

SGLT2i inhibitors

When, How and When Not To Start

Hannah Beba- Consultant Pharmacist for Diabetes West Yorkshire Health and Care Partnership

Waqas Tahir – GP Affinity Healthcare and Diabetes Clinical Lead for West Yorkshire Health and Care Partnership

Stephen Wheatcroft – Consultant Cardiologist Leeds Teaching Hospital Trust

Disclosures – Hannah Beba

Pharmaceutical and other medical companies for which you have attended an Advisory Board in the past 3 years

ADA virtual attendance 2023 – sponsorship from Lilly
EASD attendance 2023 – sponsorship from Daiichi Sankyo
ADA virtual attendance 2022 – sponsorship from Lilly
EASD in person attendance 2022- sponsorship from Novonordisk
EASD virtual attendance 2021 – sponsorship from Novonordisk

Since joining Leeds CCG and now Leeds Health and Care Partnership no personal payments have been made to myself from pharmaceutical companies for advisory boards.

In the last three years I have taken part in advisory boards for Sanofi, Roche, Abbott, Astra Zeneca, Lilly, Novonordisk, Boehringer, Royal college of Physicians, QiC awards, Diabetes UK, Primary Care Pharmacy Association, Amarin, Manchester University, Leeds University.

Pharmaceutical and other medical companies for which you have delivered or received sponsored education in the past 3 years

Since joining Leeds CCG and now Leeds Health and Care Partnership no personal payments have been made to myself from pharmaceutical companies for education.

I have done education linked to:

Kings fund, i2i, CPPE, DPC, SPS, Newcastle University, PM Management, PCDS, Amgen, Lilly, Sunderland University, Astra Zeneca, Leeds University, DSN Forum, RPS, PCDE, DUK, Cardiology Professional Care, PCPA, Sanofi, PITSTOP, BHS, BCS

Roles that you hold a professional contract with (i.e. for which you earn a salary/fee)

Consultant Pharmacist for West Yorkshire and Leeds Health and Care Partnership
Tutor for Warwick university MSC in Diabetes

Professional non-financial roles

Co-chair of Diabetes UK Council of Healthcare Professionals
Member of the UKCPA Diabetes and Endocrinology Committee
Member of the Primary Care Diabetes Society
Member of Royal Pharmaceutical Society
Chair of the Expert Reference Group for Cardio-Renal and Metabolic Medicine at Leeds Health and Care Partnership
Chair for the Diabetes Steering Group at Leeds Health and Care partnership
Member of the Primary Care Diabetes Transformation and Innovation Group
Member of the Expert Working Group for Diabetes Policy

