


# Long term condition care

Reshaping after COVID-19

Dr Scott Jamieson June 2021

# DOI

- MBChB MRCPGP DRCOG DRSRH DPD
- <http://www.whopaysthisdoctor.org/doctor/391/active>
-  @DocScott82
- Kirriemuir Full time GP, PQL, OOH Dundee ¼ full time
- GP Rep to NHS Tayside Medicines Advisory Group & Area Drugs & Therapeutics Committee
- Angus HSCP Prescribing Lead
- RCGP Faculty Board; RCGP Scottish Council Member, Optimal Testing SubGroup Member; Overdiagnosis Subgroup Member
- Cardiff University Dermatology Marker
- SIGN Council Member

# Aims

- Is the foundation solid?
- Why should we do LTC care?
- Which conditions should we see?
- How can we do this?
- What should we check?
- How often should we check?



# GP's perspectives on laboratory test use for monitoring long-term conditions: an audit of current testing practice

Martha M. C. Elwenspoek , Ed Mann, Katharine Alsop, Hannah Clark, Rita Patel, Jessica C. Watson & Penny Whiting

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## Abstract

### Background

We have shown previously that current recommendations in UK guidelines for monitoring long-term conditions are largely based on expert opinion. Due to a lack of robust evidence on optimal monitoring strategies and testing intervals, the guidelines are unclear and incomplete. This uncertainty may underly variation in testing that has been observed across the UK between GP practices and regions.

### Methods

Our objective was to audit current testing practices of GPs in the UK; in particular, perspectives on laboratory tests for monitoring long-term conditions, the workload, and how confident GPs are in ordering and interpreting these tests. We designed an online survey consisting of multiple-choice and open-ended questions that was promoted on social media and in newsletters targeting GPs practicing in UK. The survey was live between October–November 2019. The results were analysed using a mixed-methods approach.

### Results

The survey was completed by 550 GPs, of whom 69% had more than 10 years of experience. The majority spent more than 30 min per day on testing (78%), but only half of the respondents felt confident in dealing with abnormal results (53%). There was a high level of disagreement for whether liver function tests and full blood counts should be done ‘routinely’, ‘sometimes’, or ‘never’ in patients with a certain long-term condition.

The free text comments revealed three common themes: (1) pressures that promote over-testing, i.e. guidelines or protocols, workload from secondary care, fear of missing something, patient expectations; (2) negative consequences of over-testing, i.e. increased workload and patient harm; and (3) uncertainties due to lack of evidence and unclear guidelines.

### Conclusion

These results confirm the variation that has been observed in test ordering data. The results also show that most GPs spent a significant part of their day ordering and interpreting monitoring tests. The lack of confidence in knowing how to act on abnormal test results underlines the urgent need for robust evidence on optimal testing and the development of clear and unambiguous testing recommendations. Uncertainties surrounding optimal testing has resulted in an over-use of tests, which leads to a waste of resources, increased GP workload and potential patient harm.

# What methods are being used to create an evidence base on the use of laboratory tests to monitor long-term conditions in primary care? A scoping review

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## Abstract

**Background:** Studies have shown unwarranted variation in test ordering among GP practices and regions, which may lead to patient harm and increased health care costs. There is currently no robust evidence base to inform guidelines on monitoring long-term conditions.

**Objectives:** To map the extent and nature of research that provides evidence on the use of laboratory tests to monitor long-term conditions in primary care, and to identify gaps in existing research.

**Methods:** We performed a scoping review—a relatively new approach for mapping research evidence across broad topics—using data abstraction forms and charting data according to a scoping framework. We searched CINAHL, EMBASE and MEDLINE to April 2019. We included studies that aimed to optimize the use of laboratory tests and determine costs, patient harm or variation related to testing in a primary care population with long-term conditions.

**Results:** Ninety-four studies were included. Forty percent aimed to describe variation in test ordering and 36% to investigate test performance. Renal function tests (35%), HbA1c (23%) and lipids (17%) were the most studied laboratory tests. Most studies applied a cohort design using routinely collected health care data (49%). We found gaps in research on strategies to optimize test use to improve patient outcomes, optimal testing intervals and patient harms caused by over-testing.

**Conclusions:** Future research needs to address these gaps in evidence. High-level evidence is missing, i.e. randomized controlled trials comparing one monitoring strategy to another or quasi-experimental designs such as interrupted time series analysis if trials are not feasible.



# Are guidelines for monitoring chronic disease in primary care evidence based?

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<sup>1</sup>National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care West (NIHR CLAHRC West), University Hospitals Bristol NHS Foundation Trust, Bristol, UK; <sup>2</sup>Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, UK

## What you need to know

- Current UK guidelines for monitoring type 2 diabetes, chronic kidney disease, and hypertension are largely based on expert opinion; robust evidence for optimal monitoring strategies and testing intervals is lacking
- Unnecessary testing in primary care can lead to false positive and false negative results, increased workload for clinicians, and increased costs for the health service
- Patients and healthcare professionals should be aware of these uncertainties when making shared decisions about chronic disease monitoring

Pathology tests have a unique place in management of chronic diseases. They are used to guide disease management; assess risk and compliance; and enable early detection of adverse events, complications, and development of secondary diseases. Primary care clinicians rely on guidelines for common chronic diseases such as type 2 diabetes, chronic kidney disease, and hypertension to inform them which tests they should recommend to their patients and how frequently these should be done. With rates of pathology tests rising—at an estimated annual cost of £1.8bn to primary care in the UK<sup>1</sup>—and the potential for harm from over-testing, it is important to consider the evidence base for these recommendations.

