a multi-agency stepped care pathway through local stakeholder events to consult and engage commissioners, service providers and key partner agencies outlining the contribution of different stakeholders to the pathway (see appendix 1).
3. Specialist ADHD services to support the provision of training programmes and access to consultation for primary care and community children's services to support a multi-agency stepped care model.
4. Through workforce planning and a workforce skills audit, service providers to assess the skills and capacity required within services to support the ADHD care pathway to meet the needs of children and young people with ADHD locally including:
 - Identification of staff skills and training needs
 - Access to training programmes and supervision to ensure continuous professional development.
5. Specialist ADHD services to be jointly delivered by CAMHS and paediatrics with a single point of access for referrals. Specialist teams should be multi-disciplinary and consider the role of specialist ADHD nurses to provide more cost-effective models of care. ADHD nurses should act as a named contact for community services in providing consultation and advice and supporting a stepped care model.
6. Assessment provided by specialist services should follow the good practice guidance outlined within the report. They should consider the use of a standardised assessment protocol and investment in objective psychometric assessments to aid reliability of diagnosis and standardise care.
7. Behavioural interventions including self-help information should be available as recommended for young people with ADHD and their parents/carers, and provided within a stepped care model.
8. Young people on pharmacological treatment should be monitored within specialist ADHD clinics. There should be local agreement between commissioners, specialist and primary care services regarding the role of each stakeholder in monitoring and prescribing through the use of shared care protocols to ensure that the needs of children and young people with ADHD are met.
9. Specialist services should monitor outcomes for young people on treatment through the use of validated symptom scales or routine outcome measures (ROM) as locally agreed with commissioners.
10. Transition must be discussed and planned in a timely (6 months prior) and collaborative manner that enables all young people to access the services they need, both to manage planned needs and support children in crisis.
11. The NICE ADHD guidance (2013) propose that 2% of adults will meet the criteria for a diagnosis of ADHD and subsequently commissioners must invest in the development of a local multi-agency ADHD care pathway across the lifespan with relevant stakeholders.



ADHD Voices (2015). Available at: www.adhdvoices.com/adhdreport.

Arnold, L. E., Hodgkins, P., Kahle, J., Madhoo, M., & Kewley, G. (2015). Long-Term Outcomes of ADHD Academic Achievement and Performance. *Journal of Attention Disorders*. Available at: www.ncbi.nlm.nih.gov/pubmed/25583985. [accessed 12 May 2015]

Barkley, R. A., Fischer, M., Smallish, L., & Fletcher, K. (2002). The persistence of attention-deficit/hyperactivity disorder into young adulthood as a function of reporting source and definition of disorder. *Journal of Abnormal Psychology*, 111(2), pp.279.

Biederman, J., Petty, C. R., Evans, M., Small, J., & Faraone, S. V. (2010). How persistent is ADHD? A controlled 10-year follow-up study of boys with ADHD. *Psychiatry Research*, 177(3), pp.299-304.

Bramham, J., Young, S., Bickerdike, A., Spain, D., McCartan, D., & Xenitidis, K. (2008). Evaluation of group cognitive behavioral therapy for adults with ADHD. *Journal of Attention Disorders*. 12(5), pp.434-441.

British Association for Community Child Health (BACCH). Available at: www.bacch.org.uk/publications/other_service_improvement.php.

Campbell, S. B. (1990). *Behaviour Problems in Preschool Children, Second Edition: Clinical and Developmental Issues*. The Guilford Press: NYC.

Care Quality Commission (2015). Transition arrangements for young people with complex health needs from children's to adult services. Available at: www.cqc.org.uk/content/transition-arrangements-young-people-complex-health-needs-children%E2%80%99s-adult-services?cqc= [accessed 12 May 2015]

Dalsgaard, S., Østergaard, S. D., Leckman, J. F., Mortensen, P. B., & Pedersen, M. G. (2015). Mortality in children, adolescents, and adults with attention deficit hyperactivity disorder: a nationwide cohort study. *The Lancet*. Available at: [www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)61684-6/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61684-6/abstract) [accessed 12 May 2015]

D'Amico, F., Knapp, M., Beecham, J., Sandberg, S., Taylor, E., & Sayal, K. (2014). Use of services and associated costs for young adults with childhood hyperactivity/conduct problems: 20-year follow-up. *The British Journal of Psychiatry*. 204(6), pp.441-447.

