Taking it forward to the future:
Finally a new direction

DoubleTree by Hilton, Glasgow | 29 October 2024

17th SCOTTISH CONFERENCE OF THE PCDS Primary Care Diabetes Society

diabetesdistilled
the latest developments filtered for you

Pam Brown

GP with an interest in diabetes, obesity and lifestyle medicine
SA1 Medical Practice, Beacon Centre for Health, Swansea
Editor-in-Chief *Diabetes Distilled*
pam.brown4@btinternet.com

I have received funding from the following companies for providing educational sessions, writing documents, and for attending advisory boards and conferences:

Abbott, Boehringer Ingelheim, Astra Zeneca, Eli Lilly, Janssen, MSD, Napp and Novo Nordisk
OmniaMed, RCGP and Sherborne Gibbs

Staying up to date

Mail Online

Diabetes

health

Home | News | Royals | U.S. | Sport | TV | Showbiz | Femail | Health | Science | Money | Travel | Podcasts | Shopping | Mail+

Diabetes-busting 'soup-and-shake' diet works, claim experts... but just one in ten are able to stick to brutal 800 calorie a day plan

The Telegraph

HEALTH

Doctors told me I was heading for diabetes – here's what I did

I wore a glucose tracker for two weeks – it's bad news for my favourite breakfast

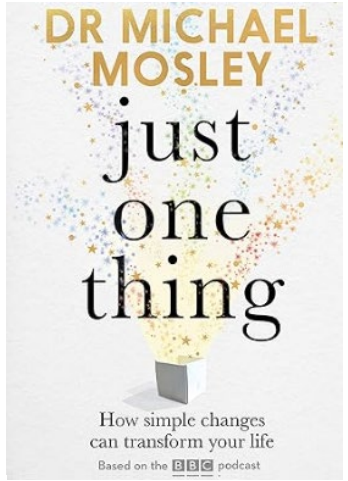
Making six simple lifestyle tweaks can cut your dementia risk, say experts - as diagnoses hit record high of almost 500,000

Kidney disease: How to protect yourself and the symptoms the NHS may not spot

Move over, Ozempic! New 'anti-diet' crafted by top expert Professor Tim Spector helps slimmers lose more than two inches off their waist

- Participants who stuck to the strategy saw their weight fall by 4.7 per cent

Pay tribute to Michael Mosley by looking after ourselves better and sharing his evidence-based advice



Scientists discover new 'supercharged' probiotic said to burn fat faster than Ozempic... and it's half the price

EXPRESS

Doctor says start taking 2p pill from today to stop getting dementia in the future

Excessive light pollution may increase risk of Alzheimer's, one study warns

Useful reading and updates

Efficacy and Safety of GLP-1 Medicines for Type 2 Diabetes and Obesity

https://doi.org/10.2337/dci24-0003

Diabetes care 2024 open access

Daniel J. Drucker

STATE OF THE ART REVIEW

Cite this as: BMJ 2024;386:e076246
http://dx.doi.org/10.1136/bmj-2023-076246

Management of atrial fibrillation in older adults

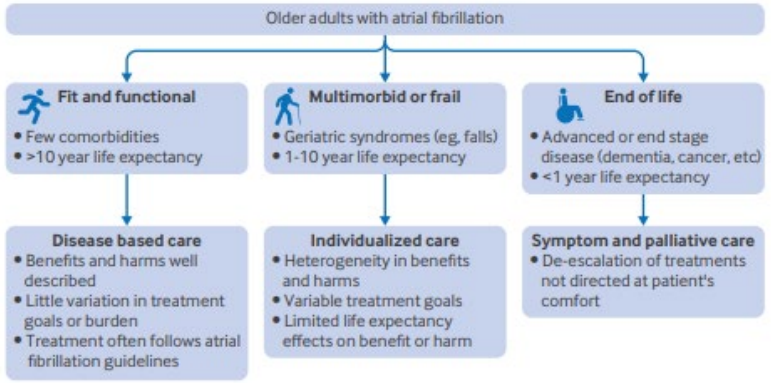


Fig 2 | Proposed approach to tailor clinical management of atrial fibrillation (AF) to older adults

diabetesdistilled
the latest developments filtered for you

Hyperglycemic Crises in Adults With Diabetes: A Consensus Report

Diabetes Care 2024;47:1257–1275 | https://doi.org/10.2337/dci24-0032

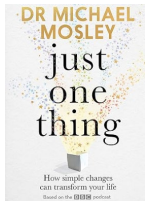
DKA	HHS
Develops over hours to days	Develops over days to a week
Usually alert	Change in cognitive state common
Polyuria, polydipsia, weight loss and dehydration	
Nausea, vomiting and abdominal pain	Often co-presenting with other acute illness
Kussmaul respiration	
1/3 of hyperglycaemic emergencies have a hybrid DKA/HHS presentation	