In this article, we review monitoring strategies in current UK guidelines for patients with type 2 diabetes, chronic kidney disease, and hypertension ([box 1](#)), highlighting the uncertainties in these guidelines and the need for further research.

## Box 1: Search strategy and guideline selection

We searched for published UK guidelines for the management of patients with type 2 diabetes, chronic kidney disease stages 1-3\*, or hypertension using the following sources:

- National Institute for Health and Care Excellence (NICE)
- Scottish Intercollegiate Guidelines Network (SIGN)
- Royal Colleges of Pathologists (RCPATH), Physicians, and General Practitioners
- Quality Outcomes Framework (QOF)

The following guidelines are included in this review:

- SIGN 116 Management of diabetes (2017)<sup>2</sup>
- NICE CG127 Hypertension, the clinical management of primary hypertension in adults (2011)<sup>3</sup>
- NICE CG182 Chronic kidney disease (partial update) (2014)<sup>4</sup>
- NICE NG28 Type 2 diabetes in adults (2015)<sup>5</sup>
- NICE PH38 Evidence reviews (Type 2 diabetes: prevention in people at high risk) (2017)<sup>6</sup>
- RCPATH: National minimum retesting intervals in pathology (2015)<sup>7</sup>

We extracted any guidance on the use of laboratory tests for disease monitoring, the recommended frequency of testing, and the level of evidence on which the guidance was based. Tests recommended specifically in relation to medication monitoring are not included.

The main limitation of this search strategy is that we did not search the primary literature itself. As a consequence, we may have missed evidence that is not picked up by the guidelines or was published after the guideline was written.

\*Chronic kidney disease stages 4 and 5 are generally monitored in secondary care and are therefore not included in our analysis.

## What is the evidence of uncertainty?

### Tests recommended by guidelines

For the chronic diseases reviewed, the recommended tests are similar across guidelines. In the case of type 2 diabetes the monitoring tests recommended across guidelines are glycated haemoglobin (HbA<sub>1c</sub>), plasma glucose profile, and renal function



DISEASE	TEST	GUIDELINE	RECOMMENDATION	FREQUENCY OF TESTING	EVIDENCE	
Diabetes	Diabetes specific	RCPATH (2015)	Routinely in all patients	Measure in "2–6 monthly intervals (tailored to individual needs), until the blood glucose concentration is stable on unchanging therapy"	Refers to NICE CG66	
		HbA <sub>1c</sub>	NICE NG28 (2015)	Routinely in all patients	"Frequency should be tailored to individual needs, taking into account personal preferences, comorbidities, risk from polypharmacy, life expectancy"	Unclear
			SIGN 116 (2017)	No recommendations made		
				NICE NG28 (2015)	Routinely in all patients	"3–6 monthly intervals (tailored to individual needs, until the HbA1c is stable on unchanging therapy"
		Plasma glucose profile	NICE NG28 (2015)	Only under certain circumstances	"6 monthly intervals once the HbA1c level and blood glucose levels are stable"	Unclear
	Renal function	eGFR	SIGN 116 (2017)	Routinely in all patients	"eGFR should be assessed on an annual basis in people with diabetes. More frequent assessment may be necessary in adults with established CKD"	Expert consensus
			NICE CG182 (2014)	Routinely in all patients	Once to more than 4 times a year. "Frequency of testing is determined by previous eGFR and ACR levels"	Expert consensus and evidence based
		Urine ACR	SIGN 116 (2017)	Routinely in all patients	Annually	Expert consensus and evidence based
			NICE CG182 (2014)	Routinely in all patients	Once to more than 4 times a year. "Frequency of testing is determined by previous eGFR and ACR levels"	Expert consensus and evidence based
		Other	Haemoglobin	SIGN 116 (2017)	Diabetes patients with CKD stage 3-5	"At least annually"



DISEASE	TEST	GUIDELINE	RECOMMENDATION	FREQUENCY OF TESTING	EVIDENCE	
Hypertension	Cardiovascular risk assessment	Urine ACR and haematuria	NICE CG127 (2011)	Routinely in all patients	Not stated	NICE CG73
		Electrolytes and creatinine	NICE CG127 (2011)	Routinely in all patients to exclude secondary kidney disease	Not stated	Expert consensus
		Serum total and HDL cholesterol	NICE CG127 (2011)	"A full cardiovascular assessment should be conducted in patients with persistently raised blood pressure who do not have established cardiovascular disease"	Not stated	Expert consensus
	Monitoring diabetes risk	Renal function	NICE PH38 (2017)	"All individuals at high risk of diabetes whether taking metformin or not"	Not stated, but possibly more frequent in elderly patients	Expert consensus
		HbA <sub>1c</sub>	NICE PH38 (2017)	"All identified individuals at high risk of diabetes" (such as hypertensive patients)	Annually	NICE PH38
		Lipid profile	NICE PH38 (2017)	"All identified individuals at high risk of diabetes" (such as hypertensive patients)	Annually	NICE PH38
		Blood glucose	NICE CG127 (2011)	Routinely in all patients to evaluate diabetes	Not stated	Expert consensus
	Renal function	Urine ACR	NICE CG182 (2014)	Routinely to monitor CK progression	Once to more than 4 times a year. "Frequency of testing is determined by previous eGFR and ACR levels"	Expert consensus and evidence based
		eGFR	NICE CG182 (2014)	Routinely to monitor CKD progression	Once to more than 4 times a year. "Frequency of testing is determined by previous eGFR and ACR levels"	Expert consensus and evidence based
			NICE CG127 (2011)	"In patients with persistently raised blood pressure who do not have established cardiovascular disease. . . (to) identify kidney disease"	Not stated	Expert consensus

