Men's Health

GP ST2

Dr Seb Pillon

1

Men's Health Stats

- **19% of men** in England, in Wales and Northern Ireland **die before they retire**.
  - It's 22% of men in Scotland
- The peak age group for death from suicide is aged 45-49.
- **Men are 37% more likely to die from cancer overall** – and 67% more likely to die than women from the cancers that men and women share (excluding sex-specific cancers & breast cancer)
  - In 2016 more men in England and Wales died of breast cancer (74) than testicular cancer (55).
- Men are more likely to get diabetes, twice as likely to suffer complications such as foot ulcers, more likely to require an amputation and twice as as likely to die prematurely.
- Men *do* go to the doctor just as much as women – as soon as they retire.

2

Why don't men visit the GP?

- Too busy to go (29%)
- Worried about burdening the NHS (28%)
- Unable to get an appointment around work hours (26%)
- Embarrassment or awkwardness (23%)
- Worried about catching germs (22%)

3

4

Premature Ejaculation

- Mickey, 25 presents with an embarrassing problem
- He is coming to orgasm too quickly with his partner
- Not had this problem before
- Planning wedding and under financial stress

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Premature Ejaculation

- Non-drug treatment (including psychosexual counselling, education, and behavioural treatments) are recommended in patients for whom premature ejaculation causes few (if any) problems or in patients who prefer not to take drug treatment.
  - Stop-Start and Squeeze Techniques
  - Sensate Focus
- Topical local anaesthetics
- SSRIs (citalopram, fluoxetine, fluvoxamine maleate, escitalopram, paroxetine, sertraline) have been widely used as regular, daily treatment.
  - Dapoxetine, a short-acting SSRI, is licensed to be used when required for this condition

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Therapy for PE

Stop Start Technique

- Semans, 1956

- The partner stimulates the penis until the patient feels the urge to ejaculate.
- At this point, he instructs his partner to stop, waits for the sensation to pass
- Then stimulation is resumed
- 3 pauses before orgasm

Squeezing technique

- Masters and Johnson, 1970

- The partner applies manual pressure to the glans just before ejaculation until the patient loses his urge.
- Squeeze for 15-20 sec
- 3 pauses before orgasm

7

Charlie, 63

- Presents with problems passing urine
- Leaking after thinks has finished, some dribbling and over past 4-5 years stream has slowed.
- Sometimes has to go back to toilet soon after initial visit.
- Passes urine once or twice at night

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Lower Urinary Tract Symptoms

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LUTS

- **Storage symptoms** urgency, daytime urinary frequency, nocturia, urinary incontinence, and feeling the need to urinate again just after passing urine.
- **Voiding symptoms** include hesitancy, weak or intermittent urinary stream sometimes causing splitting or spraying, straining, intermittency, incomplete emptying, and terminal dribbling.
- **Post-micturition symptoms** include post-micturition dribble and the sensation of incomplete emptying.

Table 1: Lower urinary tract symptoms in men

Storage symptoms
• Increased daytime frequency • Nocturia • Urgency • Urinary incontinence • Altered bladder sensation (normal, increased, reduced, absent, non-specific)
Voiding symptoms
• Slow stream • Splitting or spraying • Intermittent stream • Hesitancy • Straining and terminal dribble
Post-micturition symptoms
• Feeling of incomplete emptying • Post-micturition dribble

Source: National Clinical Guideline Centre (UK). The Management of Lower Urinary Tract Symptoms in Men [Internet]. London: Royal College of Physicians (UK); 2010. (NICE Clinical Guidelines, No. 97.) Appendix A, Scope. Available from: http://www.ncbi.nlm.nih.gov/books/NBK65067/

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Serious causes of LUTS

Urological cancer

- may present with a prostate that is hard and irregular, unexplained haematuria, lower back pain, bone pain, and weight loss.

Urological infection

- may present with pain when urinating, pelvic pain, loin pain, fever, and abnormal urine dipstick test findings.

Sciatica

- may present with weakness, numbness, or tingling in the leg, and can cause or aggravate LUTS.

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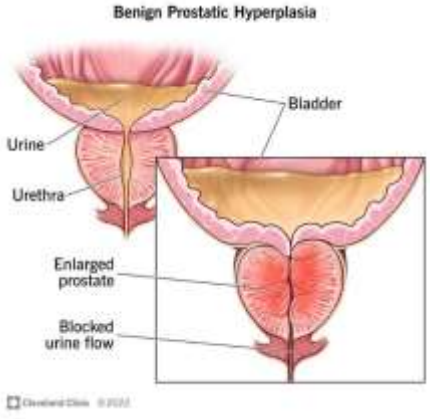
Benign Prostatic Hyperplasia

- 50% of men over 50 affected
  - Over 90% of 80 year-olds
- Progression leads to increased risk of retention, infection and bladder calculi
- Main risk factors are obesity and genetic predisposition
- BPH is linked to androgen production



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IPSS

- Each question is assigned points from 0 to 5 indicating increasing severity of the particular symptom.
- The total score can therefore range from 0 to 35 (asymptomatic to very symptomatic).
  - 0 - 7 = mildly symptomatic
  - 8 - 19 = moderately symptomatic
  - 20 - 35 = severely symptomatic

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LUTS Conservative Management

- Pelvic floor muscle training and bladder training.
- Advising on prudent fluid intake,
  - Advice NOT to limit fluid intake excessively to control symptoms, as doing this could increase the risk of complications
- Advising on lifestyle measures, such as:
  - Avoiding constipation (or treating it if present);
  - Maintaining a healthy lifestyle (with respect to body weight, exercise, diet, smoking, and alcohol consumption);
  - Limiting intake of caffeine, artificial sweeteners, and fizzy drinks.