Obesity in adults

Lancet 2024; 404: 972–87

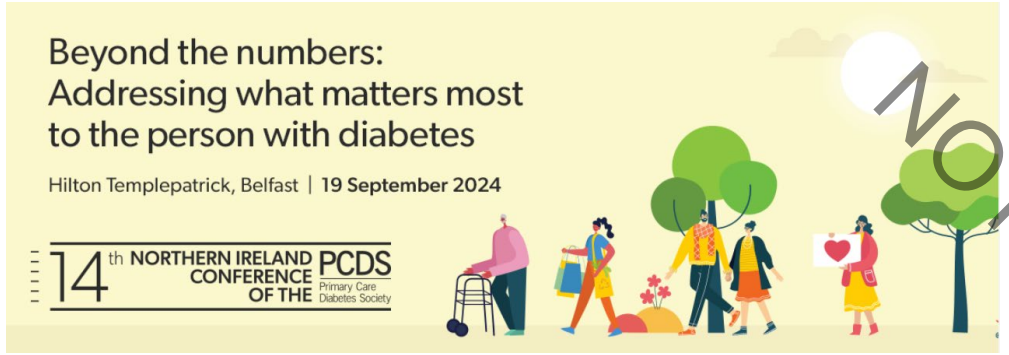
Ildiko Lingvay, Ricardo V Cohen, Carel W le Roux, Priya Sumithran

- ✓ Consequences – mechanical, metabolic, mental health
- ✓ Lifestyle
- ✓ Pharmacotherapy
- ✓ Surgery
- ✓ Long term maintenance
- ✓ Risks of weight loss



Early morning walk.
Exercise less but more often.

diabetesdistilled
the latest developments filtered for you



- ✓ Hyperglycaemic crises in diabetes
- ✓ NHS Type 2 Path to Remission early data
- ✓ Glycaemic control still an important goal
- ✓ Comparative effectiveness of GLP-1RAs including new drugs
- ✓ Validated and practical approach to selecting best treatment
- ✓ KDIGO resources for primary care teams for CKD in diabetes
- ✓ ABCD/UKKA lipid guidance for people with diabetes and CKD

These and other slide sets are available to view on diabetesonthenet – Events and on demand tab
https://diabetesonthenet.com/events-ondemand/

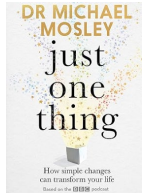
- ✓ Lifestyle - activity mix for cardiometabolic risk
- ✓ Waking up to the importance of sleep
- ✓ Food additives and emulsifiers and diabetes
- ✓ Child to adult size changes and diabetes
- ✓ Undiagnosed T2DM
- ✓ Non-adherence to cardiometabolic medication
- ✓ CGM
- ✓ Choosing between SGLT2i and GLP-1RA
- ✓ CKD management

What’s new in remission?

Type 2 diabetes remission trajectories and variation in risk of diabetes complications: A population-based cohort study

Hajira Dambha-Miller[1], Hilda O. Hounkpatin[1]*, Beth Stuart[1¤], Andrew Farmer[2], Simon Griffin[3,4]

PLOS ONE | https://doi.org/10.1371/journal.pone.0290791



Drink 1-3 cups of coffee

NIHR ALERTS

Even short periods of diabetes remission are linked to lower risk of heart attack and stroke

Helen Saul, [1] Brendan Deeney, [1] Laura Swaithes, [1] Hilda Hounkpatin, [2] Hajira Dambha-Miller[2]

Cite this as: BMJ 2024;384:q516
http://dx.doi.org/10.1136/bmj.q516

Remission by lifestyle changes, over 7 years:
Those who achieved remission v high glucose:

- ✓ ↓ CVD
- ✓ ↓ macrovascular and microvascular complications
- ✓ Any remission ↓ mortality

Even short periods of remission reduce long term risks

CulinaryMedicine

https://culinarymedicineuk.org/our-course

Pre-diabetes remission – a new goal

- ✓ HbA1c < 42mmol/mol (US <39mmol/mol) FBG <5.5mmol/L
- ✓ Previous goal T2DM prevention
- ✓ Guideline goal ≥7% weight loss

Role of weight loss-induced prediabetes remission in the prevention of type 2 diabetes: time to improve diabetes prevention

Jumpertz von Schwartzenberg et al Diabetologia 2024 67: 1714-1718
Bergman Lancet Diab Endocr 2024 12: 603-605

- ✓ Pre-diabetes/intermediate hyperglycaemia associated with microvascular complications and CVD
- ✓ Secondary analysis Diabetes Prevention Programme data, 480 achieved ≥7% weight loss by 1 year; 114 of them achieved normoglycaemia at 12 months (US criteria) – 'responders'
- ✓ At 4 years, 42/366 (11.5%) who did not achieve normoglycaemia developed T2DM v 1/114 (0.9%) 'responders'; RR T2DM ↓ 72% within 6 years

Pre-diabetes remission is a new goal – time to update our management
Remission achievable with low calorie/low carb diet, GLP-1RA, bariatric surgery

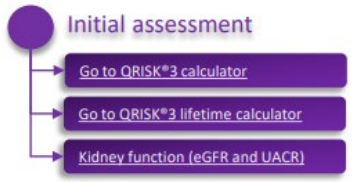
What’s new in drugs?