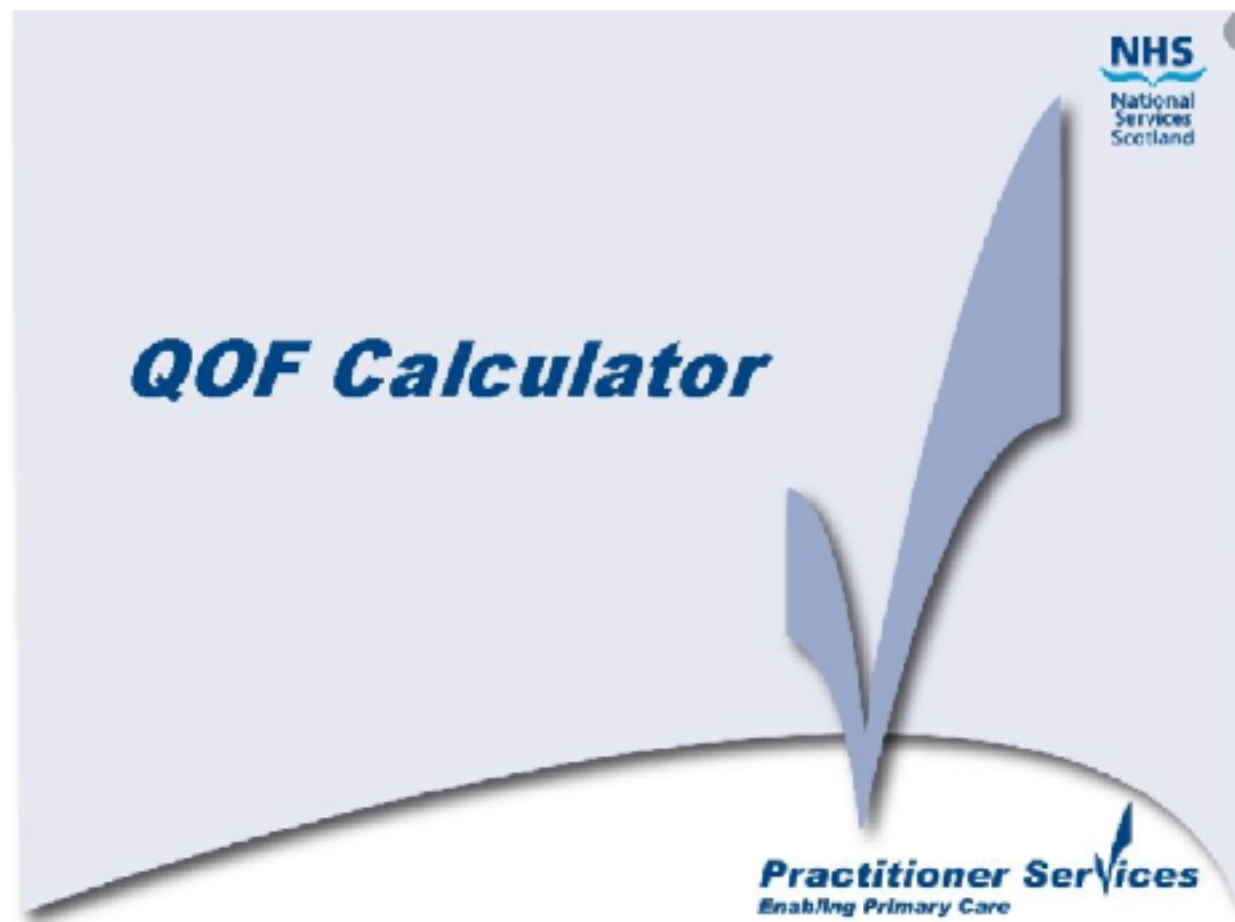


# SUMMARY

- Evidence to support inclusion rarely ever show by doing an intervention in LTC care you change the outcome. e.g. PTH in CKD or ACR in T2DM. SIGN 116 on T2DM didn't even mention HBA1c monitoring in T2DM
- Tendency to err on side of caution.
  - Risks false positives/workload/patient anxiety/false negatives
- Evidence describes variation in reporting or test performance but does not address the fundamental question if a test is necessary or beneficial
- 78% of GPs spent >30mins a day looking at blood results and only 53% of the time felt confident on how to manage all abnormalities







**Data to support the peer review GP Cluster Continuous Quality Improvement process in 2016-17**

Population Health Directorate  
Primary Care Division - Room 1R 07



Telephone: 0131-244 2305 Fax: 0131-244 2621  
Email: Richard.Foggo@scotland.gsi.gov.uk

To: NHS Chief Executives  
Chief Officers, Health and Social Care Partnerships  
Primary Care Leads

29 July 2016

Dear Colleague

**Re 2016 TQA Data Extractions**

Please find attached an out-line of what data will be provided to practices, Clusters and the wider health and social care system (Health and Social Care Partnerships and Boards) to support the delivery of high quality individualised care; the peer led Continuous Quality Improvement process in GP Clusters; and wider service planning across the local health and social care system.