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Management of LUTS

- Men with mild symptoms are candidates for watchful waiting with or without behavioural modification.
  - About 85% men with mild-to-moderate LUTS will remain stable for one year.
- Alpha-blockers improve LUTS and have a good safety profile.
- 5α-reductase inhibitors (for men with prostate >40ml) improve LUTS and reduce the risk of urinary retention and the need for surgery.
- In patients with predominant storage symptoms and PVR <150ml, antimuscarinics or β3-agonists are recommended.
- Tadalafil is the only PDE5I licensed for the treatment of LUTS with reported improvements
- Surgery is reserved for men with absolute indications, and for patients who fail medical therapy.
- Patients receiving pharmacotherapy should be reviewed 4-6 weeks after treatment initiation to assess treatment response, thereafter every 6-12 months and then annually

Summary Paper on the 2023 European Association of Urology Guidelines on the Management of Non-neurogenic Male Lower Urinary Tract Symptoms - Beyond the Abstract
European Urology. 2023 May 16

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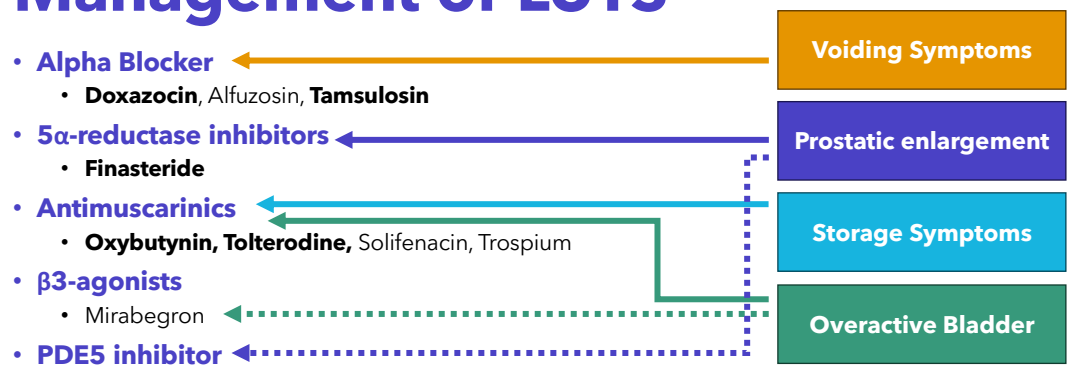
Management of LUTS

- **Alpha Blocker**
  - **Doxazocin**, Alfuzosin, **Tamsulosin**
- **5α-reductase inhibitors**
  - **Finasteride**
- **Antimuscarinics**
  - **Oxybutynin, Tolterodine,** Solifenacin, Trospium
- **β3-agonists**
  - Mirabegron
- **PDE5 inhibitor**
  - Tadalafil
- **Surgery**
  - resection; enucleation; vaporisation; alternative ablative; nonablative



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LUTS AKT Question

- According to NICE, please select the most appropriate condition to use the therapies (*named from A-G*) listed for.
- Each condition (*numbered from 1-6*) may be selected once, multiple times, or not at all.

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LUTS AKT Question

A. Tamsulosin
B. Finasteride
C. Furosemide
D. Oxybutynin
E. Intermittent self-catheterisation
F. Urethral milking
G. Indwelling suprapubic catheter ✕

1. Overactive bladder
2. Recurrent urinary bladder retention
3. Post-micturition dribble
4. Voiding symptoms
5. Nocturnal Polyuria
6. Benign Prostatic Hypertrophy

A4, B6, C5, D1, E2, F3 (G unused)

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Will, 41

- Attends with partner: "He needs anger management therapy".
- Getting agitated a lot, things that never used to bother him. No violent acts, just gets irritated easily.
  - Trigger event is excessive road rage. He has also recently gotten a speeding ticket.
- Drinking more alcohol, smoking cannabis again.
- Started 4-5 months ago when made redundant.
- Not sleeping well, struggles to get to sleep.
- Stopped going to the gym.
- Not particularly interest in help of any kind, has become because partner has made appointment

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Depression

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Depression in men can look different

- Irritability, sudden anger, increased loss of control, risk-taking and aggression are common presenting symptoms
- Men may also be more likely to use alcohol and drugs to cope.
- They may use escapist behaviour too, such as throwing themselves into their work.

