Bristol, North Somerset and South Gloucestershire
Integrated Care Board

Reference: FOI.ICB-2223/258

Subject: Adult and Child ADHD, ASD, Tourette's and Generalised Anxiety Disorder

I can confirm that the ICB does hold some of the information requested; please see responses below:

QUESTION	RESPONSE
1. All policies for referral and assessment for adult and child ADHD, ASD and Tourette's syndrome and Generalised Anxiety Disorder used by BNSSG ICB and their contracted partners. Please indicate which disorder they refer to and whether they are for adults, children, or both.	Sirona – Childrens **Autism pages** Specialist Autism Assessment Service: https://www.sirona-cic.org.uk/nhsservices/childrens-services/specialist-autism-assessment-service/ Making a referral: https://www.sirona-cic.org.uk/nhsservices/childrens-services/making-a-referral/ Referral information/criteria: Referral Criteria – Sirona care & health NHS services (sirona-cic.org.uk) Information-about-the-autism-assessment: https://www.sirona-cic.org.uk/nhsservices/childrens-services/information-about-the-autism-assessment/ Clinical Prioritisation Form: https://www.sirona-cic.org.uk/nhsservices/wp-content/uploads/sites/2/2023/06/Clinical-PRIORITISATION-FORM.doc **Note**: Clinical Prioritisation form has also been replaced under the 'What if the situation changes while waiting for assessment?'

	Community Paediatrics pages Community Paediatrics referral: Community Paediatric Referral – Sirona care & health NHS services (sirona-cic.org.uk) Community Paediatrics: Community Paediatrics – Sirona care & health NHS services (sirona-cic.org.uk) **News item:** Autism Assessment Service update for Bristol, North Somerset, and South Gloucestershire - Sirona care & health (sirona-cic.org.uk) **Advice and Signposting:** Advice and signposting – Sirona care & health NHS services (sirona-cic.org.uk) Community Paediatrics does not assess for generalised anxiety disorder. ICB Information – Adults and Children Adult ADHD ADHD (adult) (Remedy BNSSG ICB) Adult ASD Autism-Spectrum (Remedy BNSSG ICB) There are no Remedy pages for Tourette's or Generalised Anxiety Disorder for Adults Mental Health Resource Page for Children and Young People (includes ADHD and ASD Mental Health Resources for Children and Young People (Remedy BNSSG ICB)

	Children Tourette's Tics and Tourette's in children (Remedy BNSSG ICB) There are no Remedy pages for Children's Generalised Anxiety Disorder Adults These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB do not hold copies of their policies. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net Further information regarding Tourette's syndrome may be held by UHBW. The provider can be contacted at FreedomOfInfo@uhbw.nhs.uk
2. Training material used by BNSSG ICB and their contracted partners for adult and child ADHD, ASD, Tourette's syndrome and Generalised Anxiety Disorder. Please indicate which disorder they refer to and whether they are for adults, children, or both.	Childrens There is not a standardised training package. There are regular evidenced based education sessions within the service. Community paediatrics do not assess for generalised anxiety disorder. Adults

	these services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net Information regarding Tourette's syndrome may be held by UHBW. The provider can be contacted at FreedomOfInfo@uhbw.nhs.uk
3. Policies on right to choose used by BNSSG ICB and their contracted partners for both children and adults. Please indicate if there are different policies for adults and children.	Childrens and Adults BNSSG ICB use the National NHS Choice Framework published by the Department of Health and Social Care. The framework can be found here: https://www.gov.uk/government/publications/the-nhs-choice-framework/the-nhs-choice-framework-what-choices-are-available-to-me-in-the-nhs
4. For each of the years 2021, 2022, and currently in 2023, the separate total number of adult and child ADHD assessments conducted by BNSSG ICB and their contracted partners. Please give separate totals for each year of how many received a diagnosis and which	Childrens Previously all ADHD clients were considered as part of the paediatric pathway. This information that is requested is held within the individual patient records however to extract relevant information to respond to the line of inquiry would exceed our cost limits (over 18 hours).

diagnostic tools/questionnaires were used for adults and children. e.g. 2021 diagnostic tools – Conners questionnaire (child), ASRS 1.1 (adult) 1000 adult ADHD assessments 1000 child ADHD assessments. 100 diagnosed	<u>Adults</u> These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net
5. How many parents have sought a second opinion after a child ADHD assessment by BNSSG ICB and their contracted partners since 1st January 2021.	<u>Childrens</u> Previously all ADHD clients were considered as part of the paediatric pathway. This information that is requested is held within the individual patient records however to extract relevant information to respond to the line of inquiry would exceed our cost limits (over 18 hours). <u>Adults</u> These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net

6. For each year, the total number of formal complaints received by BNSSG ICB and their contracted partners about child health or mental health services in 2021, 2022, and currently in 2023.	Childrens Complaints received by the ICB regarding children associated with CCHP 2021 17 formal complaints received ICB 2022 25 formal complaints received ICB 2023 20 formal complaints received ICB Complaints received by Sirona Split by fiscal year in relation to reporting requirements (Apr – Apr) Sirona - 2020-21 - 9 Sirona - 2021-22 - 17 Sirona 2022-23 – 39 Sirona -2023-24 – 8 up until 10/06/2023 Complaints received by the ICB (both children's and adult's services) 2021 – 141 2022 – 133 2023 – 42

	The ICB does not hold data regarding complaints made directly to the Children's hospital, please contact University Hospitals Bristol and Weston directly: FreedomOfInfo@uhbw.nhs.uk
7. For each year, the total number of complaints escalated to the Parliamentary and Health Service Ombudsman about child health or child mental health services provided by BNSSG ICB and their contracted partners for 2021, 2022, and currently in 2023. For each yearly total, please give a total for upheld complaints a. e.g. b. 2021 10 Parliamentary and Health Ombudsman complaints, 5 upheld.	Childrens Complaints received by the ICB regarding children associated with CCHP 2022 1 PHSO complaint not upheld 2023 1 PHSO complaint not upheld Complaints received by Sirona Sirona 2022-23 – 2 PHSO received, 1 not upheld, 1 part of joint response between 3 organisations - not upheld against Sirona. 2023-24 – 2 PHSO received, 1 not upheld, 1 upheld. Sirona does not hold the data for child mental health Services Child mental health services are provided by Avon and Wiltshire Mental Health Partnerships (AWP). The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net

	Complaints received by the ICB which were escalated to the PHSO: 2021 – 0 2022 – 0 2023 – 0 The ICB does not hold data regarding complaints made directly to the Children's hospital, please contact University Hospitals Bristol and Weston directly: FreedomOfInfo@uhbw.nhs.uk
8. For each of the years 2021, 2022, and currently in 2023, the total number of right to choose applications received for adult ADHD, adult ASD, child ADHD or child ASD assessment by BNSSG ICB and their contracted partners, and how many were approved. e.g. 2021 100 adult ADHD right to choose applications, 100 approved 100 adult ASD right to choose applications, 100 approved 100 child ADHD right to choose applications, 100 approved 100 child ASD right to choose applications, 100 approved	Childrens and Adults Due to service users accessing ASD assessments under Right to Choose. The ICB does not hold this information. There is no requirement to seek funding approval for an assessment and therefore GPs are able to refer directly to the provider.