Other relevant potential conflicts of interest

N/A

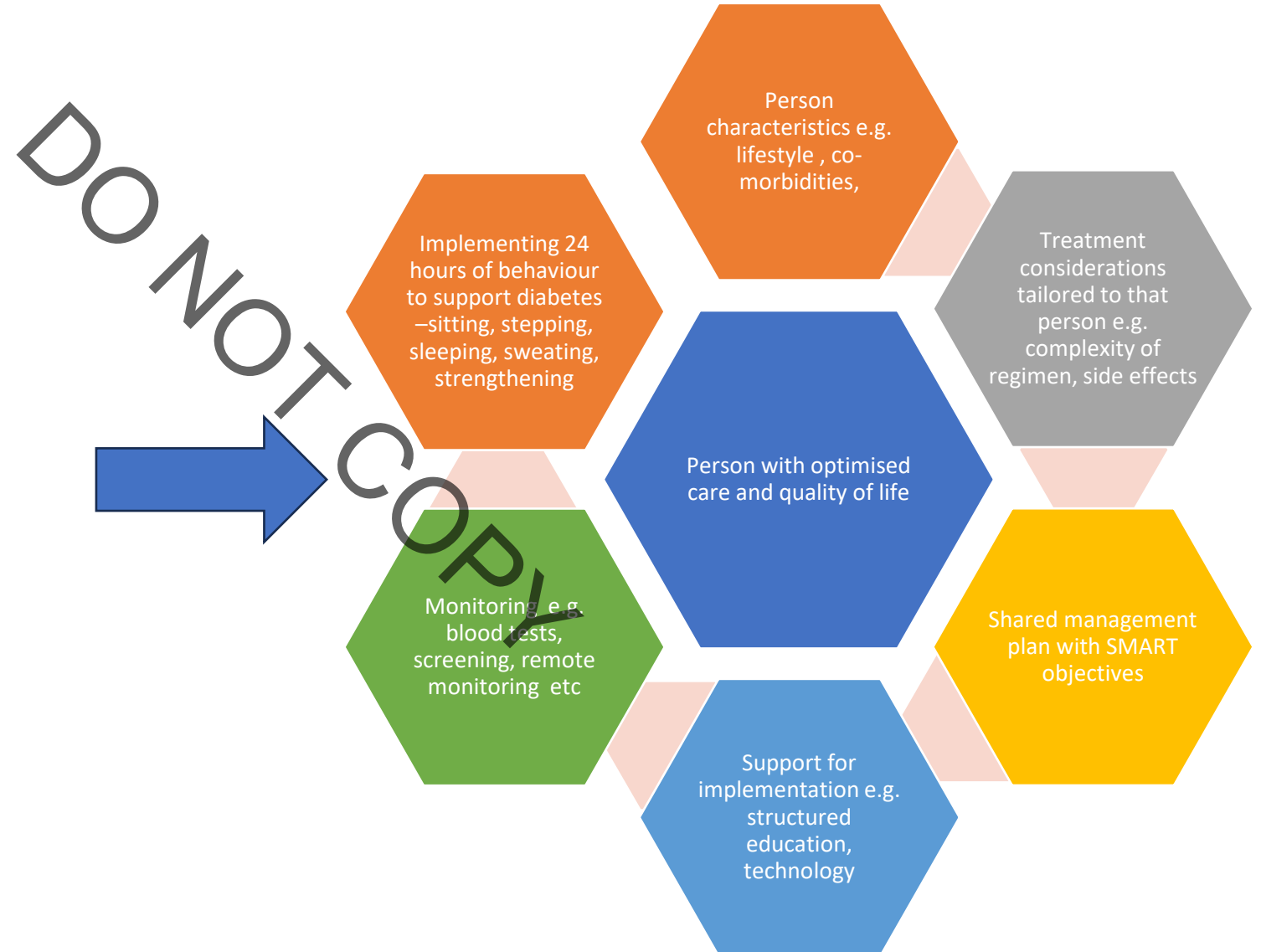
Disclosures – Waqas Tahir

- The Westcliffe Partnership has received funding from: Abbott, AstraZeneca, Bayer, Boehringer-Ingelheim, Bristol Myers Squibb, Dawn, INRStar, Medtronic, Oberoi Consulting, Pfizer, Roche, Sanofi-Aventis, Servier
- Advisory roles: Abbott, AstraZeneca, Boehringer-Ingelheim, Dexcom, Novo Nordisk, NAPP Pharmaceuticals Ltd, MSD and Roche
- Speaker fees: Amarin, AstraZeneca, Bayer, Boehringer-Ingelheim, Dexcom, Eli Lilly, Merck and MSD, Novo Nordisk, Menarini, NAPP and Sanofi
- Consultancy: Abbott, AstraZeneca, Boehringer-Ingelheim, Dexcom, European Medtec, Sanofi, Merck and MSD, Menarini, Novo Nordisk and Roche.
- I have also worked in a non-promotional capacity to support GP / PN education : Kings fund, MIMS, medical updates, DPC, DUK, Primary care health, PCDS and PCDE
- Clinical Advisor to Gendius – AI remote management
- Supported / Advised on data platforms – PARM , DPIR , AZ CVRM dashboard

Disclosures – Stephen Wheatcroft

- Speaker fees: Amarin, AstraZeneca, Bayer, Boehringer-Ingelheim, Eli Lilly, Merck and MSD, Novo Nordisk
- Consultancy: Boehringer-Ingelheim and Roche
- Support for conference attendance/travel: Amarin, AstraZeneca, Boehringer Ingelheim, Medtronic, Abbott Vascular
- Leeds Cardiometabolic clinic was funded by a joint working agreement between Leeds Teaching Hospitals NHS Trust and Boehringer Ingelheim