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Norwich City FC

https://youtu.be/tX8TgVR33KM?si=TGbqzqXtPG5hjyxB

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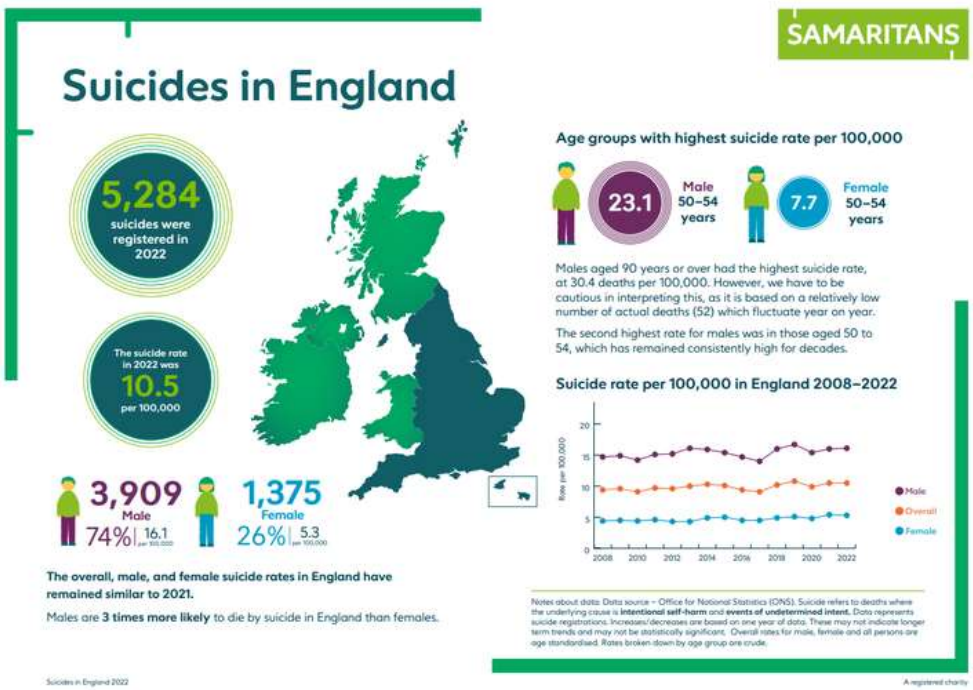

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AKT Depression Question

- You have diagnosed a 41 year-old man with depression based on a history of poor sleep, tiredness, irritability, sense of worthlessness and anhedonia.
- Which is the most appropriate first choice medication if he asks to start an antidepressant?

1. Amitriptyline 10mg
2. Quetiapine 50mg
3. Sertraline 50mg
4. Zopiclone 7.5mg
5. Mirtazepine 15mg

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Depression Management

Lifestyle Advice

Self-guided Therapy

Psychological Therapy

Medication

Is it that simple?

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Psychosocial History

- What advice could you give to a man with depression who:
  - Usually meets his friends at the pub?
  - Prefers to spend time alone?
  - Enjoys sports?
  - Is practical and likes to make/fix things?
  - Used to be in the Armed Forces?
  - Identifies as gay, bisexual or transgender?
  - Has co-existing chronic health conditions?

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Psychosocial History

- What advice could you give to a man with depression who:
  - Usually meets his friends at the pub?
  - Prefers to spend time alone?
  - Enjoys physical activity/sports?
  - Is practical and likes to make/fix things?
  - Used to be in the Armed Forces?
  - Identifies as gay, bisexual or transgender?
  - Has co-existing chronic health conditions?

- Alcohol advice – is sudden abstinence realistic?
- Mindfulness, nature therapy
- letskeepboltonmoving.co.uk
- Men in Sheds/Andy's Man Club
- www.gmmh.nhs.uk/military-veterans-services/
- www.lgbt.foundation
- Are the conditions being managed?

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Develop Rapport

- Get to know your patient
- Make sure they feel listened to
- Take interest in their interests
- Offer praise when they do well
- Consider consultation style: do you need to be more directive or more collaborative?

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Break

30

Phil, 55

- Presents with "personal" problem
- Unable to maintain erection
- Gets early morning erections & sometimes with husband
- Bought Viagra Connect but doesn't always work

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Erectile Dysfunction

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Erectile Dysfunction Background

- Overall prevalence of ED: 52% of men aged 40–70 years.
  - The annual incidence rate of erectile dysfunction increases with each decade of life (2.3% at 30 years to 53.4% at 80 years of age)
- Complications:
  - Anxiety, depression, social withdrawal, interpersonal difficulties
- Commonest cause is vasculogenic.
  - The presence of erectile dysfunction increases the risk for CVD by a factor of 1.46, and may be a marker for future CV events
- Other causes include psychological (commoner in younger men),drug side effects, neurogenic, anatomical & endocrine

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Causes of ED

An **organic** cause is suggested by a **gradual onset of symptoms, lack of tumescence, and low-to-normal libido**.

A **psychogenic** cause is suggested by **sudden onset of symptoms, low libido, and good quality spontaneous or self-stimulated erections**.

Consider endocrine causes:

- check for signs of low testosterone (body hair, testicular atrophy)
- Check HbA1c, TFTs, testosterone, FSH/LH, SHBG, Prolactin
- Consider anabolic steroid misuse

Consider cardiovascular causes:

- BP, obesity, lipids, HbA1c

Consider prostatic causes:

- LUTS, DRE

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Medications with ED Side Effect

- Antihypertensives
  - beta-blockers, verapamil, methyldopa, and clonidine.
- Diuretics
  - spironolactone and thiazides.
- Antidepressants
  - tricyclics, monoamine oxidase inhibitors (MAOIs), selective serotonin reuptake inhibitors (SSRIs), lithium, and venlafaxine.
- Antiarrhythmic drugs
  - digoxin and amiodarone.
- Anticholinergics
  - pregabalin, gabapentin, and duloxetine.
- Antiepileptics
  - carbamazepine, topiramate, gabapentin, and pregabalin.
- Antipsychotics/tranquilizers
  - chlorpromazine, haloperidol, and phenothiazines.
- Hormones and hormone-modifying drugs
  - anti-androgens (such as cyproterone acetate); gonadotrophin-releasing hormone agonists (such as leuprorelin, goserelin); corticosteroids; 5-alpha reductase inhibitors (such as finasteride), oestrogens, and progesterone.
- Histamine (H2)-antagonists
  - cimetidine and ranitidine.
- Cytotoxic drugs
  - cyclophosphamide and methotrexate.
- Recreational drugs
  - alcohol, heroin, cocaine, cannabis, methadone, anabolic steroids, and opiates.