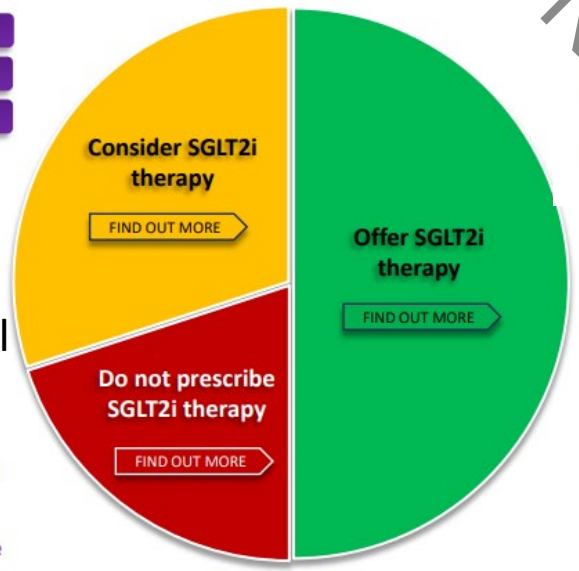
Diabetes Ther (2024) 15:1099–1124
https://doi.org/10.1007/s13300-024-01550-5

REVIEW

Seidu et al

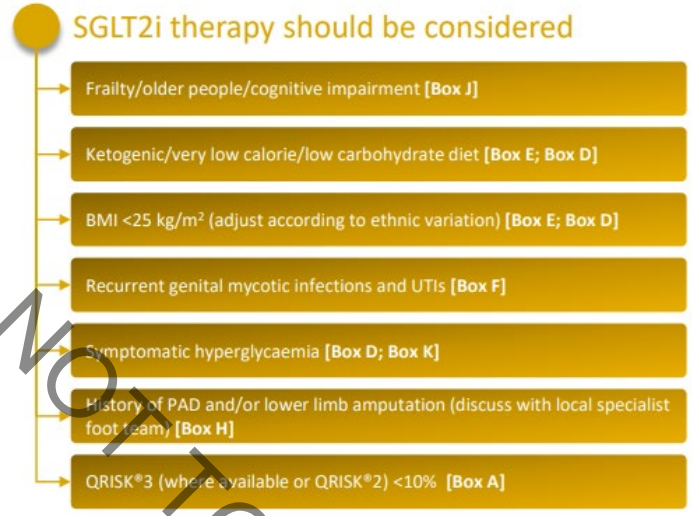
SGLT2 Inhibitors – The New Standard of Care for Cardiovascular, Renal and Metabolic Protection in Type 2 Diabetes: A Narrative Review

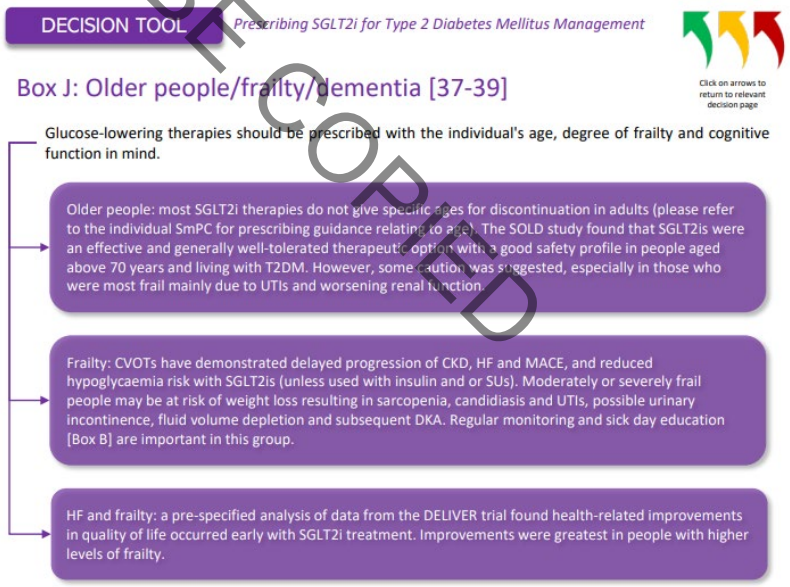




- ✓ Clinical paper
- ✓ Wall poster
- ✓ Interactive tool

IMPORTANT – this decision tool is for guidance only. The final clinical decisions are the responsibility of the prescriber.





BOX A: NICE and ADA / EASD recommendations for SGLT2i prescribing

BOX B: Sick day guidance

BOX D: Diabetic ketoacidosis

BOX E: Diets and eating disorders

BOX F: Genital and urinary infections

BOX H: Foot disease (limb ischaemia or ulceration)

BOX J: Older people / frailty / dementia

BOX K: High blood glucose despite oral diabetes medication

https://resources.gpnotebook.com/bridging-the-gap-between-type-2-diabetes-guidelines-and-prescribing-practices

Guidance to help us use SGLT2is safely and effectively

Healthcare Improvement Scotland | Scottish Medicines Consortium

SMC – May 2024 Tirzepatide: adults with BMI ≥30 kg/m^2* and at least one weight-related comorbidity (hypertension, dyslipidaemia, obstructive sleep apnoea, cardiovascular disease, prediabetes, or type 2 diabetes mellitus)

Opportunities to optimize lifestyle interventions in combination with glucagon-like peptide-1-based therapy

Satya Dash MBBS Diabetes Obes Metab. 2024;26(Suppl. 4):3–15.