Department for Communities and Local Government (2015). *2010 to 2015 Government Policy; Support for Families*. London.

Department for Education (2015). *Special educational needs and disability code of practice: 0 to 25 years* Statutory guidance for organisations which work with and support children and young people who have special educational needs or disabilities. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/398815/SEND_Code_of_Practice_January_2015.pdf [accessed 12 May 2015]

Department of Health (2004). *The National Services Framework for Children, Young People and Maternity Services*. Disabled children and young people and those with complex health needs. London.

Department of Health (2015). *Future in Mind*. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/414024/Childrens_Mental_Health.pdf [accessed 12 May 2015]

Gillies, D., Sinn, J. K. H., Lad, S. S., Leach, M. J., & Ross, M. J. (2012) Polyunsaturated fatty acids (PUFA) for attention deficit hyperactivity disorder (ADHD) in children and adolescents. *Cochrane Database of Systematic Reviews* issue 7. DOI: 10.1002/14651858.CD007986.pub2.

Groenman, A. P., Oosterlaan, J., Rommelse, N. N., Franke, B., Greven, C. U., Hoekstra, P. J., Hartman, C.



- A., Luman, M., Roeyers, H., Oades, R. D., Sergeant, J. A., Buitelaar, J. K., & Faraone, S. V. (2013). Stimulant treatment for attention-deficit hyperactivity disorder and risk of developing substance use disorder. *British Journal of Psychiatry*, 203, 112–119.
- Hall, C., Walker, G., Valentine, A., Guo, B., Kaylor-Hughes, C., James, M., Daley, D., Sayal, K., Hollis, C. (2014). Protocol investigating the clinical utility of an objective measure of activity and attention (Qbtest) on diagnostic and treatment decision-making in children and young people with ADHD (AQUA): a randomised controlled trial. *BMJ Open Access*; 4(12).
<http://bmjopen.bmj.com/content/4/12/e006838.abstract> [accessed 12 May 2015]
- Hill, P. (2015). Attention-deficit hyperactivity disorder in children and adolescents: assessment and treatment. *Advances in Psychiatric Treatment*, 21(1), pp23-30.
- Hiscock, H., Sciberras, E., Mensah, F., Gerner, B., Efron, D., Khano, S. & Oberklaid, F. (2015). Impact of a behavioural sleep intervention on symptoms and sleep in children with attention deficit hyperactivity disorder, and parental mental health: randomised controlled trial. *BMJ*, 350:h68
 Available at: www.bmj.com/content/350/bmj.h68 [accessed 12 May 2015]
- HM Government (2014). Mental Health Crisis Care Concordat: Improving outcomes for people experiencing mental health crisis. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/281242/36353_Mental_Health_Crisis_accessible.pdf [accessed 12 May 2015]
- House of Commons (2013). Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. London: The Stationery Office. Available at: www.ipem.ac.uk/Portals/0/Documents/Consultations/Francis%20Report%20Feb%202013%20Executive%20Summary.pdf [accessed 12 May 2015]
- Hughes, N., Williams, H., Chitsabeau, P., Davies, R. & Mounce, L. (2012) Nobody Made the Connection: The prevalence of neurodisability in young people who offend. London: Office of the Children's Commissioner for England.
- Khong, B. (2014). The lifetime costs of attention deficit hyperactivity disorder (ADHD). Available at: www.centreformentalhealth.org.uk/costs-of-adhd [accessed 12 May 2015]
- Kirby, A. (2012) Technology to assist with transition from primary to secondary school in ADHD. *ADHD in Practice*, 4(2), pp. 4-6.
- Klassen, A., Miller, A., Raina, P., Lee, S. K. and Olsen, L. (1999). Attention-deficit hyperactivity disorder in children and youth: a quantitative systematic review of the efficacy of different management strategies. *Canadian Journal of Psychiatry*, 44(10), pp.1007-1016.
- Knouse, L. E., & Safren, S. A. (2010). Current status of cognitive behavioral therapy for adult attention-deficit hyperactivity disorder. *Psychiatric Clinics of North America*, 33(3), pp.497-509.
- Langley, K., Fowler, T., Ford, T., Thapar, A. K., van den Bree, M., Harold, G., Owen, M. J., O'Donovan, M. C., Thapar, A. (2010). Adolescent clinical outcomes for young people with attention-deficit hyperactivity disorder. *British Journal of Psychiatry* 2010; 196(3), pp.235-40.
- Lichtenstein, P., Halldner, L., Zetterqvist, J., Sjölander, A., Serlachius, E., Fazel, S., Långström, N., & Larsson, H. (2012). Medication for attention deficit–hyperactivity disorder and criminality. *New England Journal of Medicine*, 367(21), pp.2006-2014.
- Mangle, L., Phillips, P., Pitts, M. and Laver-Bradbury, C. (2014) Implementation of independent nurse prescribing in UK mental health settings: focus on attention-deficit/hyperactivity disorder. *ADHD Attention Deficit Hyperactivity Disorders* 6(4), pp.269-279.
- Molina, B. S. G., Hinshaw, S. P., Swanson, J. M., Arnold, L. E., Vitiello, B., Jensen, P. S., Epstein, J. N., Hoza, B., Hechtman, L., Abikoff, H. B., Elliott, G. R., Greenhill, L. L., Newcorn, J. H., Wells, K. C., Wigal, T., Gibbons, R. D., Hur, K. & Houck, P. R. (2009). The MTA at 8 Years: Prospective Follow-Up of Children Treated for Combined Type ADHD in a Multisite Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 48(5): 484-500.