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Management of ED

In primary care:

- Lifestyle advice
  - Alcohol, smoking, weight loss, exercise, avoid cycling >3hr/week
- Offer information & support
- Review medication
- Assess cardiac risk
- Prescribe PDE5i if *not* high-risk
  - sildenafil (Viagra®), tadalafil (Cialis®), vardenafil (Levitra®), and avanafil (Spedra®)

Refer to urology if:

- Primary ED
- history of pelvic, perineal, or genital trauma
- penile structural abnormality or abnormal testicular examination
- If PDE-5 inhibitor drug or other treatment is ineffective, not tolerated, or contraindicated due to cardiac risk

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Testosterone

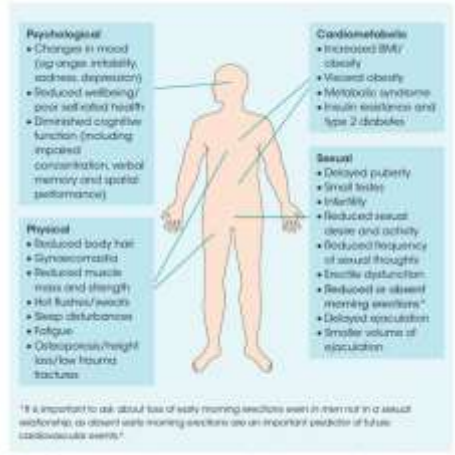
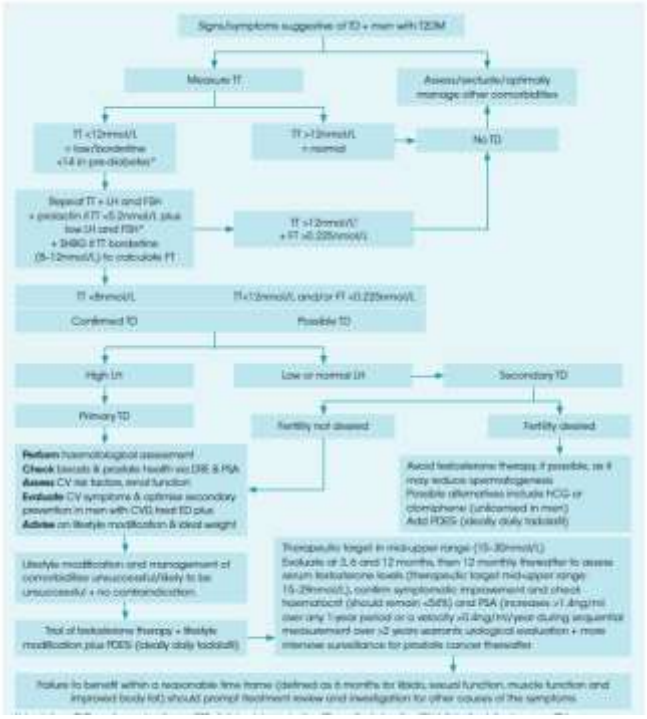


Figure 1. Clinical signs and symptoms suggestive of testosterone deficiency[1,2,3]

https://bssm.org.uk/free-resources/



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AKT ED Question

- Which of these would be a contraindication to starting sildenafil for erectile dysfunction?
- Please select the SINGLE most appropriate answer

1. Type 2 Diabetes (last HbA1c 65mmol/mol)
2. Reduced Ejection Fraction Heart Failure NYHA class IV
3. Myocardial infarction 2 years ago
4. Hypertension (last BP 130/80)
5. Depression

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Humza, 36

- Would like an NHS Health Check but told by reception that isn't eligible.
- Father has recently had a heart attack (aged 58)
- Both grandfathers died of heart attacks (ages uncertain)
- Mum has high cholesterol and type 2 diabetes
- Brother told he is at risk of diabetes.

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Cardiovascular disease

40

Preventable Early Death from Cardiovascular Disease

- "Bolton experiences higher-than-average early deaths from cardiovascular disease and cancer when compared with the rest of England."
- "Life-expectancy of those in more affluent areas is around nine years greater than in deprived communities, and the healthy life expectancy in the most deprived communities in Bolton is 12 years below the England average."

