# Prescribing in attention deficit hyperactivity disorder (ADHD)

In England and Wales over £48 million is spent annually on methylphenidate, atomoxetine, dexamfetamine, lisdexamfetamine and guanfacine prolonged release (ePACT Apr - Jun 2016). These medicines are licensed for use in treating ADHD in children and young people (usually from six years), although some are licensed for use in adults.<sup>1</sup> Medicines optimisation projects in this area focus on quality of care by ensuring that medication use is appropriate and safe.

## **Key recommendations**

- A diagnosis of ADHD should only be made after a full clinical and psychosocial assessment by an appropriately qualified healthcare professional. Primary care practitioners should not make the initial diagnosis or start drug treatment in children or young people with suspected ADHD (a NICE 'Do not do' recommendation).<sup>2</sup>
- ADHD should be considered in all age groups.<sup>2</sup>
- Drug treatment for children, young people and adults with ADHD should always form part of a comprehensive treatment plan that includes psychological, behavioural and educational advice and interventions (or occupational needs in the case of adults).<sup>2</sup>
- Drug treatment is not recommended for:
- » Pre-school children (a NICE 'Do not do' recommendation).
- » First-line treatment for school-age children and young people with moderate impairment (a NICE 'Do not do' recommendation). It should be reserved for those who have refused or responded insufficiently to non-drug interventions.
- Drug therapy should be the first-line treatment for:
- » School-age children and young people with severe ADHD (hyperkinetic disorder) and severe impairment. Parents should also be offered a training/education programme.
- » Adults with either moderate or severe impairment, unless the person would prefer a psychological approach.<sup>2</sup>
- Following an adequate treatment response, drug treatment should be continued for as long as it remains clinically effective. The need for continued drug treatment should be reviewed at least annually.<sup>2</sup>
- Young people with ADHD should normally be transferred to adult services if they continue to have significant symptoms that require treatment.<sup>2</sup> In some areas there is a need to address gaps in service provision for adults with ADHD.<sup>3,4</sup>
- Side effects resulting from drug treatment for ADHD should be routinely monitored and documented.<sup>2</sup> Clarity regarding responsibility for drug monitoring is essential. GP practices need robust systems to ensure monitoring is carried out and highlight where it has been missed.

- ADHD medicines cause side-effects that can affect a person's ability to drive.<sup>1</sup> People should be advised not to drive until they are reasonably certain that their performance is not affected by the medicine.
- It is an offence to drive with more than a specified amount of amphetamines (e.g. dexamfetamine, lisdexamfetamine) in the body. Provided driving is not impaired, a 'statutory defence' to avoid prosecution can be raised if the medication was prescribed and has been taken as advised.<sup>5,6</sup>
- Before prescribing ADHD medication the risk of substance misuse and drug diversion should be assessed.<sup>2</sup>
- Methylphenidate, dexamfetamine and lisdexamfetamine are schedule 2 controlled drugs.<sup>1</sup> Prescribers should be familiar with the requirements of controlled drug legislation governing their prescription and supply.<sup>2</sup>
- Different versions of methylphenidate modified-release preparations can have different release profiles and may not have the same clinical effect. Prescribers should specify the brand to be dispensed.<sup>1</sup>
- Atomoxetine has a flat pricing structure (most of the available strengths cost the same per capsule).<sup>1</sup> The desired dosage should be given using the fewest number of capsules to maximise costeffectiveness.

# Savings

Savings may be achieved by:

• Considering formulary choice of methylphenidate prolonged release. For example, if 50% of Concerta XL® prescribing was for Xenidate XL® instead, this could release annual **savings of almost £2.8 million across England and Wales. This equates to £4,591 per 100,000 patients.** 

• Optimising atomoxetine doses (i.e. using the fewest number of capsules to get the desired dosage).

A 10% reduction in spend on atomoxetine would result in savings of approximately £800,000 across England and Wales. This equates to £1,212 per 100,000 patients.

### References

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- 2. National Institute for Health and Care Excellence (NICE): Attention deficit hyperactivity disorder: diagnosis and management [CG72]. Issued September 2008, last updated February 2016. Accessed 20/02/16 via <a href="http://www.nice.org.uk/guidance/cg72">http://www.nice.org.uk/guidance/cg72</a>].
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- 6. Drugs and driving: the law. Accessed 31/03/16 via https://www.gov.uk/drug-driving-law

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