- National Institute for Health and Care Excellence (2008) Attention deficit hyperactivity disorder: Diagnosis and management of ADHD in children, young people and adults. NICE: London. Available at: <http://publications.nice.org.uk/attention-deficit-hyperactivity-disorder-cg72> [accessed 12 May 2015]
- National Institute for Health and Care Excellence (2013) Attention deficit hyperactivity disorder: Evidence Update July 2013. Available at: www.nice.org.uk/guidance/cg72/evidence/cg72-attention-deficit-hyperactivity-disorder-adhd-evidence-update2 [accessed 12 May 2015]
- National Institute for Health and Care Excellence (2013) Attention Deficit Hyperactivity Disorder: NICE quality standard 39. Available at: www.nice.org.uk/guidance/qs39/resources/guidance-attention-deficit-hyperactivity-disorder-pdf [accessed 12 May 2015]
- National Institute for Health and Care Excellence (2014). Antisocial behaviour and conduct disorders in children and young people. Available at: <http://publications.nice.org.uk/antisocial-behaviour-and-conduct-disorders-in-children-and-young-people-recognition-intervention-cg158> [accessed 12 May 2015]
- NHS England (2015[i]) Model Specification for Transitions from Child and Adolescent Mental Health Services. Available at: www.crisiscareconcordat.org.uk/wp-content/uploads/2015/04/mod-transt-camhs-spec.pdf [accessed 12 May 2015]
- NHS England (2015[ii]) Model Specification for Child and Adolescent Mental Health Services; Targeted and Specialist Services (Tier 2/3). Available at: www.england.nhs.uk/wp-content/uploads/2015/01/mod-camhs-tier-2-3-spec.pdf [accessed 12 May 2015]
- Paediatric Formulary Committee. (2014). British National Formulary for Children (2009). London: BMJ Group.
- Palfrey, J. S., Levine, M. D., Melvin, D., Walker, D. K., & Sullivan, M. (1985). The emergence of attention deficits in early childhood: A prospective study. *Developmental and Behavioral Pediatrics*, 6(6), pp.339-348.
- Purper-Ouakil, D., Ramoz, N., Lepagnol-Bestel, A. M., Gorwood, P., & Simonneau, M. (2011). Neurobiology of attention deficit/hyperactivity disorder. *Pediatric research*, 69(5), pp.69R-76R.
- Sanders MR (2008) Triple P-Positive Parenting Program as a public health approach to strengthening parenting. *Journal of Family Psychology* 22 (4), 506-517.
- Shaw, M., Hodgkins, P., Caci, H., Young, S., Kahle, J., Woods, A. G., & Arnold, L. E. (2012). A systematic review and analysis of long-term outcomes in attention deficit hyperactivity disorder: effects of treatment and non-treatment. *BMC medicine*, 10(1), p.99.
- Solanto, M. V., Marks, D. J., Wasserstein, J., Mitchell, K., Abikoff, H., Alvir, J. M., & Kofman, M. D. (2010). Efficacy of meta-cognitive therapy for adult ADHD. *American Journal of Psychiatry*, 167(8), pp.958-968.
- Sonuga-Barke, E.J., Brandeis, D., Cortese, S., Daley, D., Ferrin, M., Holtmann, M., Stevenson, J., Danckaerts, M., van der Oord, S., Dopfner, M., Dittmann, R.W., Simonoff, E., Zuddas, A., Banaschewski, T., Buitelaar, J., Coghill, D., Hollis, C., Konofal, E., Lecendreux, M., Wong, I.C., and Sergeant, J. (2013). Nonpharmacological interventions for ADHD: systematic review and meta-analyses of randomized controlled trials of dietary and psychological treatments. *American Journal of Psychiatry*. 170(3), pp.275-289.
- Steer, C. R. (2005). Managing attention deficit/hyperactivity disorder: Unmet needs and future directions. *Archives of Disease in Childhood*, 90(1), p.19-25.
- Steinhausen, H.C., Drechsler, R., Földényi, M., Imhof, K. & Brandeis, D. (2003). Clinical Course of Attention-Deficit/Hyperactivity Disorder From Childhood Toward Early Adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry*. 42(9), pp.1085-1092