Bolton NHS FT Long Term Trust Strategy Report 2019-2024

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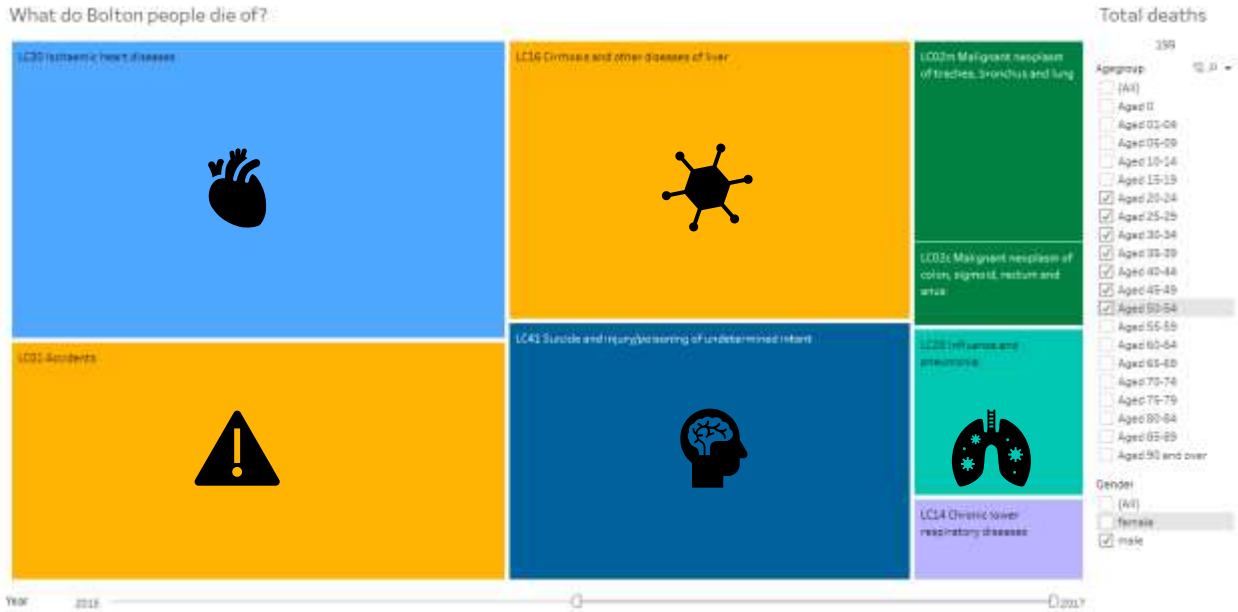

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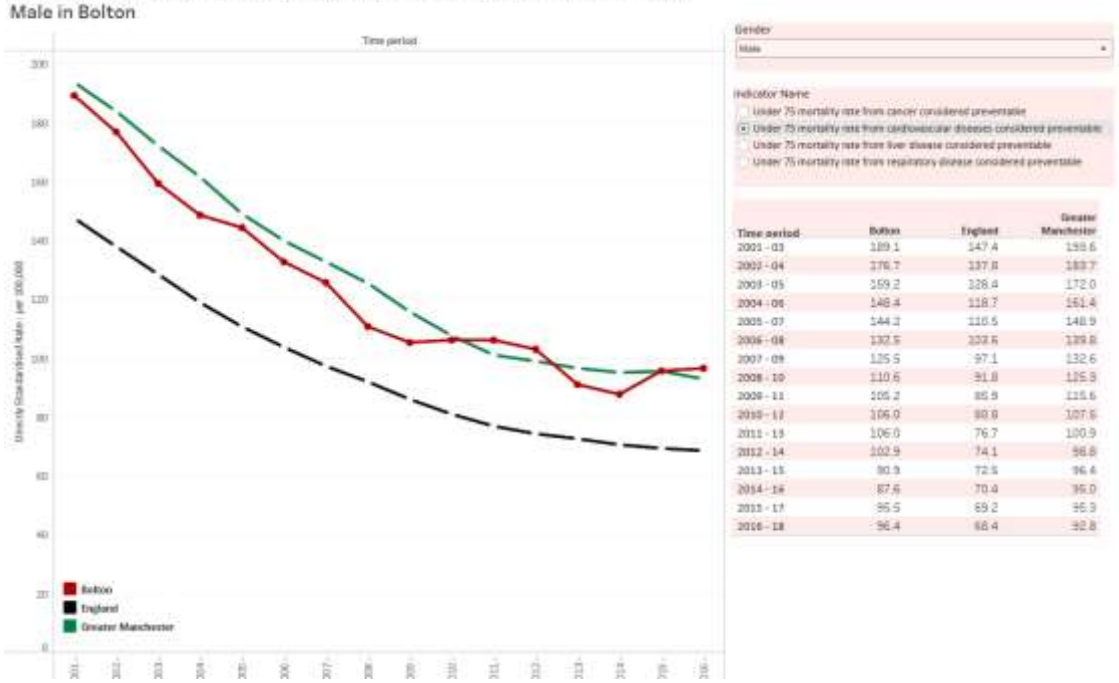
Under 75 mortality rate from cardiovascular diseases considered preventable, Male in Bolton



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Bolton CVD Risk Factors

- National studies showed high prevalence of diabetes and diabetic complications in South Asian populations in Bolton.
  - The most frequent complication in people with diabetes in Bolton was angina.
- A charity funded project offered screening using POCT.
- From 104 individuals, 43 individuals were newly identified with high risk QRISK®2- scores (>20%)
  - Of these, 37 had an HbA1c of 39–47 mmol/mol while 6 had an HbA1c of ≥48
- Less than half of the identified participants made contact with their GP following identification.