- GLP-1RA Rx - ↓ lean body mass but improved lean to fat mass and function
- Non-responders (<5% weight loss):
  - Wegovy 2.4mg- 14% no T2DM; 31% T2DM
  - Mounjaro 15mg - 9% no T2DM; 17% T2DM
- Consider nutritional deficiencies
- If sarcopenia concern - ↑ protein intake (1.3g/kg body wt/day); milk/whey > soya
- Resistance exercise may help

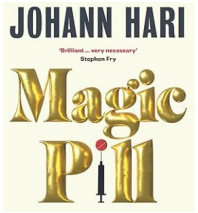
A predictive model for medium-term weight loss response in people with type 2 diabetes engaging in behavioural weight management interventions *Diabetes Obes Metab.* 2024;26:3653–3662. Al-Abdullah et al

Data from LookAHEAD (RCT), Greater Glasgow and Clyde WMS (RWE). Validated with WRAP trial data

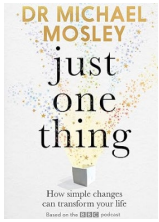
- ✓ Predictors of medium term weight loss (3 -5 yrs):
  - ✓ Older age, females and higher baseline
- ✓ Best predictor is weight loss early in programme
  - ✓ At least 0.5% body weight in first 4 weeks
  - ✓ If not achieved consider other options – Counterweight, drug therapy, bariatric surgery

WRAP Weight loss Referrals for Adults in Primary Care

Funding variation requested – Mounjaro 12 year rollout for weight loss rather than 3 months. BMI >40 + 3 weight-related health problems



Enjoy oily fish
Eat beetroot



What’s new in care delivery?

Patterns of initial and first-intensifying antidiabetic drug utilization among patients with type 2 diabetes mellitus in Scotland, 2010–2020: A retrospective population-based cohort study

Diabetes Obes Metab. 2024 Jul;26(7):2684-2694.
Mahmoud et al

- ✓ Scottish Care Information-diabetes (SCI-diabetes) and Prescribing Information System

First initiation

- ✓ 145,909 new diabetes drug users, (25% combination therapy by 2020)
- ✓ Metformin 90% monotherapy SU 7.58%

First intensification

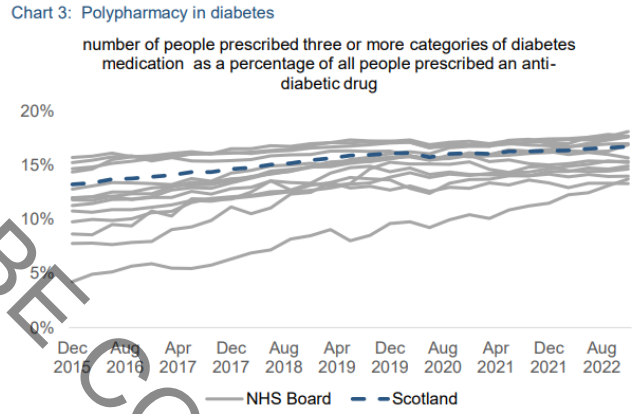
- ✓ SUs if on metformin until 2019 then overtaken by SGLT2is
- ✓ SIGN 2015 added SGLT2is; evidence early prioritisation over DPP4is

Antidiabetic drugs	£70,157,783	Sulfonylureas	£1,970,483
		Metformin	£6,953,361
		DPP-4 inhibitors	£11,222,683
		Pioglitazones	£260,691
		GLP1 analogues	£21,115,564
		SGLT2 inhibitors	£28,607,278
		Other	£27,723

2022-23 data

Quality Prescribing Strategy for Type 2 Diabetes Mellitus

A Guide for Improvement 2024-2027



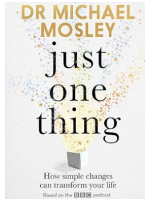
Prevalence: 6%
Most deprived 10%
Least deprived 4%

Ethnic disparities in quality of diabetes care in Scotland: A national cohort study

Scheuer et al

diabetesdistilled
the latest developments filtered for you

Ethnic disparities in quality of diabetes care in Scotland



Stand on one leg – improve balance

Early adopters following guidelines

Inequalities of care across ethnicities and deprivation in Scotland as in England

