



Implications of commercial testosterone prescribing for the NHS

The complexity of care is seldom covered in commercial testing

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The rapid expansion of testosterone prescribing risks broadening treatment from men with well characterised hypogonadism to people with non-specific symptoms and borderline biochemical findings, for whom the balance of benefit and long term risk are less certain.

The testosterone replacement market in the UK was valued at around \$205m in 2024 and is projected to grow substantially, reaching \$365m by 2032.¹ Testosterone prescribing in the NHS is rising rapidly: data from the NHS Business Services Authority show community dispensing rose by 52% between 2020-21 and 2024-25.² In England, 429 women aged 50 or older received NHS prescriptions for testosterone gel in November 2015, compared with 4675 in November 2022.³ These figures count recipients, not prescriptions, and cannot establish whether treatment was appropriate.

Private prescriptions are not recorded nationally, so the scale of private testosterone provision is unknown. However, several indicators suggest rapid growth: a proliferation of private and online clinics,² subscription pricing of £100-£375 a month (to cover ongoing blood monitoring, remote telemedicine consultations, and home delivered medication), and heavy marketing through social media, influencers, and outdoor advertising.⁴ Prescription-only medicines cannot legally be advertised to the public, but indirect promotion through marketing of testing or services requires scrutiny. The market is potentially large. Declining testosterone and libido are natural aspects of ageing, and up to a fifth of men over 50 may report deficiency symptoms, although under 1% receive treatment in the NHS,⁵ with fewer receiving treatment under strict biochemical testosterone deficiency criteria.⁵

Testosterone deficiency can cause reduced libido, erectile dysfunction, and impaired quality of life with fatigue, reduced energy levels, and depressive symptoms.^{6,7} Diagnosis requires two fasting samples: total testosterone <8 nmol/L confirms deficiency; 8-12 nmol/L is classified as “possible” deficiency.^{6,7} Reversible causes, including obesity, medication, sleep apnoea, and depression must be excluded before lifelong therapy begins. Obesity in particular produces “pseudo-hypogonadism” leading to low testosterone, producing a state that usually responds better to weight loss than to testosterone.⁸

Excluding these causes takes time and repeated testing. It is not established how consistently private providers do this, but rapid access subscription models built around marketing non-specific symptoms are unsuitable to handle the complexity of the diagnostic process and risk unnecessary

lifelong treatment and a resulting NHS monitoring burden.

For testosterone therapy in men, clinicians rely on professional society guidance with differing thresholds. For example, the British Society for Sexual Medicine’s guidelines on male adult testosterone deficiency recommend testosterone therapy when symptoms of testosterone deficiency are present with testosterone <12 nmol/L, or <14 nmol/L in people with non-diabetic hyperglycaemia,⁶ while the Society for Endocrinology guidelines for male hypogonadism suggest testosterone replacement in men with three sexual symptoms (decreased libido, loss of morning erections, and erectile dysfunction) and testosterone <11 nmol/L.⁷

However, NHS clinicians may see patients who have already started taking testosterone against a more permissive private threshold of hypogonadal symptoms with a biochemical testosterone level of ≤15 nmol/L.⁹ This shows why general practitioners need the diagnostic evidence and rationale when asked to continue prescribing. Existing professional guidance addresses diagnostic complexity; a nationally agreed pathway could clarify documentation, referral, monitoring, and transfer of responsibility.

Side effect management falls to the NHS

Testosterone therapy has longer term risks, and management of these will likely fall to NHS services rather than private providers. In Traverse, a randomised, placebo controlled trial in 5246 men aged 45-80 with confirmed hypogonadism and cardiovascular risk with a mean treatment duration of around 22 months and a mean follow-up duration of 33 months, testosterone was non-inferior to placebo for major adverse cardiovascular events but produced significantly higher rates of atrial fibrillation (absolute risk 3.5% v 2.5%), acute kidney injury, and pulmonary embolism.¹⁰ Although the results of this trial cannot be extrapolated beyond men who meet the inclusion criteria, the excess of arrhythmia, renal, and thromboembolic events means testosterone treatment needs ongoing monitoring, which will likely fall to the NHS.

Women are also increasingly seeking testosterone, mainly for low libido associated with menopause.^{3,4} UK guidance recommends testosterone if hormone replacement therapy is insufficient,¹¹ but the only licensed option—a female specific cream, Androfeme—is not yet NHS funded. This has led to off-label use of preparations licensed for men, with careful dosing to avoid androgenic effects.¹² Some general practices decline to prescribe, referring instead to NHS specialist clinics.¹³ However, private

prescribing volumes and the frequency of subsequent NHS referrals for women remain insufficiently characterised.

As stated in General Medical Council and BMA guidance, the responsibility of care rests exclusively with any private sector clinician who initiates treatment unless an NHS GP formally agrees to shared care.^{14 15} If a GP declines, the responsibility remains with the original prescriber.¹⁴ However, patients who started treatment privately may return to their GP informally for tests or managing side effects, leading to the NHS absorbing the workload without any formal agreement. Audits show that around a third of all shared care prescriptions lack up-to-date monitoring.¹⁶

Testosterone replacement remains a valuable treatment for carefully selected patients. However, national data are needed to close the evidence gap on private prescribing of testosterone. A reporting framework for private prescribers and dispensing pharmacies could capture indications, patient numbers, monitoring, and transfers of care. This would lead to transparent prescribing and demonstrable adherence to evidence based care, protecting patients while preserving access to effective treatment.

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