9. For each of the years 2020, 2021, 2022, 2023, the total number of assessments conducted for adult ADHD, adult ASD, child ADHD or child ASD assessment by BNSSG ICB and their contracted partners. For each total, please state how many received a diagnosis of the disorder they were being assessed for. e.g. 2021 100 adult ADHD assessments, 90 diagnosed 100 adult ASD right to choose applications, 90 diagnosed 100 child ADHD right to choose applications, 90 diagnosed 100 child ASD right to choose applications, 90 diagnosed	<u>Childrens</u> The ASD information that is requested is held within the individual patient records however to extract relevant information for each year in the line of inquiry would exceed our cost limits. question. Children ASD 2022 – 694 appointments – 512 diagnosed Children ASD 2023 – 465 appointments – 360 diagnosed. The ADHD information that is requested is held within the individual patient records however to extract relevant information to respond to the line of inquiry would exceed our cost limits. <u>Adults</u> Due to service users accessing ASD and ADHD assessments under Right to Choose. The ICB do not hold this information. There is no requirement to seek funding approval for an assessment and therefore GPs are able to refer directly to the provider. For assessments and Diagnosis data relating to services provided by AWP – our contracted provider. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net

10. For each of the years 2021, 2022 and currently in 2023, the total number of children diagnosed with Tourette's syndrome by BNSSG ICB and their contracted partners.	The ICB does not hold the information requested. Information regarding Tourette's syndrome may be held by UHBW. The provider can be contacted at FreedomOfInfo@uhbw.nhs.uk
11. The total number of children and adults currently waiting for ADHD assessment by BNSSG ICB and their contracted partners. Please provide child and adult as separate totals. e.g. 3000 children waiting for ADHD assessment 3000 adults waiting for ADHD assessment	Childrens Children's Currently on ADHD pathway: 2442 The ADHD information that is requested is held within the individual patient records however to extract relevant information for the line of inquiry would exceed our cost limits (18 hours). Adults These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE

	Email: awp.freedomofinformation@nhs.net For individuals waiting for an ADHD assessment through patient choice. Due to service users accessing ASD and ADHD assessments under Right to Choose. The ICB does not hold this information.
12. The month and year of referrals currently being allocated child ADHD and adult ADHD assessment appointment by BNSSG ICB and their contracted partners. e.g. Adult ADHD – June 2018 Child ADHD – June 2022	Children As of 01/06/2023 Child ADHD – ADHD is part of the general paediatric pathway, the current list is seeing children referred May 2021 Adults These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net
13. The total number of children and adults waiting for ASD assessment by BNSSG ICB and their contracted partners. Please provide children and adults as separate totals. Of the total number of children waiting, please	Children As of 14/06/2023 - 4,154 waiting assessment (including those awaiting triage)

state how many currently meet the new referral criteria that was introduced on 1st March 2023. e.g. 3000 children waiting for ASD assessment, 300 meet new referral criteria. 3000 adults waiting for ASD assessment	There is no current new referral criteria as this was reversed to the original criteria listed in question 1. <u>Adults</u> These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net For individuals waiting for an ADHD assessment through patient choice. Due to service users accessing ASD and ADHD assessments under Right to Choose. The ICB does not hold this information.
14. The month and year of referral currently being allocated appointments for adult ASD and child ASD assessment by BNSSG ICB and their contracted partners. Please list the dates separately. e.g. Adult ASD – June 2021 Child ASD – June 2019	<u>Childrens</u> ASD children – as of 01/06/2023. Those triaged by clinicians as having clinically urgent needs who were referred from January 2021 are currently being allocated their first assessments. <u>Adults</u>

	These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted through Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net
15. Please provide details of the support offered to adults or children diagnosed with ADHD. Please indicate whether it is relevant to adults, children or both.	Sirona - Childrens Advice and Signposting: Advice and signposting – Sirona care & health NHS services (sirona-cic.org.uk) ICB – Childrens Children and young people's emotional health and wellbeing - NHS BNSSG ICB Children with additional needs - NHS BNSSG ICB Children's community health services - NHS BNSSG ICB Transitioning to adult health services - NHS BNSSG ICB ICB – Adults and Children Mental health services - NHS BNSSG ICB

	Adults These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted through Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net
16. Please provide details of the support offered to adults or children diagnosed with ASD. Please indicate whether it is relevant to adults or children or both.	Childrens Children - 1 post diagnosis meeting offered, recommendations contained within reports. Referrals onto other paediatric services if required for co-morbidities. Children's ASD is currently a diagnostic service, not a support service. ICB – Childrens Children and young people's emotional health and wellbeing - NHS BNSSG ICB Children with additional needs - NHS BNSSG ICB Children's community health services - NHS BNSSG ICB Transitioning to adult health services - NHS BNSSG ICB ICB – Adults and Children

<table>
<tr><td></td><td>Mental health services - NHS BNSSG ICB

<u>Adults</u>
These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted:

Freedom of Information
Bath NHS House
Newbridge Hill
Bath
BA1 3QE
Email: awp.freedomofinformation@nhs.net</td></tr>
<tr><td>17. Total yearly cost of prescribing ADHD medication for adults and children for the years 2021, 2022 and currently in 2023. Please provide separate totals for adults and children for each year.</td><td>
<table>
<tr><th></th><th>Under 18 years</th><th>18 year and over</th></tr>
<tr><td>2021</td><td>£415,551</td><td>£655,126</td></tr>
<tr><td>2022</td><td>£462,641</td><td>£846,352</td></tr>
<tr><td>2023 (Jan 23-Feb 23)</td><td>£77,930
(2 months)</td><td>£173,856
(2 months)</td></tr>
</table>
</td></tr>
<tr><td>18. The yearly total of child ASD referrals received by BNSSG ICB and their contracted partners for the years 2021, 2022, and currently in 2023.</td><td>ASD Children’s -
2020 – 1,020
2021 – 1,956
2022 – 2,208
As of 01.05.2023 – 219 per month average – predicted annual 2,628</td></tr>
</table>

19. All policies on shared care agreements for adults or children used by BNSSG ICB and their contracted partners. Please indicate whether they are for adults, children, or both.	 ADHD shared care protocol _ atomoxet  ADHD shared care protocol _ lisdexamf  ADHD shared care protocol _ methylph The Joint Formulary Group are in the process of establishing a new process for updating the BNSSG Shared Care Protocols so this is likely to change in due course. A BNSSG wide working group has been established to review SCPs, starting with adult SCPs. Currently, specialist teams will update SCPs that relate to their clinical area when they become aware these are due for review. This relies on specialist teams from across the system working together. Once these have been updated, they are shared with the BNSSG ICB Formulary Team who will liaise with any other relevant system providers and primary care for their comments. When this has been reviewed by all parties, it will be taken to the Joint Formulary Group for review and approval. Specialist teams are responsible for updating SCPs that relate to their clinical area. Some SCPs are relevant to a number of providers and it is expected that specialist teams from across the system will work together to update these. For example, SCPs relating to heart failure medicines will be relevant to Sirona, NBT and UHBW clinicians and SCPs for ADHD medicines for children will be relevant to AWP and Sirona clinicians. The ICB Formulary Team will facilitate linking clinicians from different providers together. The Joint Formulary Group is responsible for approving the SCPs, this group has representation from across the system.