Swanson, J. M. (1992). School-based assessments and interventions for ADD students. Irvine, CA: Publishing.

Thompson, M. J. J., Laver-Bardbury, C., Ayres, M., Le Poidevin, E., Mead, S., Dodds, C., Psychogiou, L., Bitsakou, P., Daley, D., Weeks, A., Brotman, L. M., Abikoff, H., Thompson, P., & Sonuga-Barke, E. J. S. (2009). A small-scale randomized controlled trial of the revised New Forest parenting programme for preschoolers with Attention Deficit/Hyperactivity Disorder. *European Child and Adolescent Psychiatry*, 18(10), pp.605 – 616.

Vogt, C., & Shameli, A. (2011). Assessments for attention-deficit hyperactivity disorder: use of objective measurements. *The Psychiatrist*, 35(10), pp.380-383.

Webster-Stratton, C., & Reid, M. J. (2010). A multi-facted treatment approach for young children with conduct problems. In J. Weisz, & A. Kazdin (Eds.), *Evidence-based Psychotherapies for Children and Adolescents* (2nd Edition) (pp.194-210). New York: Guild Publications.

Wolpert, M., Harris, R., Jones, M., Hodges, S., Fuggle, P., James, R., Wiener, A., Mckenna, C., Law, D., & Fonagy, P. (2014) THRIVE: The AFC–Tavistock Model for CAMHS. Available at: [www.ucl.ac.uk/ebpu/docs/ publication_files/New_THRIVE](http://www.ucl.ac.uk/ebpu/docs/publication_files/New_THRIVE) [accessed 12 May 2015]

Wright, N., Moldavsky, M., Schneider, J., Chakrabarti, I., Coates, J., Daley, D., Kochhar, P., Mills, J., Sorour, W. & Sayal, K. (2015). Practitioner Review: Pathways to care for ADHD—a systematic review of barriers and facilitators. *Journal of Child Psychology and Psychiatry*. Available at: [http://onlinelibrary.wiley.com/ doi/10.1111/jcpp.12398/abstract](http://onlinelibrary.wiley.com/doi/10.1111/jcpp.12398/abstract) [accessed 12 May 2015]

Young, S.J. and Ross, R.R. (2007). R&R2 for ADHD Youths and Adults: A Prosocial Competence Training Program. Ottawa: Cognitive Centre of Canada.