Bromley L, Bharaj HS (2016) Screening for diabetes and cardiovascular disease outcomes in people of South Asian ethnicity in Bolton. **Diabetes & Primary Care 18:279–82**

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Lipid Modification

- Offer lipid modification therapy to people aged 25-84 years if their QRISK3 score is10% or more (and lifestyle modification is ineffective or inappropriate).
  - Do not rule out lipid modification therapy just because the score is less than 10% if they have an informed preference for taking a statin or there is concern that risk may be underestimated.
- The aim of treatment in primary prevention is to achieve a greater than 40% reduction in non-HDL-C levels.
  - The aim of treatment in secondary prevention is to achieve an LDL-C level of 2.0 mmol per litre or less, or non-HDL-C levels of 2.6 mmol per litre or less.

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Lipid therapy

- Use a high intensity statin
- If maximum tolerated dose of statin does not achieve non-HDL-C reduction > 40% of baseline value after 3 months consider adding Ezetimibe 10mg daily
- Inclisiran is recommended as an option for treating primary hypercholesterolaemia or mixed dyslipidaemia if
  - there is a history of ASCVD, and;
  - LDL-C >2.6 despite maximal therapy

High intensity (above 40%)	Medium intensity (31-40%)	Low intensity (20-30%)
Atorvastatin		
20 mg (43%) 40 mg (49%) **80 mg (55%)**	10 mg (37%)	
Simvastatin		
80 mg (42%)	20 mg (32%) 40 mg (37%)	10 mg (27%)
Pravastatin		
		10 mg (20%) 20 mg (24%) 40 mg (29%)
Fluvastatin		
	80 mg (33%)	20 mg (21%) 40 mg (27%)
Rosuvastatin		
10 mg (43%) 20 mg (48%) **40 mg (53%)**	5 mg (38%)	

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Andrew, 60

- Attended for an NHS Health Check and has asked the HCA to do a prostate test whilst he is there.
- The HCA has asked you whether you should just add on.

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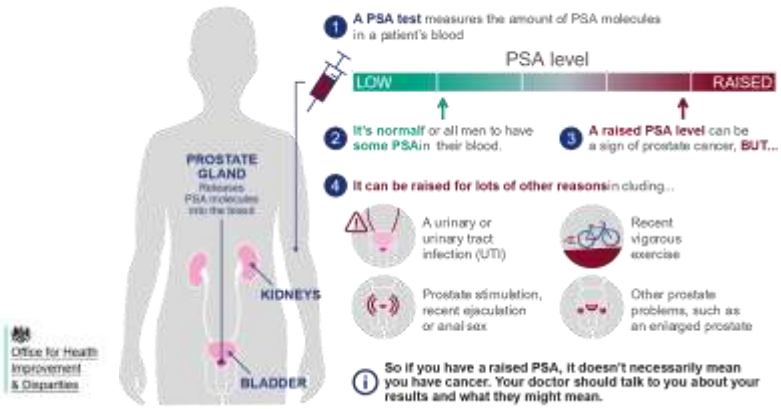
2.1 PSA testing and prostate cancer patient pathway



Guidance

Advising men without symptoms of prostate disease who ask about the PSA test

Updated 13 May 2022

https://www.gov.uk/government/publications/prostate-specific-antigen-testing-explanation-and-implementation/advising-well-men-about-the-psa-test-for-prostate-cancer-information-for-gps

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Prostate Cancer

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AKT Prostate Specific Antigen

- Which of the following does can cause a rise in serum PSA?
- Please select ALL the answers that apply.

Note: medicines like statins, aspirin, thiazide diuretics and finasteride can LOWER a PSA.

1. Benign Prostatic Hypertrophy
2. ~~Finasteride~~
3. Vigorous Exercise
4. A urinary tract infection treated 2 weeks ago
5. ~~A urinary tract infection treated 6 weeks ago~~
6. Prostate cancer
7. ~~Atorvastatin~~

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False positive causes of Raised PSA

- Semen released during sexual activity can cause PSA levels to rise temporarily, which may affect the test results.
- Exercised vigorously in the previous 48 hours
- An active urinary infection (UTI) or had a UTI in the past 6 weeks
- Had a prostate biopsy in the previous 6 weeks

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Statistics AKT Question

- On the following diagram, assign the correct term to the four boxes labelled A-D.

1. Positive Predictive Value
2. Negative Predictive Value
3. Sensitivity
4. Specificity

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1. Positive Predictive Value
2. Negative Predictive Value
3. Sensitivity
4. Specificity

		Actual		
		Positive	Negative	
Predicted	Positive	True Positive	False Positive	A
	Negative	False Negative	True Negative	B
		C	D	

$$C = \frac{\text{True Positives}}{\text{True Positives} + \text{False Negatives}}$$

$$D = \frac{\text{True Negatives}}{\text{True Negatives} + \text{False Positives}}$$

A : TP / (TP + FP)

B : TN / (FN + TN)

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		Actual		
		Positive	Negative	
Predicted	Positive	True Positive TP	False Positive FP	PPV
	Negative	False Negative FN	True Negative TN	NPV
		sensitivity	specificity	

3 $\text{Sensitivity} = \frac{\text{True Positives}}{\text{True Positives} + \text{False Negatives}}$

4 $\text{Specificity} = \frac{\text{True Negatives}}{\text{True Negatives} + \text{False Positives}}$

PPV: TP / (TP + FP) 1

NPV: TN / (FN + TN) 2

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Statistics

- A test which reliably detects the presence of a condition, resulting in a high number of true positives and low number of false negatives, will have a **high sensitivity**.
- A test which reliably excludes individuals who do not have the condition, resulting in a high number of true negatives and low number of false positives, will have a **high specificity**.
- The ideal value of the PPV, with a perfect test, is 1 (100%), and the worst possible value would be zero.
- With a perfect test, one which returns no false negatives, the value of the NPV is 1 (100%), and with a test which returns no true negatives the NPV value is zero.