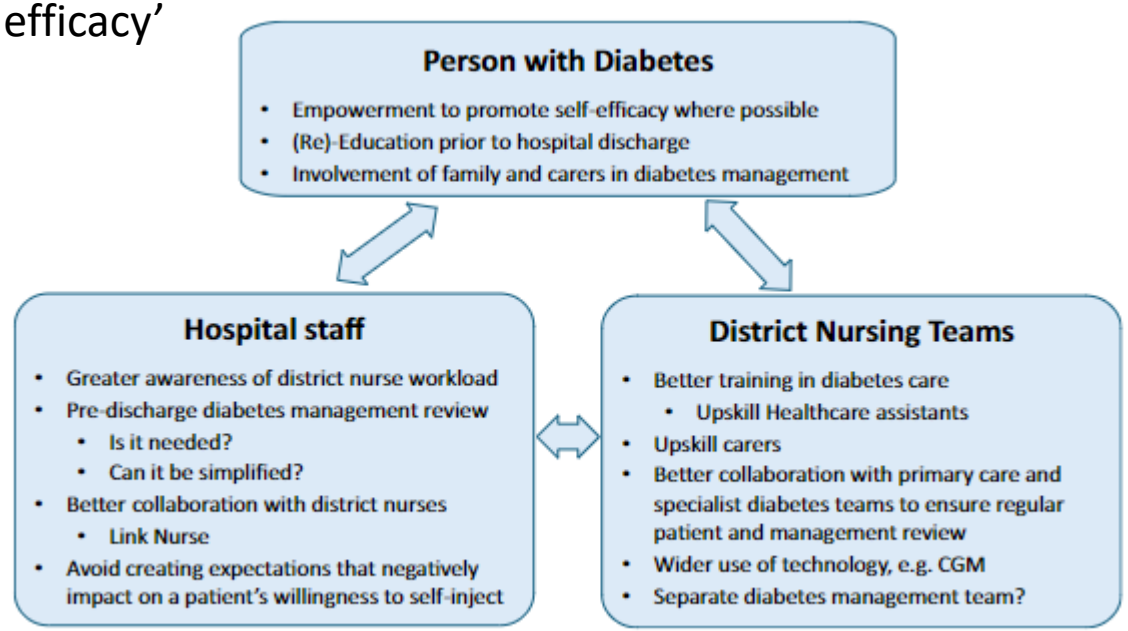
DIABETIC Medicine

The effect of diabetes management on the workload of district and community nursing teams in the UK

Martin, Hill and Holt

Diabetic Medicine. 2024;41:e15367.
https://doi.org/10.1111/dme.15367

- ✓ Online survey – 159 teams responded
- ✓ 4-20% of their workload/visit numbers for diabetes
- ✓ Average 1.09 home visits/day/person for diabetes
- ✓ 91% 'diabetes workload increased over 2 years'
- ✓ 76% 'diabetes workloads unsustainable'
- ✓ 'New models needed – eg better collaboration HCPs, simplification of insulin, promotion self-efficacy'



Continuous glucose monitoring-based metrics and the duration of hypoglycaemia events with once-weekly insulin icodec versus once-daily insulin glargine U100 in insulin-naive type 2 diabetes: an exploratory analysis of ONWARDS 1

Richard M Bergenstal, Björg Ásbjörnsdóttir, Sara K Watt, Ildiko Lingvay, Julia K Mader, Tomoyuki Nishida, Julio Rosenstock

- ✓ ↑ time in range and ↓ time above range v glargine U100 at midtrial, end main phase and extension
- ✓ Time below 3.9mmol/L ↑ in icodec v glargine, but levels <3.0mmol/L low and same with both drugs
- ✓ No significant differences in duration of hypoglycaemia
- ✓ CGM data support efficacy/safety icodec v glargine

ONWARDS study programme v basal insulins

Insulin Efsitora versus Degludec in Type 2 Diabetes without Previous Insulin Treatment

The NEW ENGLAND JOURNAL of MEDICINE
DOI: 10.1056/NEJMoa2403953 |

Wysham et al QWINT 2

- ✓ Efsitora non-inferior to degludec for glycaemia
- ✓ No difference with or without GLP-1RA
- ✓ Clinically significant and severe hypos 0.58 v 0.45 events per PYE efsitora v degludec; no severe efsitora v 6 degludec

QWINT study programme in insulin naïve and switches

Impact of preoperative haemoglobin A_{1c} levels on postoperative outcomes in adults undergoing major noncardiac surgery: A systematic review

Diabetic Medicine. 2024;41:e15380.
https://doi.org/10.1111/dme.15380
Yu et al

Eat an apple a day

- ✓ Diabetes ↑ morbidity/mortality after major surgery
- ✓ Higher HbA1c ↑ morbidity after cardiac surgery
- ✓ 20 observational studies - ↑ HbA1c associated with:
  - ✓ ↑ overall postop complications
  - ✓ ↑ post op acute kidney injury
  - ✓ ↑ anastomotic leaks
  - ✓ ↑ surgical site infections
  - ✓ ↑ length of stay
- ✓ Each 1% ↑ preop HbA1c associated with ↑ odds of all complications
- ✓ No association with reoperations or 30 day mortality
- ✓ Highly variable data on perioperative CVD events, hospital readmission, post op pneumonia, VTE/PE
- ✓ HbA1c levels ≥ 53-64 mmol/mol pose increased risk

Risks of peri- and postoperative complications with glucagon-like peptide-1 receptor agonists

Diabetes Obes Metab. 2024;26:3128–3136.

- ✓ Retrospective RWE study – no difference in 6 peri- and post-operative complications on GLP-1RA – weigh risks of hyperglycaemia v gastroparesis
- ✓ Some may have discontinued - may need several weeks off Rx to normalise emptying
- ✓ Gastric emptying abnormal 30-50% people with longstanding DM

We have a role in supporting smoking cessation and achieving individual glycaemic goals prior to surgery
Early discharge policies may mean complications have to be managed in primary care
Unclear if GLP-1RA use ↑ aspiration risk; unlikely to be reduced by 1-2 weeks' cessation – risk of hyperglycaemia

What’s new in CKD?