	Clinicians from each relevant provider should be involved in the update of an individual SCP and this will depend on the medicine. The Joint Formulary Group will then review this updated shared care protocol with input from primary care. There is information about the Joint Formulary Group purpose and processes on the formulary website here: https://remedy.bnssg.icb.nhs.uk/
20. This Sirona video claims that other UK ICB's have a higher threshold for child ASD referral:Changes to autism assessment and paediatric services. Please provide the data used to make this statement, I would like a a list of each UK ICB and the child ASD criteria threshold.	Sirona does not hold the data requested. Please contact alternative ICB's directly or view their individual websites to obtain their referral criteria's. The video refers to other areas of the country, not other ICB's For additional information on other area referral criteria's please see the HSJ article: Children must wait for 'crisis' before autism diagnosis, say overwhelmed systems | News | Health Service Journal (hsj.co.uk)
21. In the video in #20 it is claimed the proportion of referrals to BNSSG is higher. Please provide the data this claim was based on for each UK ICB analysed, including the number of patients and the number of child ASD referrals. Please provide data for each year that was analysed. e.g. NHS Somerset ICB 2021 - 200,000 patients, 1000 child ASD referrals 2022 - 200,000 patients, 3000 child ASD referrals	Sirona is not the holder of this information, please contact other ICBs directly. As above, the video does not refer to other ICBs.

2023 – 200,000 patients, 50 child ASD referrals	
22. A yearly total of CAMHS referrals received for the years 2021, 2022, and currently in 2023. For each yearly total, please state how many were accepted. e.g. 2021 – 100 CAMHS referrals, 50 accepted.	The ICB and Sirona does not hold the information for CAHMS referrals Child mental health services are provided by Avon and Wiltshire Mental Health Partnerships (AWP). The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net
23. Policy on training for doctors and nurses in neurodevelopmental disorders used by BNSSG ICB and their contracted partners. Please indicate how often it must take place and whether it is different for certain neurodevelopmental disorders. Please state whether this is done internally or externally.	There was no mandatory training in any health organisation around neurodevelopmental disorders, until recently with the Oliver McGowan autism and learning disability training. This is accessible to all Sirona staff. Expectations are made by professional regulatory bodies relating to the area in which you are clinically practicing in to maintain knowledge and skills.
24. Policy on training for college tutors for junior doctors used by BNSSG ICB and their contracted partners. Please state how often training is updated and who supervises these doctors.	The supervision of all junior doctors includes an allocated supervisor, with regular supervision and case review discussions. Junior doctors have a clinical competency document for their clinical speciality and core skills which they must evidence as part of their ongoing training.

	With regards to college tutors: All doctors have annual appraisals that feed into their GMC revalidation. They need to demonstrate evidence of relevant CPD every year which includes at least 4 hours a year or 8 hours every two years. In addition, every training location is assessed through the GMC quality panel annually; this includes trainee doctor feedback from the national GMC trainee survey and peer review from other training environments. The service is then monitored by HEE (Health Education England) to ensure any actions are followed up if we have an unsatisfactory assessment.
25. How many child ADHD assessments did not find ADHD present on the basis of school's Conners rating scores for each of the years 2021, 2022, and currently in 2023 by BNSSG ICB and their contracted partners. For each, indicate how many belonged to each county area, e.g. Bristol North 10 Bristol East 10 Bristol Central 10 etc.	The information that is requested is held within the individual patient records however to extract relevant information to respond to the line of inquiry would exceed our cost limits (18 hours).
26. A total of how many BNSSG ICB, including their contracted partners, doctors were qualified to diagnose child ASD for the years 2021, 2022, and currently in 2023.	<u>Childrens:</u> There are no expected 'qualifications' for the diagnosis of ASD. Clinicians have to demonstrate on the core areas of the community paediatric curriculum at which they need to demonstrate competency against before they will be recognised on the specialist consultant register.

	The ICB and Sirona does not hold the information for CAMHS Child mental health services are provided by Avon and Wiltshire Mental Health Partnerships (AWP). The provider can be contacted through Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net <u>Adults</u> These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted through Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net
27. A total of how many BNSSG ICB, including contracted partners, doctors were qualified and working in a role assessing children referred for ASD assessment for BNSSG and their contracted partners for the years 2021, 2022, and currently in 2023.	<u>Childrens:</u> There are no expected 'qualifications' for the diagnosis of ASD. Clinicians have to demonstrate on the core areas of the community paediatric curriculum at which they need to demonstrate competency against before they will be recognised on the specialist consultant register.

	The ICB and Sirona does not hold the information for CAMHS Child mental health services are provided by Avon and Wiltshire Mental Health Partnerships (AWP). The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net <u>Adults</u> These services are provided by Avon and Wiltshire Mental Health Partnership and the ICB does not hold this information. The provider can be contacted: Freedom of Information Bath NHS House Newbridge Hill Bath BA1 3QE Email: awp.freedomofinformation@nhs.net

The information provided in this response is accurate as of 28th June 2023 and has been approved for release by Lisa Manson, Director of Delivery and Performance for NHS Bristol, North Somerset and South Gloucestershire ICB.

BNSSG Health Community's Traffic Light System
Shared Care Guidance

Please complete all sections.
Type in the grey shaded areas (deleting the prompts for information in each section).

Section 1: Heading

Trust: Please select

Specialty / Department: Children's Services

Drug: Atomoxetine (Strattera)

For the treatment of:

Attention Deficit Hyperactivity Disorder (ADHD) and Attention Deficit Disorder (ADD) in childhood

Section 2: Treatment schedule

Atomoxetine 10mg,18mg,25mg,40mg 60mg capsules -
Children (over 6 years) Up to 70kg body weight
Initially 0.5mg/kg/day for 7 days. Increase to approx 1.2mg/kg/day.
Children (over 6 years) Over 70kgs body weight
Initially 40mgs daily for 7 days. Increase up to maintenance dose of 80mgs/day.
Offer a single daily dose, or two divided doses to minimize side effects.

Date approved: xx/xx/xxx

Date to be reviewed: xx/xx/xxxx

Section 3: Monitoring

Monitoring

Initial (by specialist service) - Baseline measurement of height, weight, blood pressure, pulse and full blood count. Blood pressure and pulse. FBC (where appropriate)

6 monthly assessment -
Do FBC if indicated [nose-bleeds, bruising, recurrent infections.]

Section 4: Side-effects

Headache - Common-usually transient

Loss of Appetite - Very common (16%) usually transient. Monitor height and weight closely

Insomnia - Common (<10%) usually transient

Stomach ache - Very common. Usually transient. Contact specialist team if persistent.

Dry Mouth - Common

Palpitations - Uncommon

Nausea/Vomiting - Very common (16%), usually transient.