From Gluco-Centric Care to Person-Centric Care



Decay Model – CaReMe Multimorbidity

People who have benefitted from Public Health Interventions relevant to primordial prevention of LTCs

People who have risk factors for CaReMe Multimorbidity e.g. existing risk factor (e.g. HTN) or LTC (Diabetes, CVDP, CKD)

People who are aware that they have risk factors (e.g. HTN, existing LTC) for CaReMe Multimorbidity

People who are eligible for Risk Factor/LTC Management to avoid CaReMe co-morbidity

People who have optimal Risk Factor/LTC Management to avoid CaReMe co-morbidity

People who are compliant with risk factor/LTC care plan yet remain at risk of developing CaReMe multimorbidity

People identified as having CaReMe Multimorbidity (diabetes, CKD 3-5, CHD) and eligible for therapy to manage their CaReMe LTCs

People with CaReMe Multimorbidity have a comprehensive holistic care and support plan to support clinical optimisation

Timely and appropriate management of complications (including EoL) for people with increasing complexity CaReMe multi-morbidity

OHID/
Public Health
mitigations

A

B

C

D

E

F

G

Primordial Prevention Primary Prevention

Secondary Prevention

Tertiary Prevention

Upstream

Midstream

Downstream

NOT COPY

Costs of Complications

We are spending over £10.7 million pounds in the UK on diabetes direct costs and £3.3 billion is being spent on indirect costs.

Complications	Type 1	Type 2
Renal Replacement Therapy	£150,520,000	£690,425,000
MI	£11,095,000	£353,536,000
Stroke	£9,9930,000	£184,916,000
CHD	£48,700,000	£1,440,475,000
HF	£12,318,000	£313,831,000



Case 1

Idris

- 52-year-old male
- Type 2 diabetes since age 48 years old
- Father had an MI at age 52 years old
- Last diabetes appointment was 3 years ago, work has been too busy for him to attend before now. He is self-employed and work is stressful.
- QRISK-3 score = 30.2%
- Currently taking Metformin 1g bd but doesn't tolerate that well so only takes when he's not going into work (approximately 4 times a week)
- Sitagliptin 100mg od
- Atorvastatin 40mg od
- Amlodipine 5mg od
- Duloxetine 30mg once daily

Results

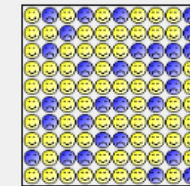
HbA1c= 86mmol/mol
UACR=6.8
FBC – normal
LFTs – normal
eGFR=70ml/min/1.72m²
LDL-C= 1.7mmol/L
Non-HDL-C= 2.4mmol/L
TG=1.0mmol/L
BP=142/93mmHg
BMI=33kg/m²

Your results

Your risk of having a heart attack or stroke within the next 10 years is:

30.2%

In other words, in a crowd of 100 people with the same risk factors as you, 30 are likely to have a heart attack or stroke within the next 10 years.



Risk of
a heart attack or stroke

Your score has been calculated using estimated data, as some information was left blank.

Your body mass index was estimated as 30.7 kg/m².

How does your 10-year score compare?

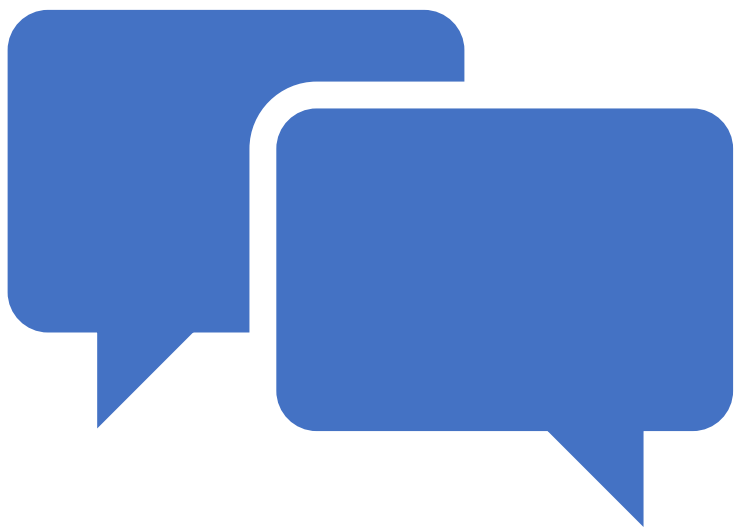
Your score	
Your 10-year QRISK [®] 3 score	30.2%
The score of a healthy person with the same age, sex, and ethnicity*	7.2%
Relative risk**	4.2
Your QRISK [®] 3 Healthy Heart Age***	73