It is intended that the data will be provided no more often than quarterly, starting soon after the end of the second quarter of 2016 i.e. September 2016, in order to fit with the Cluster timetable also mentioned in the attached short paper.

In the meantime work is on-going to finalise the Access Report and Anticipatory Care Plan Review templates and High Health Gain cohort of patients mentioned in our earlier TQA letter (February 2016) and these will be with practices before the end of September.

We have deliberately timed the data extractions in this way in order to give practices and wider systems some 'headroom' to adjust to a post QOF world, where data is not generated or used for payment purposes but instead used to support quality improvement and service planning and to allow time for Clusters to form and Practice Quality Leads and Cluster Quality Leads to be agreed. Health And Social Care Partnerships and Boards will be contacted shortly to confirm cluster arrangements, to support the provision of appropriately configured datasets.

The 2016-17 data extractions will contain a small number of READ codes that were previously used in QOF for payment purposes but that will not be the case here, instead they will be used only to support practices to; deliver high quality individualised care to their patients; have peer led quality review discussions with other practices in their cluster; and hold informed discussions with the wider health and social care system (Health and Social Care Partnerships and Health Boards) on the most appropriate use of resources/(re)design of services.

# THE 2018 GENERAL MEDICAL SERVICES CONTRACT IN SCOTLAND

- A CLEAR ROLE FOR SCOTLAND'S GPs
- BETTER CARE FOR PATIENTS
- MANAGEABLE WORKLOAD
- REDUCED RISK
- INVESTING TO MAKE IT HAPPEN
- BETTER HEALTH IN COMMUNITIES





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# What did we learn from 12 years of QOF?

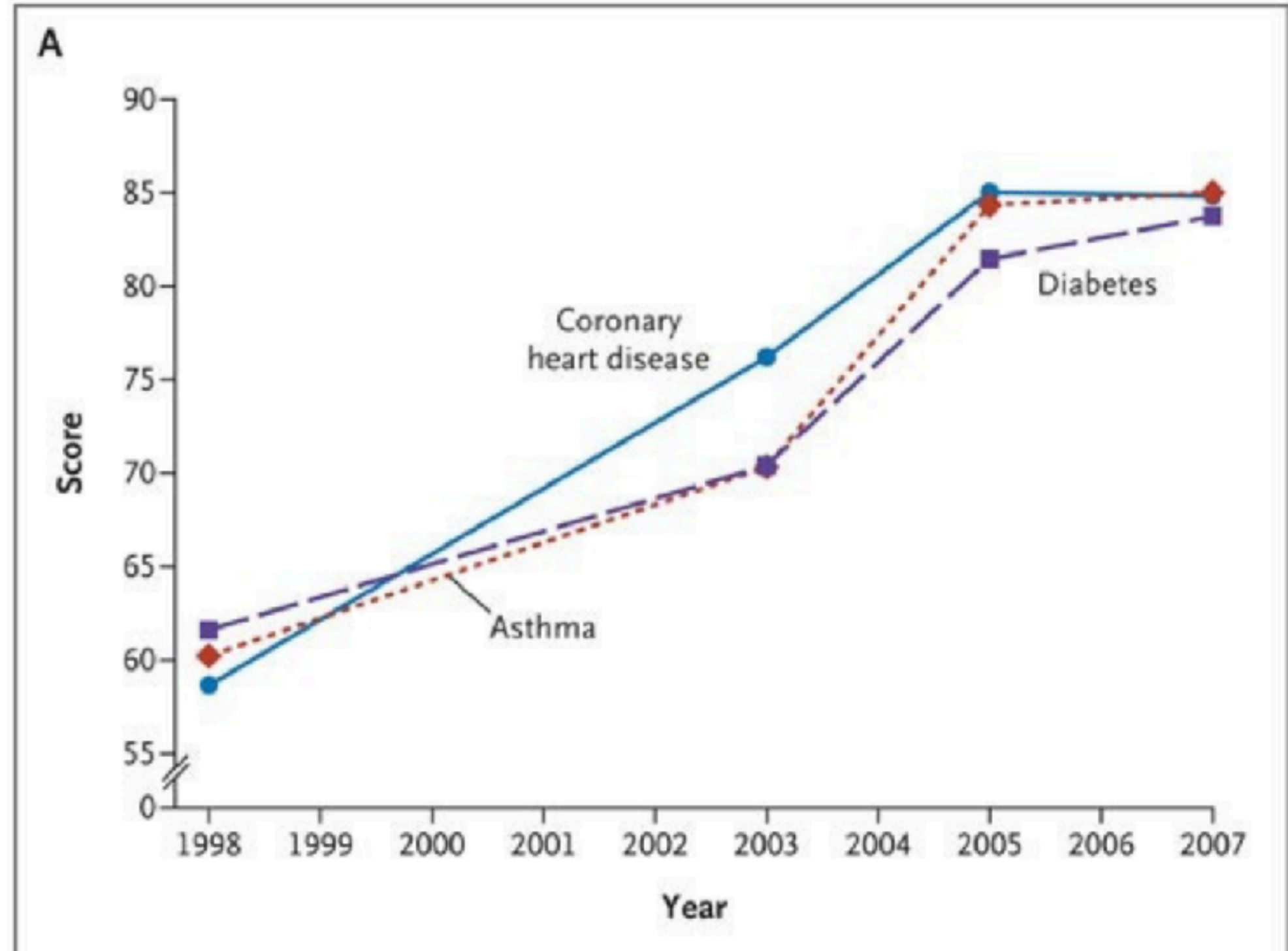
Bruce Guthrie  
Professor of Primary Care  
Medicine  
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[b.guthrie@dundee.ac.uk](mailto:b.guthrie@dundee.ac.uk)