Dyspepsia - Common

Diarrhoea - Common

Mydriasis - Common

Hepatitis, jaundice, abnormal liver function tests - Spontaneous reporting, frequency not known

Suicide related events, hostility, emotional lability - Uncommon (<1%). Contact specialist team immediately

Section 5: Drug interactions

MAOIs: risk of hypertensive crisis

Salbutomol: may potentiate action on cardiovascular system

Neuroleptics, anti- arrhythmics, TCAs, lithium, cisapride: increased risk of QT prolongation

Tricyclic antidepressants:increased levels of TCA as inhibits metabolism

Other sympathomimetics e.g. pseudoephedrine and decongestants

Pressor agents: Use with caution

CYP2D6 inhibitors: e.g. SSRIs, terbinifine and quinidine. CYP2D6 inhibitors can increase the plasma levels of atomoxetine. Concomitant use may require a slower titration and reduction of the final dose of atomoxetine.

Section 6: Cautions and special recommendations

Contraindications

Children under the age of six. Atomoxetine should be used with care in children with marked anxiety, agitation or tension; symptoms or family history of tics or Tourettes syndrome; hypothyroidism; cardiovascular disease including angina or cardiac arrhythmias and moderate to severe hypertension; glaucoma; history of drug or alcohol abuse; thyrotoxicosis

Section 7: Advice to the patient

Possible allergic events: rash, urticaria, angioneurotic oedema have been reported-although rare

Blood pressure should be monitored at appropriate intervals especially in those patients with tachycardia, hypertension, cardiovascular or cerebrovascular disease.

Atomoxetine should be discontinued in patients with jaundice or laboratory evidence of liver injury. Rarely liver toxicity has been reported.

Growth and development should be monitored using centile charts in those taking atomoxetine.

Observe children or young people taking atomoxetine for hostility, emotional lability, suicidal thinking and self-harming behaviour.

Atomoxetine should be used with caution in patients with a history of seizure. Atomoxetine should be discontinued if seizure frequency increases.

- Advise parents and carers on the best way to take medication
- Re-inforce any warnings regarding side effects.

Section 8: Responsibilities for Secondary Care

Child Psychiatrist/ Paediatrician Responsibilities

1. Establish or confirm diagnosis
2. Assess patient eligibility for treatment
3. Establish baseline monitoring (Weight, height, BP, pulse and ECG) and notify GP
4. Advise patients on risks and benefits of drug and provide written information on drug (where available e.g. NICE information)
5. Advise parents that the treatment programme will be discontinued by the child psychiatrist/paediatrician if the monitoring programme is not complied with (and informing the GP in writing if appointments are not kept)
6. Initiate trial of treatment (including prescribing) and determine benefit from treatment is established
7. Liaise with pharmacy regarding supplies, where appropriate.
8. Notify GP of the decision to initiate treatment (may use opportunity to seek agreement to eventually share care)
9. Review the patient within 1 month (may include telephone review) to assess treatment benefit, adverse effect, and monitor weight and height. (Monthly or more frequent reviews may be required until a stable dose level is reached)
10. Prescribing responsibility will remain with the specialist for the first 3 months
11. Seek shared prescribing agreement with GP providing a clinical summary of the patient involved when final therapeutic dose is established. GPs will only be asked to prescribe drugs which are used in accordance with their product licence. NOTE: Atomoxetine is only licensed for the treatment of childhood ADHD from the age of 6 years. For patients falling outside this prescribing will be retained by child psychiatrist/paediatrician.

12. Retain responsibility for monitoring effectiveness of drug therapy and making dosage adjustments. Informing the GP of any dose changes in writing as soon as possible, by FAX to avoid incorrect or duplicate medicines being prescribed. Follow the fax with a letter of confirmation. Thereafter retain prescribing responsibility until dose is again stabilized.
13. If the GP declines shared prescribing, make necessary arrangements to continue prescribing, within budget constraints.
14. Review patient at six months/yearly intervals including the following checks.
- Effectiveness of treatment
- Reviewing need for dose change (strength or timing)
- Checking for adverse effects
- Weight and height measurement using centile growth charts
- Blood pressure and pulse (six monthly)
- Other blood monitoring (i.e. periodic blood and platelet counts) as considered necessary

15. After 1 year and each year thereafter, consideration will be given to reducing the dose or stopping treatment
16. Provide ongoing support and advice to prescribing GP, evaluating adverse events noted by the GP.
17. Recommending other non medical therapeutic intervention as appropriate.
18. Performing a full clinical review of children aged 14 to 18 years of age to determine whether treatment should be stopped. The drug is not yet licensed in adulthood. In exceptional circumstances where the intention is not to stop the drug, the consultant will ensure appropriate handover to adult services for the adult services psychiatrist to continue to prescribe the drug, including consideration of referral to regional specialist services for re-evaluation.

Section 9: Responsibilities for Primary Care

GP Responsibilities

1. To refer new patient to CAMHS/ Community Paediatrics (Children`s Services)
2. Consider shared prescribing proposal from the child psychiatrist/paediatrician only after patient has been on treatment for three months.
3. Respond to request for shared prescribing promptly.
4. If shared prescribing is declined, explain to the specialist in writing, the reason for this.
5. Provide ongoing prescriptions for atomoxetine in line with the product license and at the dosage recommended by the child psychiatrist/paediatrician.
6. Reinforce warning regarding side effects etc. Provide symptomatic treatment of minor adverse events.
7. Contact the specialist to discuss any significant changes in the patient such as spontaneous bruising or bleeding which may indicate blood abnormalities.
8. Be aware of the patient`s overall health and well being including any increase in the number of infections and discussions as to the effectiveness of the medication. If there are any problems to refer back to child psychiatrist/paediatrician.
9. Maintain communication with the patient and inform the specialist of any relevant problems
10. All monitoring will be carried out by CAMHS service. GP's are to check that patient is being monitored and seen by the service at 6 monthly intervals intervals. If they are not then advice should be sought from CAMHS clinician.
11. Respond to dosage changes advised and prescribe appropriately

Section 10: Contact details

Name	Organisation	Telephone number	Fax number	E-mail address	Availability
Dr Fiona Barlow	CAMHS	01934 629660	01934 613256	fiona.barlow@nhs.net	Tues-Fri
Dr Diana Howlett	Community Paediatricians	01934 426622	01934 426270	diana.howlett@nhs.net	Mon-Thurs
Dr Trisha Tallis	CAMHS	01934 426622	01934 426270	p.tallis@nhs.net	Mon-Fri
Alison Bartlett	CAMHS	01934 629660	01934 613256	alison.bartlett@nhs.net	Mon-Wed

Section 11: Document details

Date prepared:	6/10/2010
Prepared by:	Dr Fiona Barlow, Consultant Child & Adolescent Psychiatrist
Date for review:	Usually 2 years from date of publication unless there are significant changes before that date. October 2012
Document identification:	Atomoxetine CAMHS SCP 1010

Section 12: Collaboration

Prepared in collaboration with North Somerset colleagues working across Children's Services i.e. community paediatricians and CAMHS.

Section 13: References

1. Methylphenidate, atomoxetine and dexamphatamine for the tratment of attendtion deficit hyperactivity discorder in children and adolescent. Technology Appraisal TA98 March 2006 NICE publications.

2. Attention Deficit Hyperactivity Disorder: Diagnosis and management of ADHD in children, young people and adults. Clinical Guidelines CG72, September 2008. NICE Publications.

