Definition
Erectile dysfunction is the inability to attain and maintain an erection sufficient for satisfactory sexual performance

History:
• Sexual history is essential to differentiate psychological from physical causes or mixed picture
e.g. presence of early morning erections/able to masturbate?
• Enquire about lifestyle
• Consider the following pathophysiology in history
  ➢ Vasculogenic: e.g. CVD, hypertension, diabetes mellitus, hyperlipidaemia, smoking, major surgery or radiotherapy
  ➢ Neurogenic: e.g. MS, Parkinson’s Disease, CVA, alcoholism, diabetes, tumours
  ➢ Hormonal: e.g. hypogonadism, thyroid, hyperprolactinaemia
  ➢ Anatomical: e.g. Peyronie’s Disease, congenital
  ➢ Drug induced: (see notes 1)

Examination:
• Cardiovascular, neurological and endocrine
• Genitourinary
• Digital Rectal Examination (if appropriate) to eliminate Ca Prostate

Investigations:
• FBC, U&Es, LFTs, fasting glucose & lipids
• Total Testosterone (measure in the morning between 8-11am)
  ➢ If testosterone result low, confirm with second sample and also check SHBG, LH, FSH & Prolactin
• PSA (if appropriate and only after appropriate counselling)

Refer if:
• Young man who has always had difficulty with ED
• History of Trauma to genital area
• Penile/testicular/prostate abnormality on examination

Consider trial of PDE-5 inhibitor6 +/- Refer to psychosexual counselling

Remember:
ED has a strong association with underlying CVD so consider QRISK calculation

Give lifestyle advice as appropriate²
• Assess patient’s needs and expectations

Trial of PDE-5 inhibitor
In accordance with CWS Medicines Management formulary5

No better
No reversible causes
Treat reversible causes & reassess³

No response
No response

Trial Topical Alprostadil Cream (x8 doses)

Unsuitable/unable to take PDE-5 inhibitor4

Refer Patient to Specialist Service (Click here)
1). Examples of drugs causing ED:
Antihypertensives:
Antidepressants/Psychotropic drugs: phenothiazines, tricyclics, MAOIs, SSRIs, lithium
Hormone modifying drugs: cyproterone actetate, oestrogen, 5-alpha reductase inhibitors, corticoseroids, progesterone
Cytotoxics: cyclophosphamide, methotrexate
Recreational drugs: alcohol, tobacco, cannabis
Other: digoxin, ranitidine, carbamazepine, spironolactone

2). Lifestyle advice/interventions:
• Increase exercise
• Reduce BMI
• Smoking cessation
• Reduce alcohol intake

3). Treatment of reversible causes:
• Treat any obvious underlying cause if possible in primary care (hypothyroidism, DM etc)
• If significant endocrine abnormality is discovered, refer to endocrinologist
Diagnosis of low testosterone and testosterone replacement:
If a GP feels confident to manage testosterone replacement in primary care this may be undertaken but attention must be paid to the WSHT Male Hypogonadism guidelines.

4). Unsuitability for treatment with PDE-5 inhibitor:
• PDE-5 inhibitors must not be prescribed in conjunction with nitrates or Nicorandil
• Men with intermediate or high cardiovascular disease - see (BSSM) guidance on ED British Society of Sexual Medicine

5). Treatment with PDE-5 inhibitors:
• Check suitability for prescribing under NHS Schedule 11
• Refer to BNF for notes on how to take PDE-5 inhibitors – essential to explain details to patient as failure of treatment often results from taking incorrectly
• Important to explain side effects and risk of priapism
• Trial of at least 2 PDE-5 inhibitors over 8 occasions at maximum dose before referral
• Sexual stimulation must occur for any PDE-5 inhibitor to work

6). PDE-5 inhibitors in psychogenic ED:
It is reasonable to give a trial of PDE-5 inhibitors to suitable men with psychogenic ED in conjunction with psycho-sexual support in a move to boost confidence.

Useful patient resources:
http://www.nhs.uk/Conditions/Erectile-dysfunction/Pages/Treatment.aspx
http://www.patient.co.uk/health/Erectile-Dysfunction-%28Impotence%29.htm