BNSSG Shared Care Guidance
Please complete all sections

Section 1: Heading

Drug	Lisdexamfetamine for adults with ADHD
Amber ***three months***	
Indication	Treatment of ADHD in Adults

Section 2: Treatment Schedule

Usual dose and frequency of administration *(Please indicate if this is licensed or unlicensed and any relevant dosing information)*	**This Shared Care Guidance only covers adult ADHD patients with no other serious mental health co-morbidities who are stabilised on a Lisdexamfetamine prescription.** The NICE Guideline NG87 supports the use of lisdexamfetamine or methylphenidate as first line pharmacological treatment in adults. Lisdexamfetamine 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. Formulations are marketed as the trade name **Elvanse** and **Elvanse Adult** (available from 01.07.15)**.** **Elvanse and Elvanse Adult are available as 30, 50, 70mg capsules, equivalent to 8.9mg, 14.8mg and 20.8mg Dexamfetamine, respectively. The dose may be adjusted starting at 30mg od, increasing to 50mg or 70mg, with the maximum BNF limit currently being 70mg a day, to be taken in the morning.** Although the manufacturer recommends increases on a weekly basis, in general, we undertake dosage adjustment at approximately monthly intervals, if necessary. **Lisdexamfetamine is classed as a Schedule 2 Controlled Drug under the Misuse of Drugs Act 1971. Prescriptions must therefore conform to the Misuse of Drugs Regulations 2001.** It is “best practice” to prescribe one month supply or less of schedule 2 controlled drugs.
Route and formulation	Oral, capsules

Duration of treatment	Patients should be encouraged to consider stopping the medication every 1 to 5 years, with the guidance of the specialist clinic if desired. Reduce the dose at weekly increments and discontinue over a four week period. If desired and clinically appropriate, Lisdexamfetamine can be restarted by the GP, referral back into the ADHD service is not necessary.

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

1. The GP practice to check BP, pulse and weight at referral, as per Referral form.
2. GP to carry out cardiac exam/ ECG if clinically indicated (e.g. family history of early CHD etc) prior to referral.
3. ADHD clinic to check BP, pulse and weight at the first appointment after starting treatment.

If any physical abnormality is found or suspected at baseline, investigate and treat as appropriate for that abnormality.

Subsequent tests - where appropriate *(Please indicate who takes responsibility for taking bloods and interpreting results)*

Test	Frequency	Who by	Action/management
BP, Pulse, Weight, height	First appointment	ADHD clinic	To prepare for medication titration
BP	After each dose increase and every 6 months and at annual review.	ADHD clinic if titration taking place in clinic At 6 monthly intervals: Patients can self-monitor and report to primary care or can be done by Primary Care At annual review: To be done by primary care.	If there is a clinically significant increase in blood pressure, monitor and treat as per usual unless it is felt that ADHD treatment benefits don't outweigh antihypertensive treatment requirement; discuss with ADHD clinic to consider dose adjustment or alternative ADHD treatment
Pulse			NICE guidance suggest to investigate a resting tachycardia of > 120pbm; we suggest to monitor and possibly investigate a sustained resting tachycardia >100bpm; consider ECG; discuss with ADHD clinic.
Weight			If there is evidence of significant weight loss, measure BMI and discuss with patient as appropriate. Strategies to manage weight loss include: -Taking medication with or after food. -Additional meals/snacks early morning or late evening when stimulant effects have worn off. -Choosing high calorie foods of good nutritional value.

			-Taking a planned break from treatment or changing medication.

Section 4: Side Effects

Please list only the most pertinent side effects and management. Please provide guidance on when the GP should refer back to the specialist. For everything else, please see BNF or SPC.