3. www.medicines.org.uk

BNSSG Shared Care Guidance
Please complete all sections

Section 1: Heading

Drug	Lisdexamfetamine dimesylate (Elvanse)
Amber *three months*	
Indication	Part of a comprehensive treatment programme for Attention Deficit/Hyperactivity Disorder (ADHD) in children aged 6 years and over when response to previous methylphenidate treatment is considered clinically inadequate. Children with ADHD aged 6 years and over. NICE guideline NG87 recommends dexamfetamine should be considered in children and young people whose ADHD is unresponsive to a maximum tolerated dose of methylphenidate. Lisdexamphetamine is an engineered long-acting, pharmacologically inactive version of dexamfetamine. Dexamphetamine is bound to lysine and released after hydrolysation in red blood cells as an unaltered molecule. Clinical effect of the drug is 12-13 hours, with significant advantages in safety and clinical effect compared to shorter-acting compounds.
Speciality / Department	Community Paediatrics/CAMHS
Trust(s)	Weston Area Health Trust
	Avon & Wiltshire Partnership
	Sirona Care & Health

Section 2: Treatment Schedule

Usual dose and frequency of administration	The starting dose is 20mg or 30 mg taken once daily in the morning. The dose may be increased by 10 or 20 mg increments, at approximately weekly intervals. Elvanse should be administered orally at the lowest effective dosage.
Route and formulation	Oral Capsules 20mg, 30mg, 40mg, 50mg, 60mg, 70mg
Duration of treatment	Pharmacological treatment of ADHD may be needed for extended periods. The physician who elects to use Elvanse for extended periods (over 12 months) should re-evaluate the usefulness of Elvanse at least yearly.

Section 3: Monitoring

Please give details of any tests that are required before or during treatment, including frequency, responsibilities (please state whether they will be undertaken in primary or secondary care), cause for adjustment and when it is required to refer back to the specialist.

Baseline tests - where appropriate
The Secondary care Clinician (Doctor or Specialist Nurse) to check BP, pulse and weight at the first appointment and after starting treatment, at every appointment where dose has been adjusted, and at the annual review. Connors (or Vanderbilt) rating scale from home and school as part of the diagnostic assessment. No need to check blood tests or other parameters unless specific individual concerns exist.
Subsequent tests - where appropriate
Conners (or other) questionnaires may be repeated to confirm response If hypertension or tachycardia due to medication, then the Paediatrician/CAMHS will be responsible for adjusting medication regime and/or liaising with the GP to generate a collaborative plan of action.

Section 4: Side Effects

Please list the most common side effects and management. Please provide guidance on when the GP should refer back to the specialist.

Side effects and management	If the patient experiences symptoms of hypertension, insomnia, agitation, anxiety and appetite suppression, they generally subside after 3-4 days. **Very Common:** • Headache. This is usually transient. If it is persistent, consider stopping and consult the specialist team. • Decreased appetite. This is usually transient. Weight loss is rare in adults. • Dry mouth • Insomnia. This may be transient. Refer to the specialist team if persistent. **Common:** • CVS symptoms: arrhythmias, tachycardia, hypertension, and palpitations. Monitor the BP and pulse, and if necessary do an ECG. If the pulse is > 100, contact the specialist team. • Agitation • Anxiety • Bruxism • Libido reduced, erectile dysfunction • Dizziness • Restlessness • Tremor • Irritability • Fatigue • Dyspnoea • Gastro-intestinal disorders: diarrhoea or constipation, nausea, upper abdominal pain **Uncommon:** • Hypersensitivity reactions. Contact specialist team.

	Rare: • Difficulties in visual accommodation, usually transient. Contact specialist team if persistent **Very Rare:** • Neuroleptic Malignant syndrome - Stop drug and refer. This can be characterised by: hyperthermia, fluctuating conscious level, muscular rigidity, autonomic dysfunction with pallor, tachycardia, labile blood pressure and urinary incontinence • Leucopoenia, thrombocytopenia and anaemia - Very Rare - Refer to specialist team drug may need to be stopped. More rarely, depression, or very rarely, psychosis.
Referral back to specialist	Patient will remain under specialist whilst on treatment. Inform specialist if the patient; • finds the medication intolerable for any given reason, or • if you are concerned about observed mental/psychological or physical side effects (e.g. depression or hypertension), or • if the side effects mentioned above appear to persist beyond the first week of medication. It is safe to discontinue medication pending review

Section 5: Drug Interactions

Please list clinically significant drug interactions (eMC link please click here)

Significant Drug Interactions	MAOIs, moclobemide; risk of hypertensive crisis. Not to be given within 2 weeks of MAOIs Volatile liquid anaesthetics: increased risk of hypertension Tricyclic antidepressants: increased levels of TCA as can inhibit metabolism Antipsychotics – effects of Lisdexamfetamine possibly reduced by Chlorpromazine; Lisdexamfetamine possibly antagonises antipsychotic effects of Chlorpromazine Antihypertensives – Lisdexamfetamine may reduce the effect of antihypertensives Alcohol - limited data, may increase CNS adverse reactions Others: not to be given with other sympathomimetics e.g. pseudoephedrine and decongestants
Reminder to ask patient about specific problems	Ask about emergency of any possible side effects/compliance to treatment issues.

Section 6: Contra-indications, Cautions and Special Recommendations

Please list

Absolute contraindications

- Concomitant use of monoamine oxidase inhibitors (MAOIs) or within 14 days after treatment (due to the risk of hypertensive crisis).

Contraindications

- □ Hypersensitivity to sympathomimetic amines or any of the excipients in the particular formulation (e.g. Elvanse, Elvanse Adult)
- □ Hyperthyroidism or thyrotoxicosis
- □ Agitated states
- □ Symptomatic cardiovascular disease

□ Advanced arteriosclerosis
□ Moderate to severe hypertension
□ Glaucoma

Special Warnings and precautions

□ Pre-existing cardiovascular disorders including severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias and channelopathies (disorders caused by the dysfunction of ion channels)
□ Pre-existing cerebrovascular disorders cerebral aneurysm, vascular abnormalities including vasculitis or stroke or known risk factors for cerebrovascular disorders
□ Diagnosis or history of recent severe depression, anorexia nervosa/anorexic disorders, suicidal tendencies, psychotic symptoms, severe mood disorders, mania, schizophrenia, psychopathic/borderline personality disorder.
□ Diagnosis or history of severe and episodic (Type 1) Bipolar (affective) disorder
□ Tics – stimulants can exacerbate motor and phonic tics ad Tourette's Syndrome
□ Aggression – stimulants may cause aggressive behaviour or hostility
□ Seizures – stimulants may lower the seizure threshold

Relative contraindications:

- Pre-existing cardiac disease.
- History of eating disorder.
- Epilepsy
- Tourette's syndrome

Dose reduction and discontinuation

If the symptoms of ADHD do not improve after appropriate dosage adjustment treatment must be stopped by the clinic. If paradoxical aggravation of symptoms or other serious adverse events occur, the dosage should be reduced or discontinued – advice should be sought from and managed by the clinic.