Current management of chronic kidney disease in type-2 diabetes—A tiered approach: An overview of the joint Association of British Clinical Diabetologists and UK Kidney Association (ABCD-UKKA) guidelines

Dasgupta et al

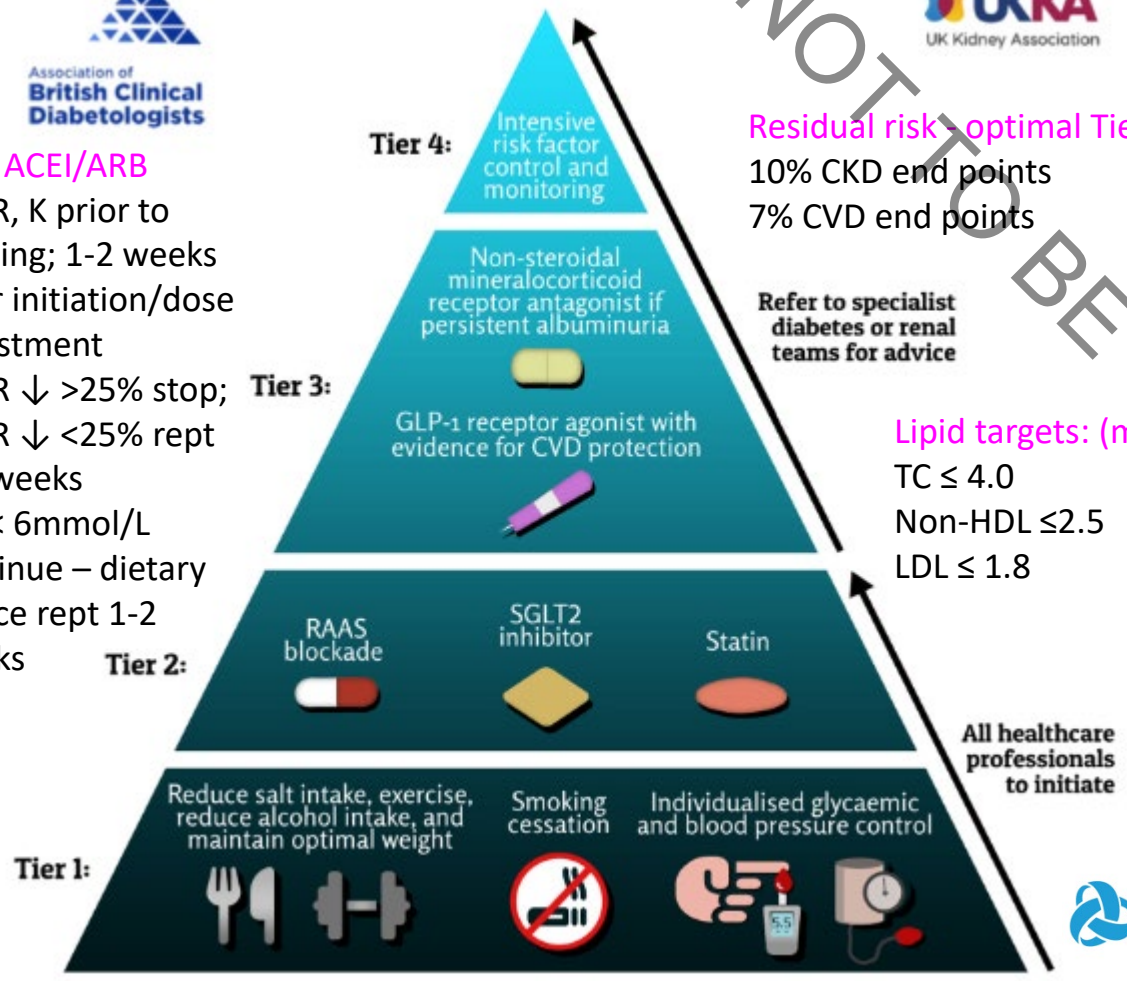
Diabetic Medicine. 2024;00:e15450.
https://doi.org/10.1111/dme.15450

- ✓ Recommends tiered approach
- ✓ Highlights importance of baseline lifestyle advice – reinforced regularly
- ✓ Identifies hyperglycaemia and hypertension as key risk factors for CKD and CVD
- ✓ Stresses CVD prevention and risk reduction – cause of death; intensive lipid lowering
- ✓ Stark inadequacies and inequalities in our management of diabetic CKD
- ✓ GLP-1RA benefits even if on SGLT2i

KIDNEY FAILURE RISK CALCULATION QRISK®3-2018

Association of British Clinical Diabetologists

UKKA UK Kidney Association



Safe use ACEI/ARB

- ✓ eGFR, K prior to starting; 1-2 weeks after initiation/dose adjustment
- ✓ eGFR ↓ >25% stop; eGFR ↓ <25% rept 1-2 weeks
- ✓ ↑ K < 6mmol/L continue – dietary advice rept 1-2 weeks

Residual risk - optimal Tier 2:
10% CKD end points
7% CVD end points

Lipid targets: (mmol/L)
TC ≤ 4.0
Non-HDL ≤2.5
LDL ≤ 1.8

Lifestyle advice:

- ✓ <2g sodium/5g sodium chloride daily (care with K in salt substitutes)
- ✓ Alcohol <14 units/week
- ✓ Smoking cessation
- ✓ Regular physical activity 30mins/day, 5 days
- ✓ Maintain BMI 20-25 kg/m2