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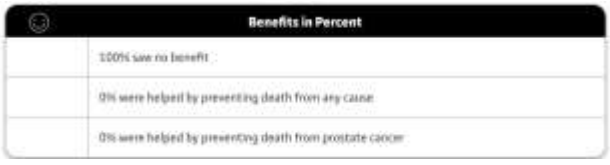
PSA to Screen for Prostate Cancer

	PSA group:	Control group
Absolute mortality rate	19.8%	20%
Prostate cancer mortality	0.7%	0.8%
Prostate cancer diagnosis	6.4%	4.4%
Adverse medical events due to biopsy	0.7%	-
Biopsy for false positive	20%	-

systematic review summarized pooled data from 6 randomized controlled trials with a total of 387,286 patients



the NNT
https://thennt.com/

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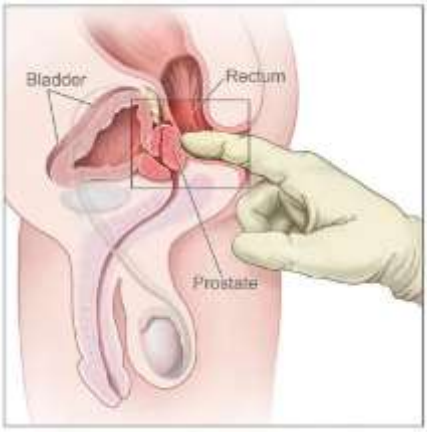
Do they really need a DRE?

- Among men with prostate cancer whose PSA level was lower than 4 ng/mL, DRE findings were normal in 4-9% and positive in 10-20%.
- When the PSA level was higher than 4 ng/mL, negative DRE results were found in 12-32% of patients, and positive DRE results were present in 42-72%.
- **Although PSA testing detects more cancers than DRE does, a combination of the 2 methods is better.**
  - DRE detects more cancers at the PSA cutoff of 4.0 ng/mL, but this may not be the case if the cutoff is lowered to 3.0 ng/mL.



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MRI scans improve prostate cancer diagnosis

Published: 22 August 2023

A new study has found magnetic resonance imaging (MRI) scans used as a screening test

Pre-biopsy mpMRI of the prostate gland aims to accurately locate clinically significant prostate cancer and facilitate targeted biopsy. Studies suggest that by using mpMRI prostate biopsy can be avoided by more than 25% of men and may reduce detection of clinically insignificant cancers.

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George, 33

- Did a home test which said should have liver checked out just after New Year.
- Abnormal liver function so had to have retested 3 months later
- Usually eats well and exercises daily

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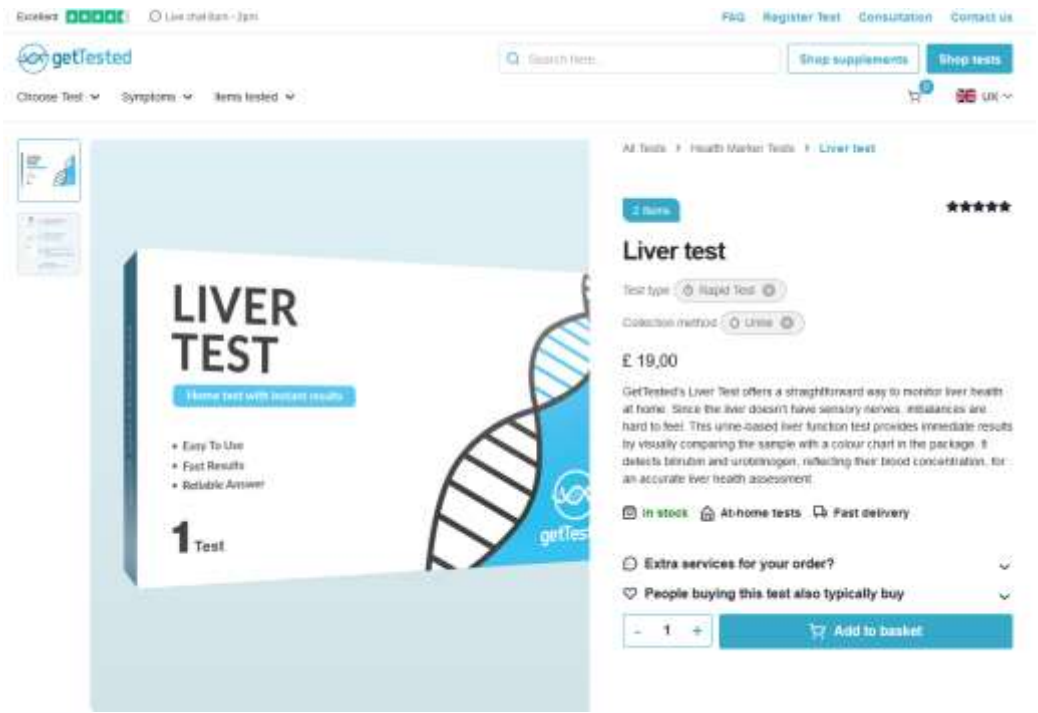