Section 7: Advice to the patient

Advice for prescribing clinician to inform patient

1. Medication works only on the day of administration, taking 30 minutes to begin acting and lasting up to 12 hours
2. There is no specific psychiatric emergency that relates to ADHD. This is a lifelong condition that generally does not wax and wane.
3. Blood pressure should be monitored at appropriate intervals (see Responsibilities for Primary care and Secondary Care, below) in all patients taking stimulants, especially those with hypertension. It is recommended to check blood pressure every six months with lisdexamfetamine
4. Requests for ADHD medications dose alterations should be addressed to the Secondary care clinicians.
5. Patients can choose to miss medications on days they don't feel they will need them, but in general this pattern ought to be predictable week to week.
6. It is not advisable to drink alcohol or take other recreational drugs whilst on lisdexamfetamine.
7. Once stabilised the patient should attend at least an annual review at the clinic, failure to do this could result in the medication being stopped.

Section 8: Responsibilities for Secondary Care

Core responsibilities

1. Initiating treatment and prescribing for the first three months
2. Undertaking the clinical assessment and monitoring for the first three months.
3. Communicate details of the above in 1 and 2 to GP within the first month of treatment. This information should be transferred in a timely manner.
4. Refer patients to GP and provide information of further action where appropriate e.g. blood test is due.
5. To provide advice to primary care when appropriate.

6. Review concurrent medications for potential interaction prior to initiation of lisdexamfetamine
7. Stopping treatment where appropriate or providing advice on when to stop.
8. Reporting adverse events to the MHRA.
9. Reminder to ask patients about particular problems see section 5

Other specific to drug

1. Full psychiatric assessment including a structured objective assessment of symptoms.
2. Initiation and prescription of medication for at least 3 months. Reclaiming responsibility of prescription during subsequent times of dose adjustment (e.g. during an attempt to reduce or pause medication)
3. Monitor Blood pressure, pulse and weight at first appointment after initiating drug, at every dose increase and at annual reviews. Inform GP of abnormal results and any actions taken or required
4. Yearly psychiatric review of all patients once stabilised, including a decision on whether to try challenge off medication, and annual monitoring of BP, pulse and weight.
5. Liaising with all professionals and carers involved in the patient's care, as necessary.
6. Providing direction and advice with respect to psychological treatments.
7. Liaising with pharmacies on matters of supply and admin.
8. Being available by phone to GPs during office hours, with a target of 48 hours in work time for a clinician to return any enquiry calls.

Section 9: Responsibilities for Primary Care

Core responsibilities

1. Responsible for taking over prescribing after the first three months
2. Responsible for the clinical assessment and monitoring after the first three months
3. Review of any new concurrent medications for potential interactions.
4. Reporting adverse events to the MHRA.
5. Refer for advice to specialist where appropriate.
6. Reminder to ask patients about particular problems see section 5

Other specific to drug

1. Following a request for shared care of a patient, if the GP or any GP within the practice is unable to take on the prescribing for these patients, then the clinic should be informed as soon as possible.
2. If the GP decides not to prescribe lisdexamfetamine, it should still be added to the patients repeat list as a 'non-issued item' for information and safety purposes.
3. Checking BP, pulse and weight of patients prior to referring patients back to specialist for drug-related complaints. Treating appropriately and/or consulting the clinic of abnormality detected.(Check more often if clinically relevant)
4. Issuing repeat prescriptions once dose is stabilised, on request from specialist clinic.
5. To manage minor adverse events as appropriate.
6. To encourage and maintain a holistic and shared approach to the adult's care, with the adult being primarily responsible for decisions about his/her health and treatment.

Section 10: Contact Details

Name	Organisation	Telephone Number	E mail address
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Dr Richard Williams	Community Childrens Health Partnership, Sirona care & health	Click here to enter details	Click here to enter details

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Click here to enter details	Click here to enter details	Click here to enter details	Click here to enter details

Section 11: Document Details

Date prepared	13th Feb 2018
Prepared by	Dr Michael Ogundele/Dr, Richard Williams
Date approved by JFG	April 2018
Date of review	April 2020
Document Identification: Version	V1

Section 12: Collaboration

Specialists in any one discipline are encouraged to collaborate across the health community in preparing shared care guidance. Please give details

Circulation amongst Commissioners from NHS Bristol, NHS North Somerset and NHS South Gloucestershire, and local GPs

Section 13: References

Please list references

1. EMC http://www.medicines.org.uk/emc/medicine/30377 [accessed 24.06.15]
2. MHRA http://www.mhra.gov.uk/home/groups/par/documents/websiteresources/con261790.pdf [Last accessed 13.02.18]
3. NICE guideline (NG87): Attention deficit hyperactivity disorder: diagnosis and management. 14 March 2018 (nice.org.uk/guidance/ng87). Available Online: https://www.nice.org.uk/guidance/ng87/resources/attention-deficit-hyperactivity-disorder-diagnosis-and-management-pdf-1837699732933
4. Biederman J, Boellner SW, Childress A, Lopez FA, Krishnan S, Zhang Y. Lisdexamfetamine dimesylate and mixed amphetamine salts extended-release in children with ADHD: A double-blind, placebo-controlled, crossover analog classroom study. Biol Psychiatry. 2007a; 62:970–976. [A 6 week randomised, double-blind, placebo- and active-controlled crossover study to compare the efficacy and safety of Elvanse in 52 children with ADHD. The active comparator was mixed amphetamine salts (not available in the UK). Elvanse treatment significantly improved ADHD scores from baseline, and adverse

events were similar for both treatment arms.]

5. Biederman J, Krishnan S, Zhang Y, McGough JJ, Findling RL. Efficacy and tolerability of lisdexamfetamine dimesylate (NRP-104) in children with attention deficit/ hyperactivity disorder: a phase III, multicenter, randomized, double-blind, forced-dose, parallel-group study. Clin Ther. 2007b Mar;29(3):450-63. [A 4 week, randomised, double-blind, placebo-controlled, forced-dose titration study in 285 school-aged children with ADHD treated in the community to assess the efficacy and tolerability of Elvanse. The study concluded that Elvanse appeared to be effective and had a tolerability profile similar to other extended-release stimulants.]
6. Wigal SB, Kollin SH, Childress AC, Squires L, for the 311 study group. A 13-hour laboratory school study of lisdexamfetamine dimesylate in school-aged children with attention-deficit/hyperactivity disorder. Child Adolesc Psychiatry Ment Health. 2009; 3(17): e1-15. [A 6 week multicentre study in children with ADHD to investigate the time course effect of Elvanse in a laboratory school setting. The study had a 4 week open-label, dose-optimisation of Elvanse phase followed by a randomised, placebo-controlled, 2-way, crossover phase of 1 week each. Compared with placebo, Elvanse demonstrated significantly greater efficacy at each post dose timepoint (1.5 hours to 13 hours)]
7. Findling RL, Childress AC, Cutler AJ, Gasior M, Hamdani M, Ferreira-Cornwell MC, et al. Efficacy and safety of lisdexamfetamine dimesylate in adolescents with attention-deficit/hyperactivity disorder. J Am Acad Child Adolesc Psychiatry. 2011;50(4):395-405. [A 4 week, randomised, placebo-controlled, double-blind, forced-dose, titration study in 309 adolescents with ADHD to assess the safety and efficacy. Elvanse was found to be effective versus placebo at all doses, and the safety profile was consistent with previous studies.]
8. Findling RL, Childress AC, Krishnan S, McGough JJ. Long-term effectiveness and safety of lisdexamfetamine dimesylate in school-aged children with attentiondeficit/ hyperactivity disorder. CNS Spectr. 2008;13(7):614-20.[An open-label, multi-centre, single-arm study to investigate the long term efficacy and safety of Elvanse over a year in 272 children with ADHD. The study concluded that Elvanse was generally well tolerated and effective.]
9. Findling RL, Cutler AJ, Saylor K, Gasior M, Hamdani M, Ferreira-Cornwell MC, et al. A long-term open-label safety and effectiveness trial of lisdexamfetamine dimesylate in adolescents with attention-deficit/hyperactivity disorder. J Child Adolesc Psychopharmacol. 2013;23(1):11-21.[A 52 week open label multicentre study of Elvanse in 269 adolescents with ADHD to assess the long terms safety and efficacy. The article concluded that Elvanse demonstrated a long term safety profile similar to that of other long-acting psychostimulants and was effective, as indicated by improvements in ADHD symptoms and participant-perceived YQOL.]