Side effects and management

Side effect	Frequency/severity	Action/management
Headache	Very Common	This is usually transient. If it is persistent, consider stopping and consult the specialist team.
Decreased appetite	Very Common	Take medication after breakfast/food; Maximise food intake at times of least appetite suppression; increase snacking, introduce liquid calories (smoothies etc.)
Dry mouth	Very Common	Contact specialist if persists.
Insomnia	Very Common	This may be transient. Make sure medication is taken in the morning Refer to the specialist team if persistent.
CVS symptoms: arrhythmias, tachycardia, hypertension, and palpitations	Common	Monitor the BP and pulse, and if necessary do an ECG. If the resting pulse is consistently > 100, contact the specialist team.
Agitation, anxiety, bruxism, restlessness, tremor, irritability, dizziness	Common	Common on initiation. Often subsides after several days. If no improvement, consult specialist.
Reduced libido/erectile dysfunction	Common	Contact specialist.
Tremor	Common	Contact specialist if persists.
Dyspnoea	Common	Contact specialist if persists.
GI disorders- diarrhoea, constipation,nausea, vomiting, abdo pain	Common	Contact specialist if persists.
Difficulties in visual accommodation	Rare	Usually transient. Optician check to rule out other causes such as increased intraoccular pressure. Contact specialist team if persistent
Serotonin Syndrome	Rare	Can occur when co-prescribed with antidepressants and Lithium; stop Lisdexamfetamine immediately if suspected and seek expert advice. Early symptoms of serotonin syndrome include tachycardia, shivering, diarrhea, diaphoresis, muscle cramps, agitation, and elevated body temperature
Leucopaenia, thrombocytopenia and	Very Rare	Refer to specialist team drug may need to be stopped.

	<table><tr><td>anaemia</td><td></td><td></td></tr></table> More rarely, depression, or very rarely, psychosis.
Referral back to specialist	Contact specialist for advice if: • Patient finds the medication intolerable for any given reason • If there is concern about observed mental/psychological or physical side effects (e.g. depression or hypertension) •The side effects mentioned above, do not appear to be of a temporary and short lived nature persist beyond the first week of medication.

Section 5: Other Issues

(e.g. Drug Interactions, Contra-indications, Cautions, Special Recommendations)

Please list only the most pertinent action for GP to take (For full list please see BNF or SPC)

Issues	**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 **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 • Breastfeeding **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 • Pregnancy – no adequate and well controlled studies in pregnant women. Use only during pregnancy if the potential benefit justifies the potential risk to the foetus. **Dose reduction and discontinuation** If paradoxical aggravation of symptoms or other serious adverse events occur, the dosage should be reduced or discontinued – advice should be sought from the AWP ADHD clinic. Patients should be carefully monitored for the risk of diversion, misuse and abuse of lisdexamfetamine. Lisdexamfetamine should be used with caution in patients with known drug or alcohol dependency because of a potential for abuse, misuse or diversion.
Reminder to ask patient about specific problems	Ask about emergence of any possible side effects/compliance to treatment issues.

Section 6: Advice to the patient

Advice for prescribing clinician to inform patient

1. It is not advisable to drink alcohol, use recreational substances or consume excessive amounts of caffeine whilst taking Atomoxetine.
2. The patient should immediately report abdominal pain, unexplained nausea, malaise, darkening of the urine, jaundice, or suicidal thinking and/or self-harm to the GP.
3. Failure to attend annual reviews when called for by the GP, could result in the medication being stopped.
4. Patients can choose to try stopping the medication. Annual reviews are an ideal opportunity to discuss this but a desire to stop medication can be expressed and discussed at any time.
5. Information on drug prescribed including a patient information leaflet (PIL). Information on mental health conditions, treatments and medication can be found at: http://www.choiceandmedication.org/awp/

Section 7: Generic principles of shared care for SECONDARY CARE

Please do not amend.

Core responsibilities

1. Initiating treatment and prescribing for the length of time specified in **section 1.**
2. Undertaking the clinical assessment and monitoring for the length of time specified in **section 1** and thereafter undertaking any ongoing monitoring as detailed in **section 3.**
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. if blood test is due.
5. To provide advice to primary care when appropriate.
6. Review concurrent medications for potential interaction prior to initiation of drug specified in **section 1.**
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.**

Section 8: Generic principles of shared care for PRIMARY CARE

Please do not amend.

Core responsibilities

1. Responsible for taking over prescribing after the length of time specified in **section 1.**
2. Responsible for any clinical assessment and monitoring if detailed in **section 3** after the length of time specified in **section 1.**
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.**

Section 10: Contact Details

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Section 11: Document Details

Date prepared	6th December 2019
Prepared by	Emily Knight/Dietmar Hank
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Section 12: Collaboration

All shared care protocols should be BNSSG wide where possible. Specialists in any one discipline are encouraged to collaborate across the health community in preparing shared care guidance. Please give details