Jason Tang  
Research Fellow  
University of Dundee

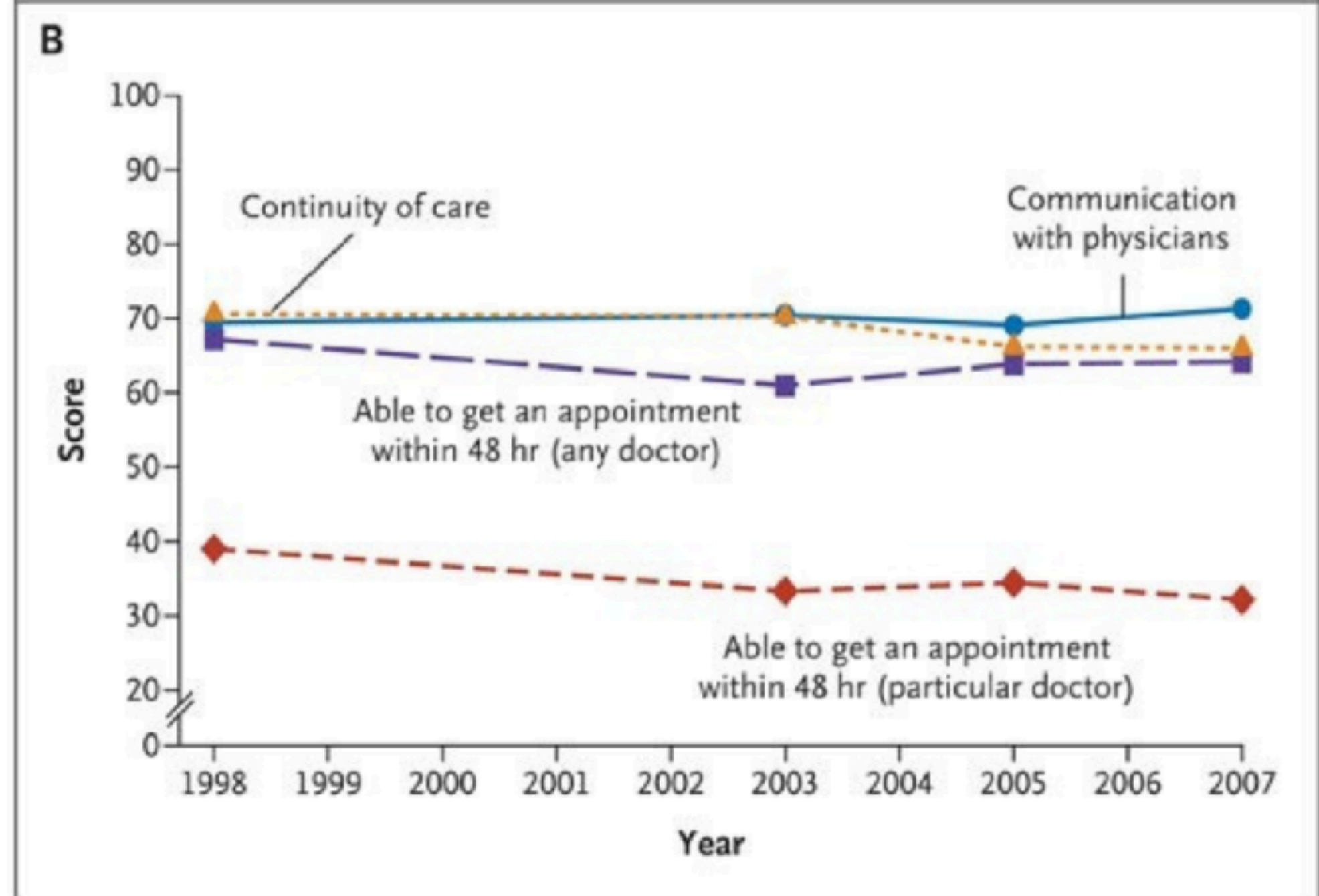
Scottish School of Primary Care  
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College of MVLS,  
University of Glasgow,  
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GLASGOW G12 9LX  
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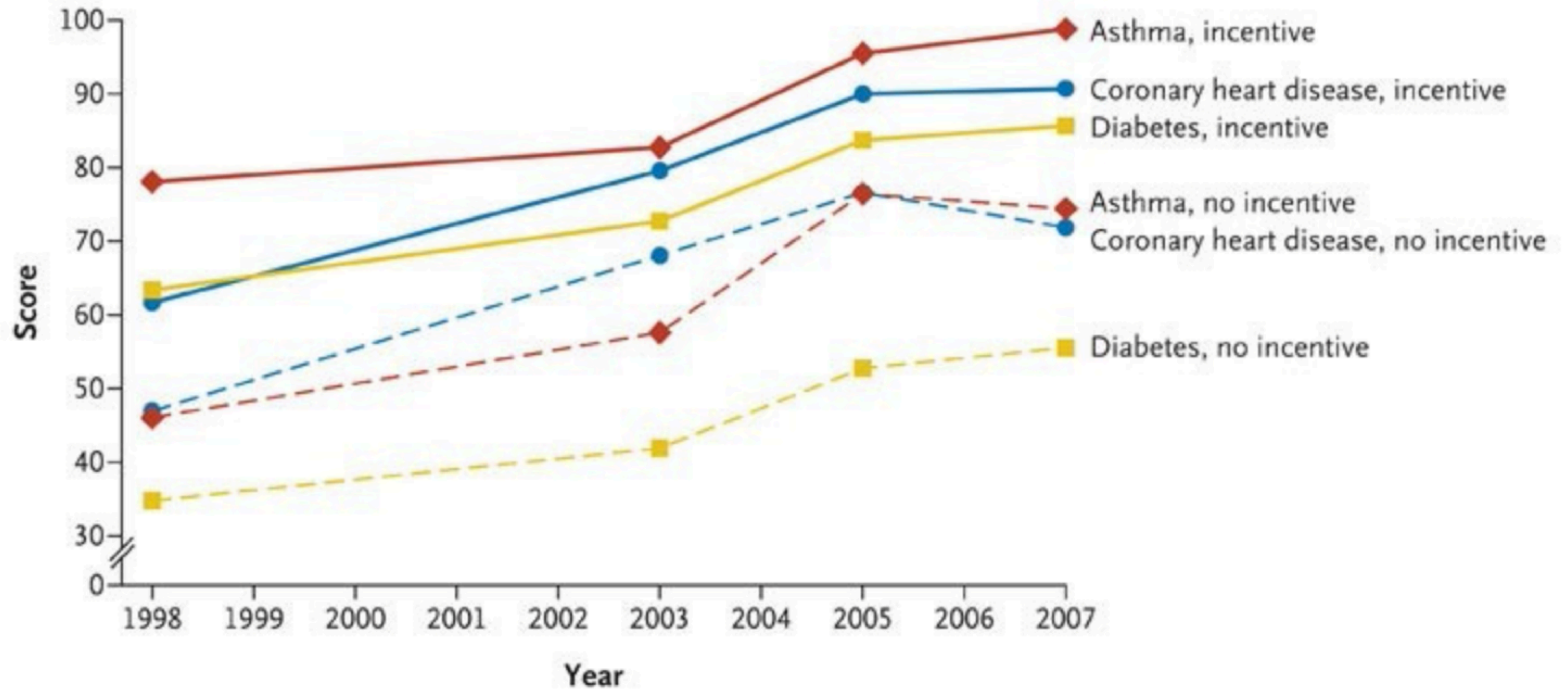