Zwi, M. Jones, H., Thorgaard, C., York, A. & Dennis, J. A. (2011) Parent training interventions for Attention Deficit Hyperactivity Disorder (ADHD) in children aged 5 to 18 years. *Cochrane Developmental, Psychosocial and Learning Problems Group*. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD003018.pub3/abstract> [accessed 12 May 2015]





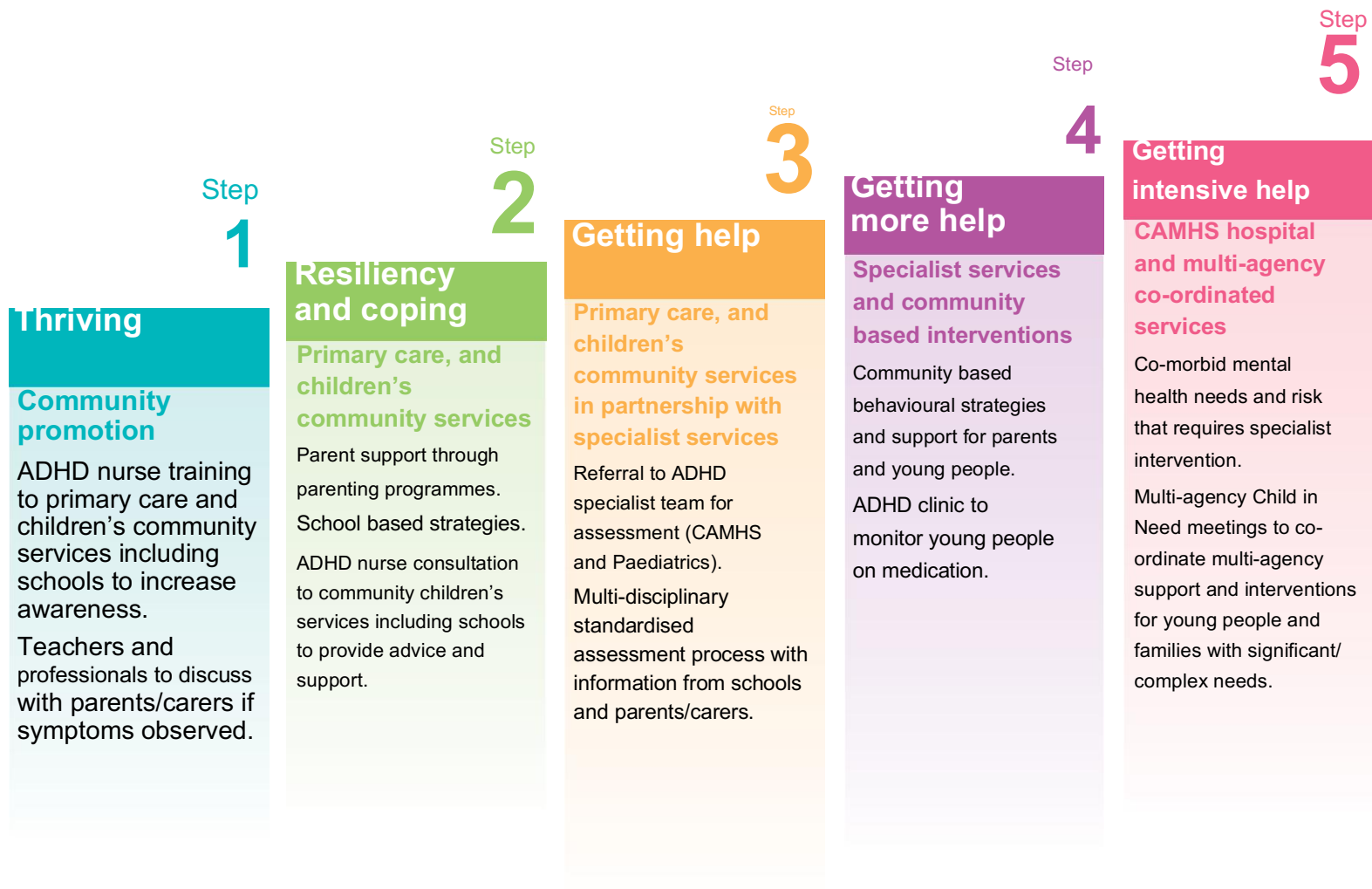
Glossary

ACE	The ADHD Child Evaluation [ACE] A semi-structured interview developed to support healthcare practitioners in the assessment and diagnosis of ADHD
ADHD	Attention Deficit Hyperactivity Disorder Neurodevelopmental disorder identified by behavioural symptoms that include inattentiveness and impulsiveness
AMH	Adult Mental Health
AQUA	Assessing Qbtest Utility in ADHD A study assessing whether providing clinicians and patients with the results of a Qbtest (see below) leads to earlier correct diagnosis of ADHD
ASD	Autistic Spectrum Disorders
BACCH	British Association for Community Child Health
CAMHS	Child and Adolescent Mental Health Services
Care Bundle	Care bundles are like protocols and enable standardisation of practice
CBT	Cognitive Behaviour Therapy
CCGs	Clinical Commissioning Groups Statutory bodies clinically led that include all of the GP practices in their geographical area. The aim of this is to give GPs and other clinicians the power to take commissioning decisions for their patients. Each CCG has a constitution and is run by its governing body, and is overseen by NHS England
CG72	NICE Guidelines on ADHD
Duty of Candour	Francis Report, Duty of Candour: “any patient harmed by the provision of a healthcare service is informed of the fact and an appropriate remedy offered, regardless of whether a complaint has been made or a question asked about it”
Connor’s	Questionnaire for parents
CPA	Care Programme Approach
CPD	Continuing Personal and Professional Development