BNSSG Paediatric Shared Care Guidance
Please complete all sections

Section 1: Heading

Drug	Methylphenidate (Immediate and modified release)
Amber *three months*	
Indication	Attention Deficit Hyperactivity Disorder (ADHD) and Deficit Disorder (ADD) in childhood
Speciality / Department	Community Paediatrics/CAMHS
Trust(s)	Weston Area Health Trust
	Avon & Wiltshire Partnership
	Sirona Care & Health

Section 2: Treatment Schedule

Usual dose and frequency of administration (Please indicate if this is licensed or unlicensed for this age group)	Immediate release methylphenidate 5mg, 10mg and 20mg tablets - Children (over 6 years) Begin with 5mg once or twice daily (e.g. at breakfast and lunch), increase the dose and frequency of administration if necessary by weekly increments of 5-10mg in the daily dose. Doses above 60mg daily are not recommended. Some stable patients require a three-times daily regime. The last dose should usually not be given within 4 hours before bedtime in order to prevent disturbances in falling asleep. However, if the effect of the drug wears off too early in the evening, disturbed behaviour and/or inability to go to sleep may recur. Xaggitin XL (other brands concerta XL , xenidate XL and delmosart) 18mg, 27mg, 36mg and 54mg tablets - The dose may be adjusted in 18mg increments to a licensed maximum of 54mg daily, to be increased to higher dose only under direction of specialist, 108mg/day taken once daily in the morning. In general, dosage adjustment may proceed at approximately weekly intervals. Equasym XL 10mg, 20mg, 30mg and Medikinet XL 5mg, 10mg, 20mg, 30mg, 40mg, 50mg, 60mg - 10mg once daily in the morning before breakfast increasing if necessary by weekly increments to a maximum of 60mg daily. Discontinue if no improvement after one month.

Route and preferred formulation (Please indicate licensed or unlicensed preparation)	Oral, tablets or capsules
Relevant dosing information	N/A
Duration of treatment	Long term or until reviewed by a specialist.

Section 3: Monitoring

Please give details of any tests that are required before or during treatment, including frequency, responsibilities (please state whether they will be undertaken in primary or secondary care), cause for adjustment and when it is required to refer back to the specialist.

Baseline tests to be done by secondary care

Baseline measurement of height, weight, blood pressure, pulse and full blood count. FBC (where appropriate)

Subsequent tests - where appropriate (Please indicate who takes responsibility for taking bloods and interpreting results. If the drug is dosed by weight please also indicate intended frequency of weight monitoring/dose adjustment)

Test	Frequency	Who by	Action/management
Blood pressure and pulse	Six monthly and when dose increased	Community Paediatrics department or Children and Adolescent Mental Health Service (CAMHS) unless local arrangements have been made for individual patients	As per CAMHS/community paeds.
Weight and height measurement using centile growth charts	Six months/yearly	Community Paediatrics department or Children and Adolescent Mental Health Service (CAMHS) unless local arrangements have been made for individual patients	As per CAMHS/community paeds.
Other blood monitoring as considered necessary eg FBC if nose bleeds, bruising or recurrent infections reported.	When considered necessary	Community Paediatrics department or Children and Adolescent Mental Health Service (CAMHS) unless local arrangements have been made for individual patients	As per CAMHS/community paeds.

Other checks at six months/yearly intervals; effectiveness of treatment, review need for dose changed (strength or timing), check for adverse effects.

Section 4: Side Effects

Please list the most common side effects and management. Please provide guidance on when the GP should refer back to the specialist.

Side effects and management

Side effect	Frequency/severity	Action/management
Headache	Very Common (26%)	Usually transient, consult specialist team and consider stopping if persistent
Loss of appetite	Very Common (14%)	Usually transient give the drug after meals. Monitor height and weight closely
Insomnia	Very common (14%)	May be transient. Refer to specialist team
Stomach ache	Very common (12%)	Contact specialist team if persistent
Dry mouth	Common	Contact specialist team if persistent
Nasopharyngitis	Common	Contact specialist team if persistent
CVS-arrhythmias, tachycardia, hypertension, palpitations	Common	Check BP and pulse, if necessary do an ECG. Stop if pulse>100 and contact specialist team.
Aggravation reaction	Common	Contact specialist team if persistent
Asthenia	Common	Contact specialist team if persistent
GI symptoms e.g. nausea and vomiting, diarrhoea, dyspepsia, abdominal pain and dry mouth	Common	Contact specialist team if persistent
Hypersensitivity reactions	Uncommon	Contact specialist team
Difficulties in visual accommodation	Rare	Usually transient. Contact specialist team if persistent
Moderate weight loss and slight growth retardation during prolonged use	Rare	Contact specialist if persistent
Neuroleptic Malignant syndrome	Very Rare	Stop drug and refer
Leucopoenia, thrombocytopenia and anaemia	Very rare	Refer to specialist team drug may need to be stopped

Referral back to specialist

See above

Section 5: Drug Interactions

Please list clinically significant drug interactions (emc link please click here)

Significant Drug Interactions	Coumarin anticoagulants e.g. warfarin (inhibit metabolism leading to increased anticoagulant effect) Anticonvulsants: phenobarbitone, phenytoin and primidone, Phenobarbital (inhibit metabolism leading to increased anticonvulsant effect) Phenylbutazone Tricyclic antidepressants: increased levels of TCA as inhibits metabolism MAOIs, moclobemide; risk of hypertensive crisis Alcohol (increased CNS adverse reactions) Other sympathomimetics e.g. pseudoephedrine and decongestants Volatile liquid anaesthetics: increased risk of hypertension Clonidine and other alpha-2 agonists - avoid Dopaminergic drugs - pharmacodynamic interactions due to increased extracellular dopamine
Reminder to ask patient about specific problems	N/A

Section 6: Contra-indications, Cautions and Special Recommendations

Please list

Contraindications

• Known sensitivity to methylphenidate or to any of the excipients in Ritalin.
• Glaucoma
• Phaechromocytoma
• During treatment with non-selective, irreversible monoamine oxidase (MAO) inhibitors, or within a minimum of 14 days of discontinuing those drugs, due to risk of hypertensive crisis (see section 4.5)
• Hyperthyroidism or thyrotoxicosis
• Diagnosis or history of severe depression, anorexia nervosa/anorexic disorders, suicidal tendencies, psychotic symptoms, severe mood disorders, mania, schizophrenia, psychopathic/borderline personality disorder.
• Diagnosis or history of severe and episodic (Type 1) Bipolar (affective) disorder (that is not well controlled)
• Pre-existing cardiovascular disorders including severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias and channelopathies (disorders caused by the dysfunction of ion channels)
• Pre-existing cerebrovascular disorders cerebral aneurysm, vascular abnormalities including vasculitis or stroke or known risk factors for cerebrovascular disorders
Methylphenidate should not be used in Children under the age of six.