Disease measures

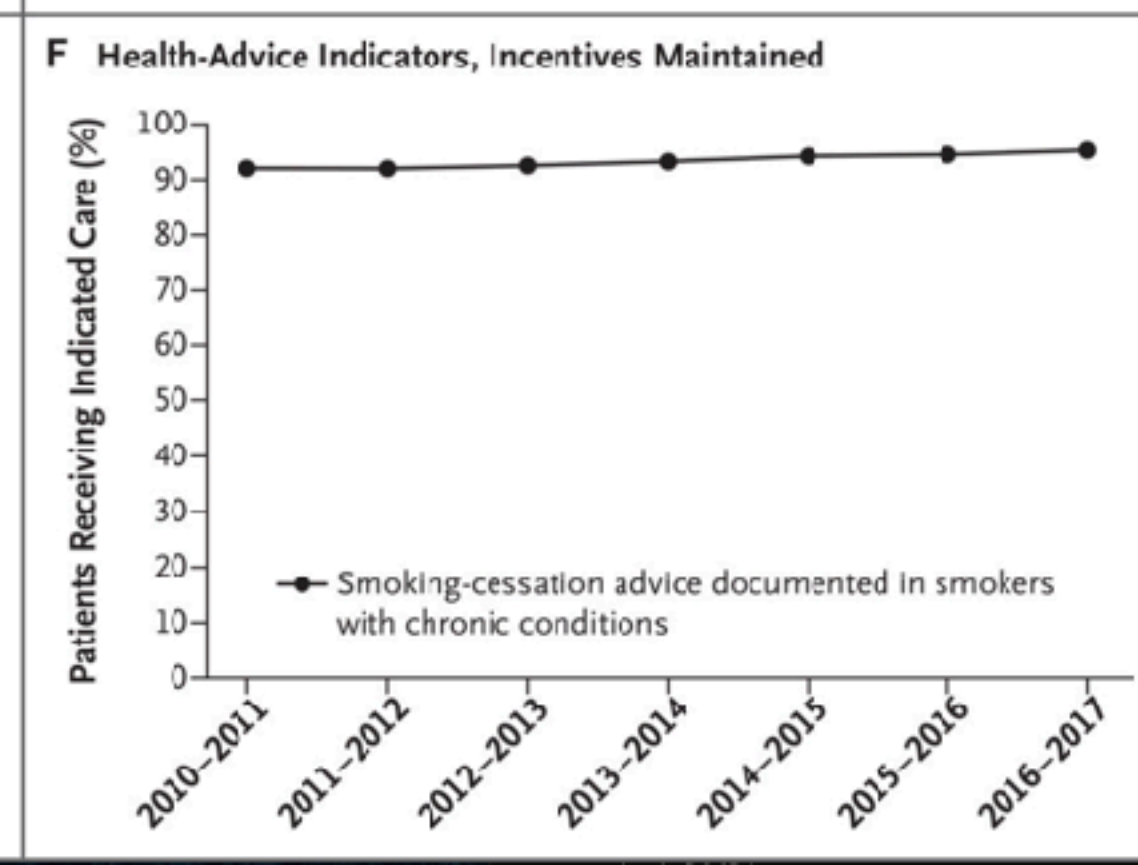