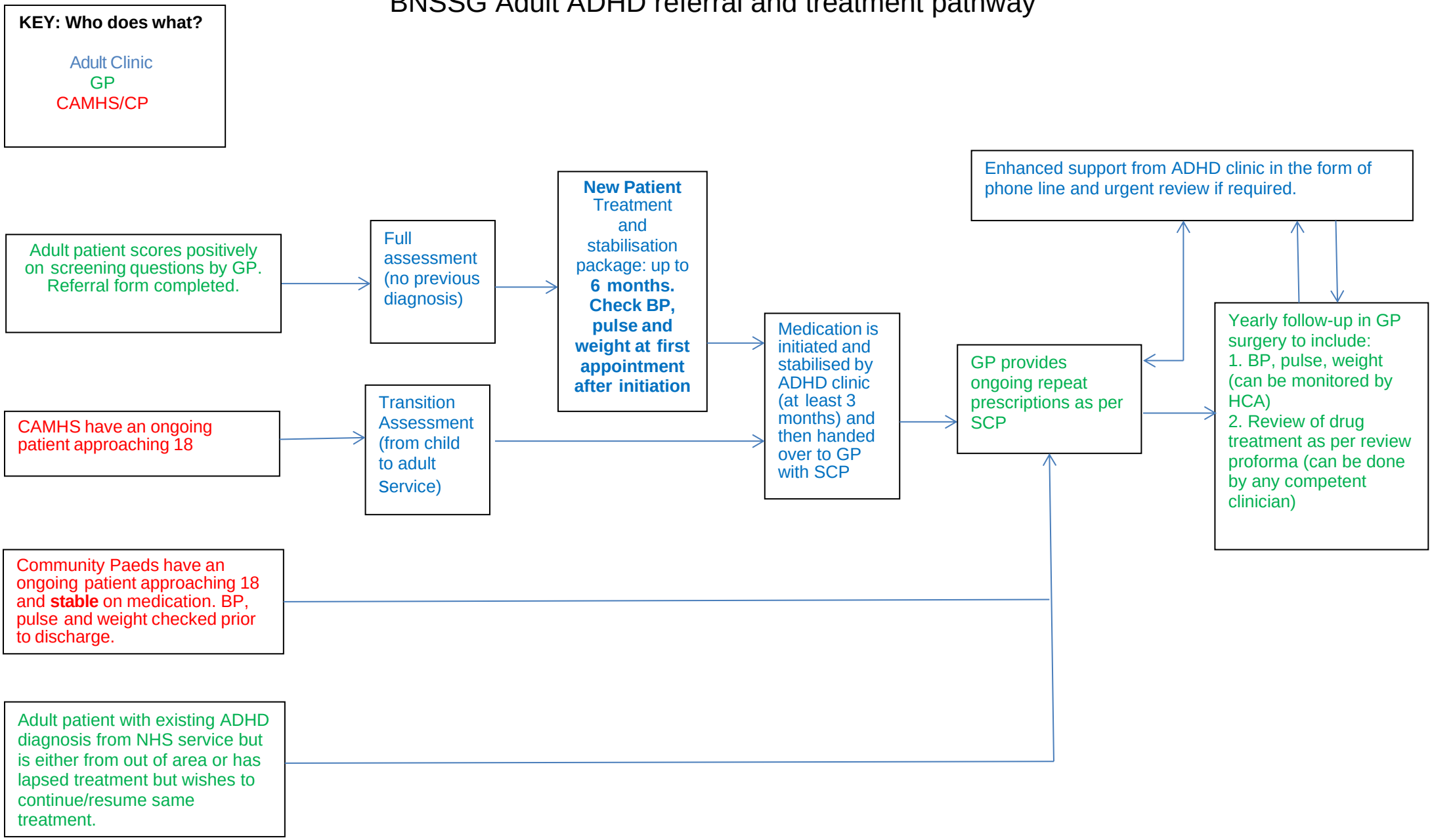
1. Click here to enter details

Section 13: References

Please list references

1. BNF online
2. EMC SPC for Lisdexamfetamine Elvanse 20mg https://www.medicines.org.uk/emc/product/2979/smpc
3. Vo, K., Neafsey, P. J., & Lin, C. A. (2015). Concurrent use of amphetamine stimulants and antidepressants by undergraduate students. Patient preference and adherence, 9, 161–172. doi:10.2147/PPA.S74602

BNSSG Adult ADHD referral and treatment pathway



Patients under CAMHs will generally be more complex and may be more likely to require Adult specialist input at transition. Patients under Community Paediatrics will generally be defined as more stable and able to be moved to care of the GP at transition.