Healthcare Improvement Scotland | Scottish Medicines Consortium

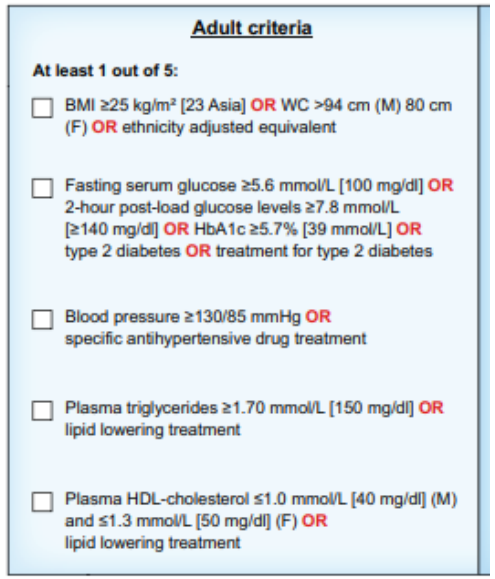
Inclisiran, PCSK9i, icosapent ethyl, fineronone

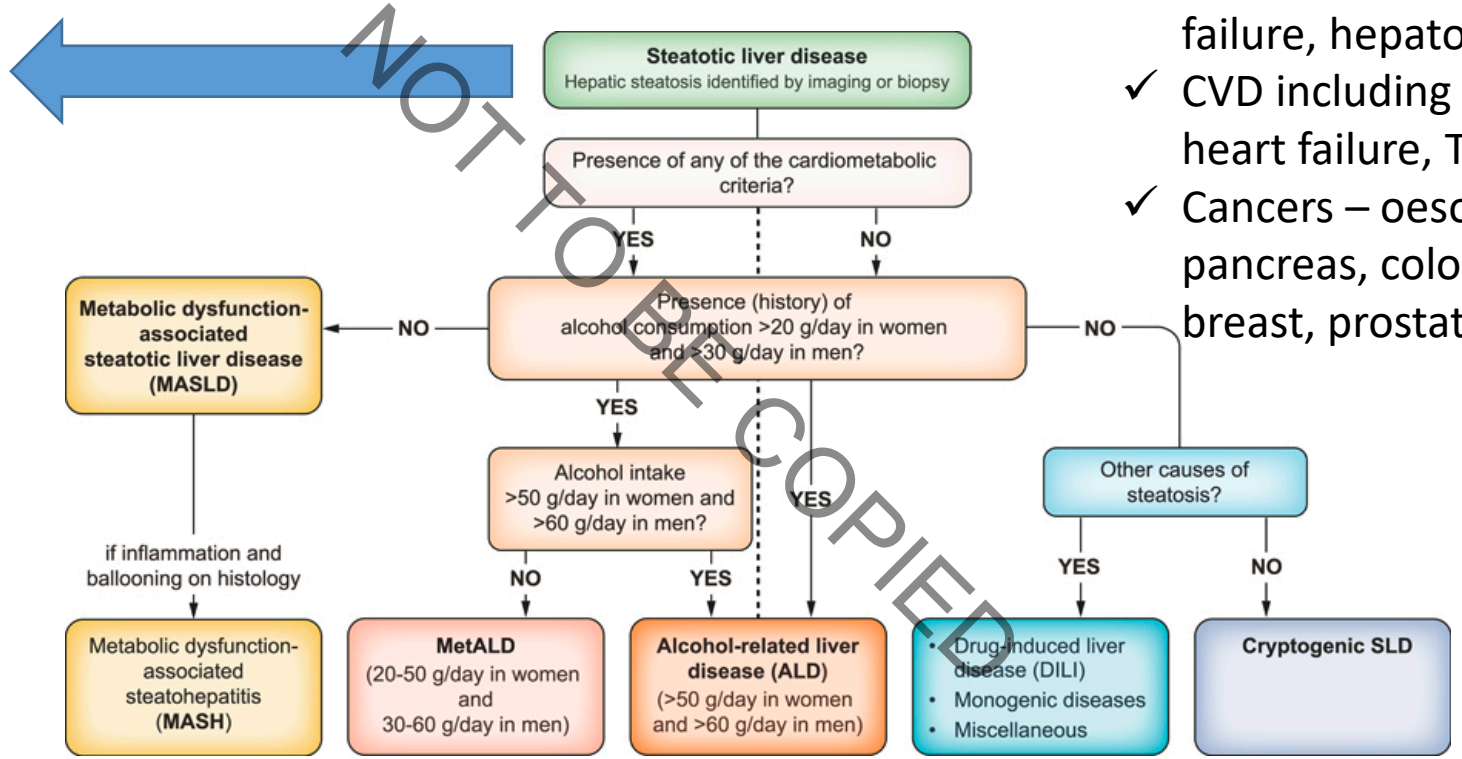
What’s new in NAFLD/MASLD?