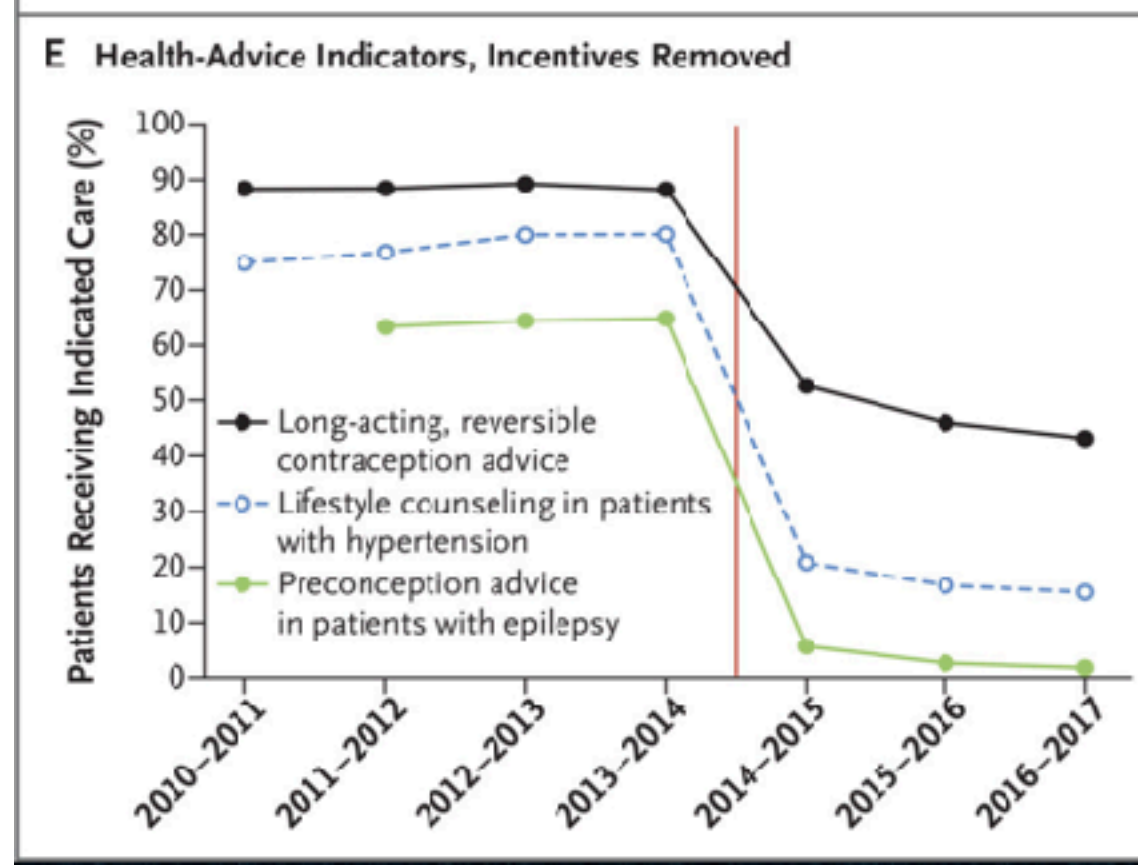
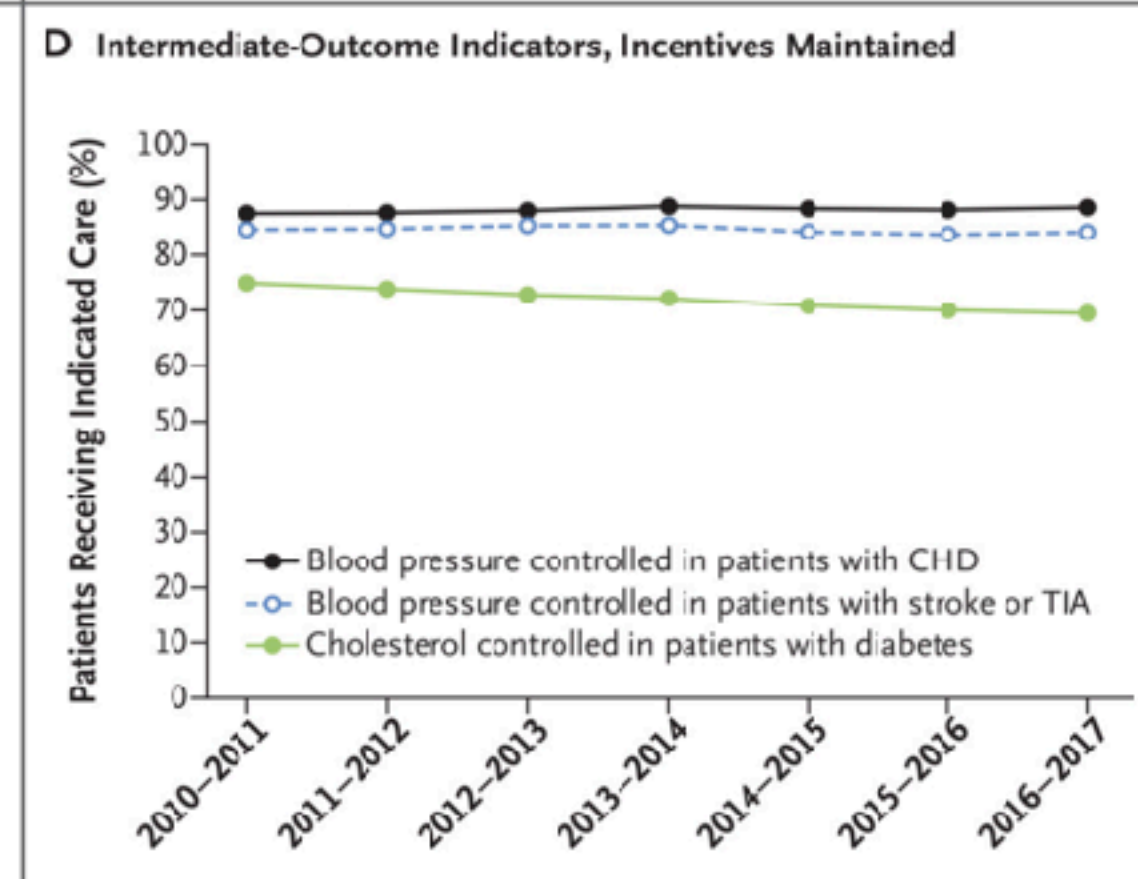