* This is the score of a healthy person of your age, sex and ethnic group, i.e. with no adverse clinical indicators and a cholesterol ratio of 4.0, a stable systolic blood pressure of 125, and BMI of 25.
** Your relative risk is your risk divided by the healthy person's risk.
*** Your QRISK[®]3 Healthy Heart Age is the age at which a healthy person of your sex and ethnicity has your 10-year QRISK[®]3 score.

Care Plan

Do you have any questions?

What are you going to do ?



DO NOT COPY

Feedback



Case 2

Anna

72 years old woman

Retired teacher

MI – 5 years ago

Type 2 diabetes for 17 years

Loves to do yoga at the wellness centre in her town but has been limited by breathlessness

Anna had reported breathlessness and a pro-BNP and Echo has been done

Echo results: LVEF 55-60%; LV diastolic dysfunction; mildly dilated LA; no significant valve disease

Medications

Aspirin 75mg od

Metformin 500mg bd

Lantus insulin – 24 units once daily at 10pm

Bisoprolol 2.5mg od

Ramipril 2.5mg od

Atorvastatin 80mg once daily

Results

HbA1c=64mmol/mol

eGFR=40ml/min/1.73m²

LDL-C=1.8 mmol/L

Non-HDL-C= 2.3mmol/L

TG= 1.4mmol/L

UACR=34mg/mmol

NT-proBNP – 542ng/L

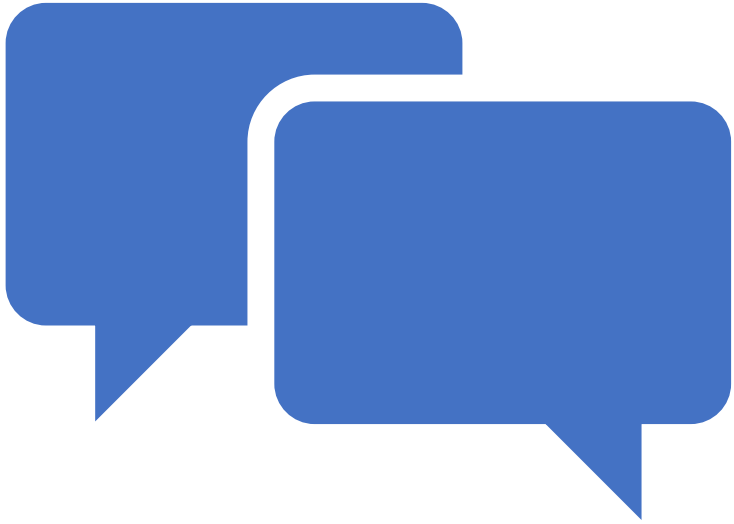
BP=134/82mmHg

BMI=35.4kg/m²

Care Plan

Do you have any questions?

What are you going to do ?



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Feedback



Case 3

Ahmed

Age 39 years old

Type 2 diabetes – 2 years

Hypothyroidism

Coeliac Disease

Presents at GP surgery today with thirst, tiredness and reporting frequent urination

Metformin 1g bd

Gliclazide 120mg bd

Results

UACR=45

eGFR=29ml/min/1.73m²

HbA1c=92mmol/mol

TG=3.4mmol/L

LDL-C= 3.5mmol/L

Non-HDL-C=4.5mmol/L

BP=156/90mmHg

BMI=26kg/m²

Care Plan

Do you have any
questions?

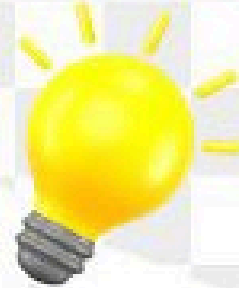
What are you
going to do ?

5-minutes Quick Fire Q&A





A B C



POP QUIZ



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DO NOT COPY

Feedback