From: **EASL-EASD-EASO Clinical Practice Guidelines on the Management of Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD)**

Obes Facts. 2024;17(4):374-444. doi:10.1159/000539371

Metabolic dysfunction-associated steatotic liver disease (MASLD) and metabolic dysfunction-associated steatohepatitis (MASH)





- ✓ Multisystem disease due to insulin resistance/metabolic dysfunction
  - ✓ Liver – fibrosis, cirrhosis, liver failure, hepatocellular carcinoma
  - ✓ CVD including ASCVD, AF and heart failure, T2DM, CKD
  - ✓ Cancers – oesophagus, stomach, pancreas, colorectal, thyroid, lung, breast, prostate, haematological

Self-reported alcohol intake

MetALD
- ✓ 20-50g/day women
- ✓ 30-60g/day in men
- ✓ 10g = 1 unit

ALD
- ✓ >50g/day women
- ✓ >60g/day men

diabetesdistilled
the latest developments filtered for you

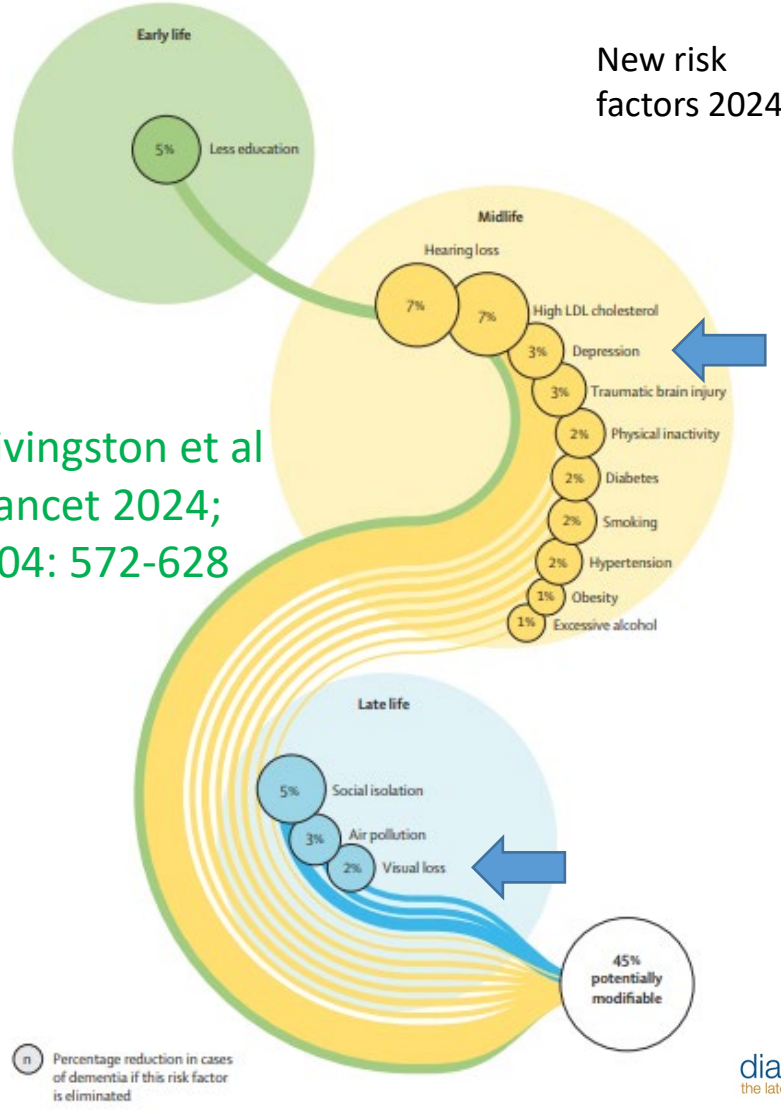
Fib-4 – A diagnostic and prognostic marker for liver and cardiovascular events and mortality

99% concordance between NAFLD and MASLD. Only 1 of the 5 criteria needed

Alcohol intake helps ensure accurate diagnosis and coding

What’s new in dementia?

Dementia prevention, intervention and care: 2024 report of the Lancet Standing Commission



Livingston et al
Lancet 2024;
404: 572-628

New risk factors 2024

We can influence/discuss: (17%)
Diabetes – 2%
High LDL – 7% 1mmol/L ↑ - 8% ↑
Physical Activity - 2%
Smoking – cessation ↓ risk - 2%
Hypertension - ≤ 130mm Hg – 2%
Obesity – 1%
Excess alcohol intake – 1%

We may be aware of: (17%)
Hearing loss – 4-24% ↑ risk/10dB loss – 7%
Vision loss – 2%
Depression – 3%
Social isolation – 5%

Numbers in purple are the % reduction in cases of dementia if this risk factor is eliminated/optimised

Other key messages:

- ✓ Remain cognitively, socially and physically active in midlife and later life
- ✓ Target risk factors as early as possible and keep them low throughout life
- ✓ Improved cognitive reserve can mean no signs or symptoms despite neuropathology

FOOD FOR THE BRAIN FOUNDATION

diabetesdistilled
the latest developments filtered for you

Reducing dementia risk while delivering diabetes care

https://foodforthebrain.org/14584-2/

It is never too early or too late to reduce dementia risk even if APOE4

diabetesdistilled

the latest developments filtered for you

To read the latest summaries and sign up for Diabetes Distilled, visit https://www.pcdsociety.org/diabetes-distilled or scan the QR code

Thank you for your attention!