CYP	Children and Young People
DSM (-V)	The Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition)
ECG	Electrocardiogram A simple and useful test which records the rhythm and electrical activity of the heart
Effect sizes	Effect size is a simple way of quantifying the difference between two groups that has many advantages over the use of tests of statistical significance alone

FDA	Food and Drug Administration
	Federal agency of the United States Department of Health and Human Services, responsible for protecting and promoting public health
IAPT	Improving Access to Psychological Therapies
ICD-10	International Statistical Classification of Diseases – 10th Revision.
	The World Health Organisation's medical classification list, in use since 1994. The 11th revision is due to be released in 2017
JSNA	Joint Strategic Needs Assessments
	Process of reviewing and describing the current and future health and wellbeing needs of a local population
MDT	Multi-disciplinary team – group of professionals
NICE	National Institute for Health and Care Excellence
	NICE provides national guidance and advice to improve health and social care
OCD	Obsessive Compulsive Disorder
Qbtest	Psychometric assessment
SCPs	Shared Care Protocols
SEND	Special Educational Needs and Disability
SNAP-IV	Swanson, Nolan and Pelham (SNAP) Questionnaire
	The SNAP Teacher and Parent Rating assesses ADHD symptoms in children and young people
Stepped Care	A system of delivering and monitoring treatments, so that the most effective yet least resource intensive, treatment is delivered to patients first; only 'stepping up' to intensive/specialist services as clinically required.
Tourette's	Neurological condition characterised by a combination of involuntary vocal and motor movements



ADHD stepped care



Shared with the permission of
Pennine Care NHS Foundation Trust
(CAMHS Directorate)