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Liver Function Tests

	02/04/2024	08/01/2024	11/07/2022	17/04/2017
Bilirubin (12-22)	18	20	16	17
ALT (<45)	48	76	64	45
Albumin (26-34)	28	28	30	28
AST (<45)	45	-	-	-
Hb (125-165)	141	142	156	134
eGFR (>60)	82	>90	>90	85
Na (135-145)	142	143	140	142
Hb_{A1c} (<48)	35	37	-	36
Ferritin (15-350)	100	-	-	-
Hepatitis B/C & HIV	Negative	-	-	-
Autoantibodies	Negative	-	-	-

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Liver

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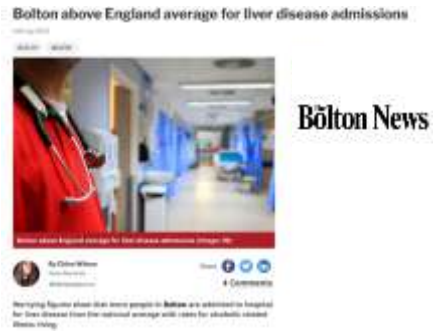
Bolton… again



- The British Liver Trust says: "The alarming rise in liver disease cases in Bolton and nationwide underscores the urgent need for government action on obesity and alcohol misuse, the primary causes.
- "There must be reformulation of high-fat, high-salt, and high-sugar foods, restrictions on advertising unhealthy products, and improved access to weight management services to address the widespread prevalence of excess weight and obesity across different demographics.

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Alcohol related liver disease

- Alcohol consumption is the most common cause of liver disease in the UK, accounting for 60% cases of liver disease.
- Up to 1 in 5 people in the UK drink alcohol in a way that could harm their liver.
- Drinking alcohol increases the risk of 7 different types of cancer. Breast and bowel cancer are two of the most common types associated with drinking alcohol.
- It's estimated 3 to 5% of people with cirrhosis will develop liver cancer every year.

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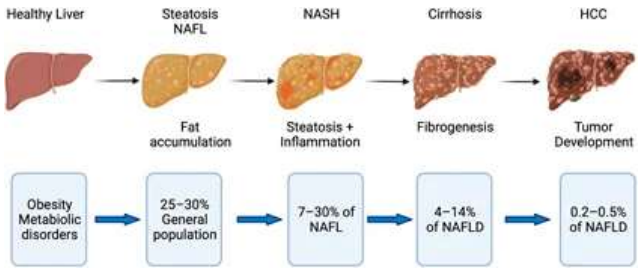
NAFLD



- Non-alcohol related fatty liver disease (NAFLD) is a long-lasting liver condition caused by having too much fat in the liver. It is closely linked with being overweight as well as conditions such as type 2 diabetes and heart and circulatory disease.
- Non-alcohol related steatohepatitis (NASH) is a more serious stage of NAFLD. In a small number of people it can lead to liver cancer or liver failure.

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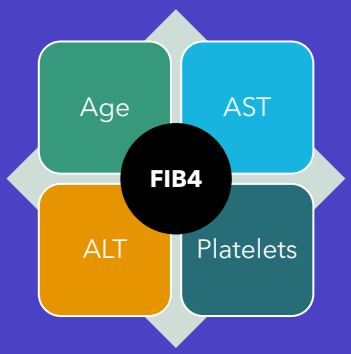
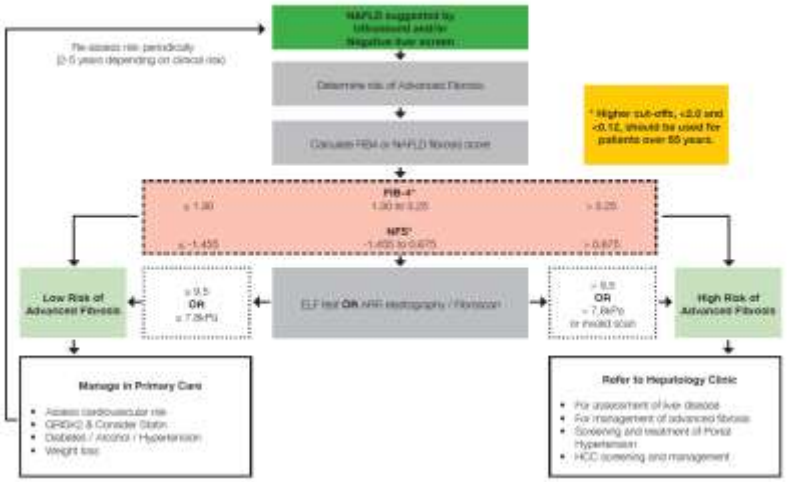
NAFLD



Management of people with suspected non-alcohol related fatty liver disease (NAFLD)



https://britishlivertrust.org.uk/health-professionals/primary-care-resources/#guidelines

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Summary

- Men don't come to the GP – take advantage when they do
- LUTS require thorough assessment to select the right treatment
  - Are there voiding, storage and/or post-micturition symptoms?
- Sexual health problems may be the presenting complaint of mental health disorder
- Younger and middle-aged men are at higher risk of suicide
  - Use the psychosocial information to develop rapport
- Cardiovascular disease is more prevalent in our South Asian population, offer screening earlier than the NHS Health Check
- Understand sensitivity/specificity & PPV/NPV
- Liver disease is a major cause of death in Greater Manchester

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Questions

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