Cautions

Methylphenidate should be used with care in children with marked anxiety, agitation or tension; symptoms or family history of tics or Tourettes syndrome; history of drug or alcohol abuse;

Caution is called for in emotionally unstable patients, such as those with a history of drug dependence

or alcoholism, because such patients may increase the dosage on their own initiative.

Methylphenidate should be used with caution in patients with epilepsy as clinical experience has shown that it can cause an increase in seizure frequency in a small number of such patients. If seizure frequency increases, methylphenidate should be discontinued.

The long-term safety and efficacy profiles of methylphenidate are not fully known. Patients requiring long-term therapy should therefore be carefully monitored and complete and differential blood counts and a platelet count performed periodically.

Careful supervision is required during drug withdrawal, since this may unmask depression as well as chronic over-activity. Some patients may require long-term follow-up.

Clinical experience suggests that methylphenidate may exacerbate symptoms of behavioural disturbance and thought disorder in psychotic children.

Special Recommendations
Long term (more than 12 months) use in children and adolescents
The physician who elects to use methylphenidate for extended periods (over 12 months) in children and adolescents with ADHD should periodically re-evaluate the long term usefulness of the drug for the individual patient with trial periods off medication to assess the patient's functioning without pharmacotherapy. It is recommended that methylphenidate is de-challenged at least once yearly to assess the child's condition (preferable during school holidays). Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Dose reduction and discontinuation
Treatment must be stopped if the symptoms do not improve after appropriate dosage adjustment over a one-month period. If paradoxical aggravation of symptoms or other serious adverse events occur, the dosage should be reduced or discontinued

Section 7: Advice to the patient

Advice for prescribing clinician to inform patient

Moderately reduced weight gain and slight growth retardation have been reported with the long-term use of stimulants in children, although a causal relationship has not been confirmed. Careful monitoring of growth using centile charts is recommended during extended treatment with methylphenidate.

Blood pressure should be monitored at appropriate intervals in all patients taking methylphenidate, especially those with hypertension.

Available clinical evidence indicates that treatment during childhood does not increase the likelihood of addiction in later life.

Section 8: Responsibilities for Secondary Care

Core responsibilities

1. Initiating treatment and prescribing for the first three months
2. Undertaking the clinical assessment and monitoring for the first three months.
3. Communicate details of the above in 1 and 2 to GP within the first month of treatment. This information should be transferred in a timely manner.
4. Refer patients to GP and provide information of further action where appropriate e.g. blood test is due.
5. To provide advice to primary care when appropriate.
6. Review concurrent medications for potential interaction prior to initiation of methylphenidate.
7. Stopping treatment where appropriate or providing advice on when to stop.
8. Reporting adverse events to the MHRA.
9. Reminder to ask patients about particular problems see section 5.

Other specific to drug

1. Advise patients on risks and benefits of drug and provide written information on drug (where available e.g. NICE information)
2. Advise parents that the treatment programme will be discontinued by the child psychiatrist/paediatrician if the monitoring programme is not complied with (and informing the GP in writing if appointments are not kept)
3. Liaise with pharmacy regarding supplies, where appropriate.
4. Review the patient within 1month (may include telephone review) to assess treatment benefit, adverse effect, and monitor weight and height. (Monthly or more frequent reviews may be required until a stable dose level is reached)
5. Seek shared prescribing agreement with GP providing a clinical summary of the patient involved when final therapeutic dose is established. GPs will only be asked to prescribe drugs which are used in accordance with their product licence. NOTE: Methylphenidate is only licensed for the treatment of childhood ADHD from the age of 6 years. For patients falling outside this prescribing will be retained by child psychiatrist/paediatrician.
6. Retain responsibility for monitoring effectiveness of drug therapy and making dosage adjustments. Informing the GP of any dose changes in writing as soon as possible. Thereafter retain prescribing responsibility until dose is again stabilized. (> 3 months)
7. Review patient at six months/yearly intervals.
8. After 1 year and each year thereafter, consideration will be given to reducing the dose or stopping treatment.
9. Recommending other non-medical therapeutic intervention as appropriate.
10. Performing a full clinical review of children aged 14 to 18 years of age to determine whether treatment should be stopped. The drug is not yet licensed in adulthood. In exceptional circumstances where the intention is not to stop the drug, the consultant will ensure appropriate handover to adult services for the adult services psychiatrist to continue to prescribe the drug, including consideration of referral to regional specialist services for re-evaluation.

Section 9: Responsibilities for Primary Care

Core responsibilities

1. Responsible for taking over prescribing after the first three months
2. Responsible for the clinical assessment and monitoring after the first three months
3. Review of any new concurrent medications for potential interactions.
4. Reporting adverse events to the MHRA.
5. Refer for advice to specialist where appropriate.
6. Reminder to ask patients about particular problems see section 5.

Other specific to drug

1. Provide on going prescriptions for methylphenidate in line with the product license and controlled drug regulations (once the final therapeutic dose has been established) at the dosage recommended by the child psychiatrist/paediatrician
2. Contact the specialist to discuss any significant changes in the patient such as spontaneous bruising or bleeding which may indicate blood abnormalities.
3. Be aware of the patient`s overall health and well being including any increase in the number of infections and discussions as to the effectiveness of the medication. If there are any problems to refer back to child psychiatrist/paediatrician.
4. All monitoring will be carried out by CAMHS service. GP's are to check that patient is being monitored and seen by the service at 6 monthly intervals intervals. If they are not then advice should be sought from CAMHS clinician.
5. Respond to dosage changes advised and prescribe appropriately

Section 10: Contact Details

Name	Organisation	Telephone Number	E mail address
Dr Fiona Barlow/ Dr Tania Randall	Weston Area Health Trust CAMHS	01934 881262	Fiona.barlow@nhs.net
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Section 11: Document Details

Date prepared	6/10/2010, Update July 2018
Prepared by	Dr. Fiona Barlow, Consultant Child & Adolescent Psychiatrist, Updated Natasha Mogford
Date approved by JFG	July 2018
Date of review	July 2020
Document Identification: Version	V2

Section 12: Collaboration

Specialists in any one discipline are encouraged to collaborate across the health community in preparing shared care guidance. Please give details

1. Prepared in collaboration with North Somerset colleagues working across Children's Services i.e. community paediatricians and CAMHS.

Section 13: References

Please list references

1. NICE guideline (NG87): Attention deficit hyperactivity disorder: diagnosis and management. 14 March 2018 (nice.org.uk/guidance/ng87). Available Online: https://www.nice.org.uk/guidance/ng87/resources/attention-deficit-hyperactivity-disorder-diagnosis-and-management-pdf-1837699732933

2. www.medicines.org.uk