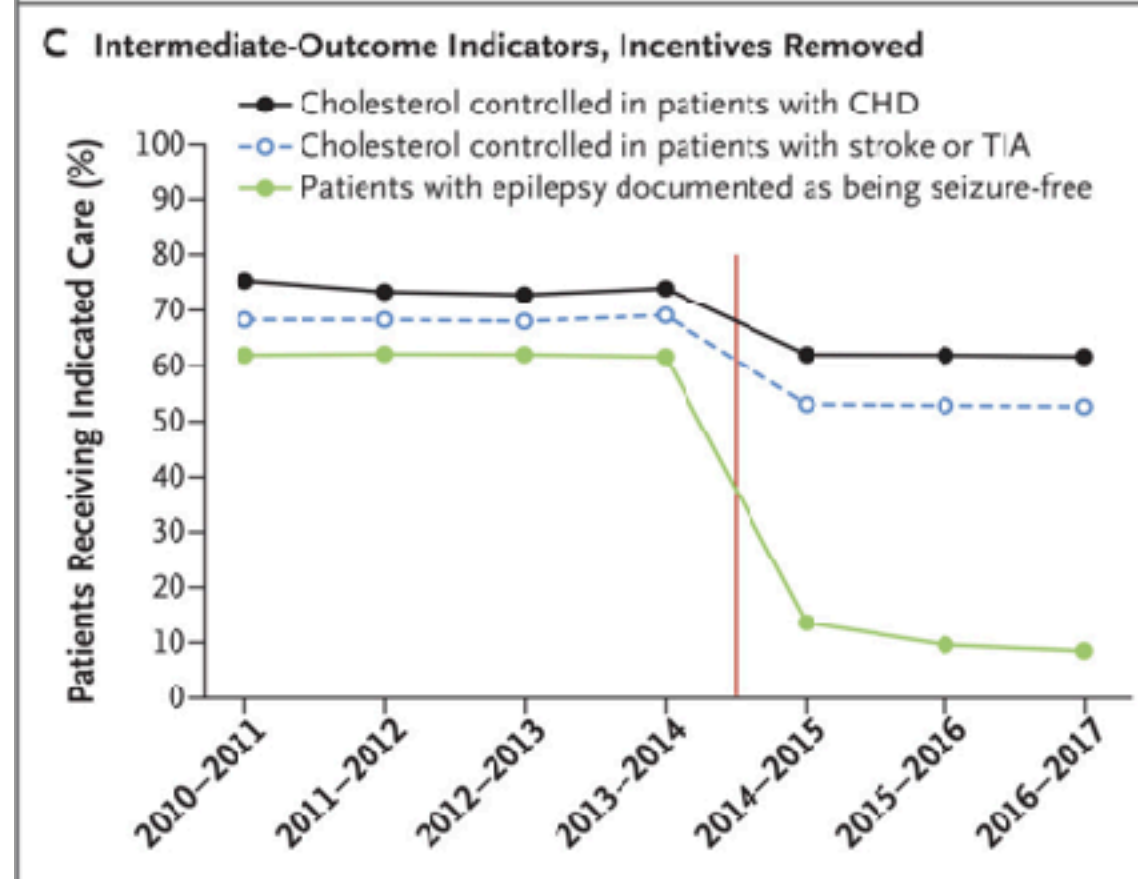
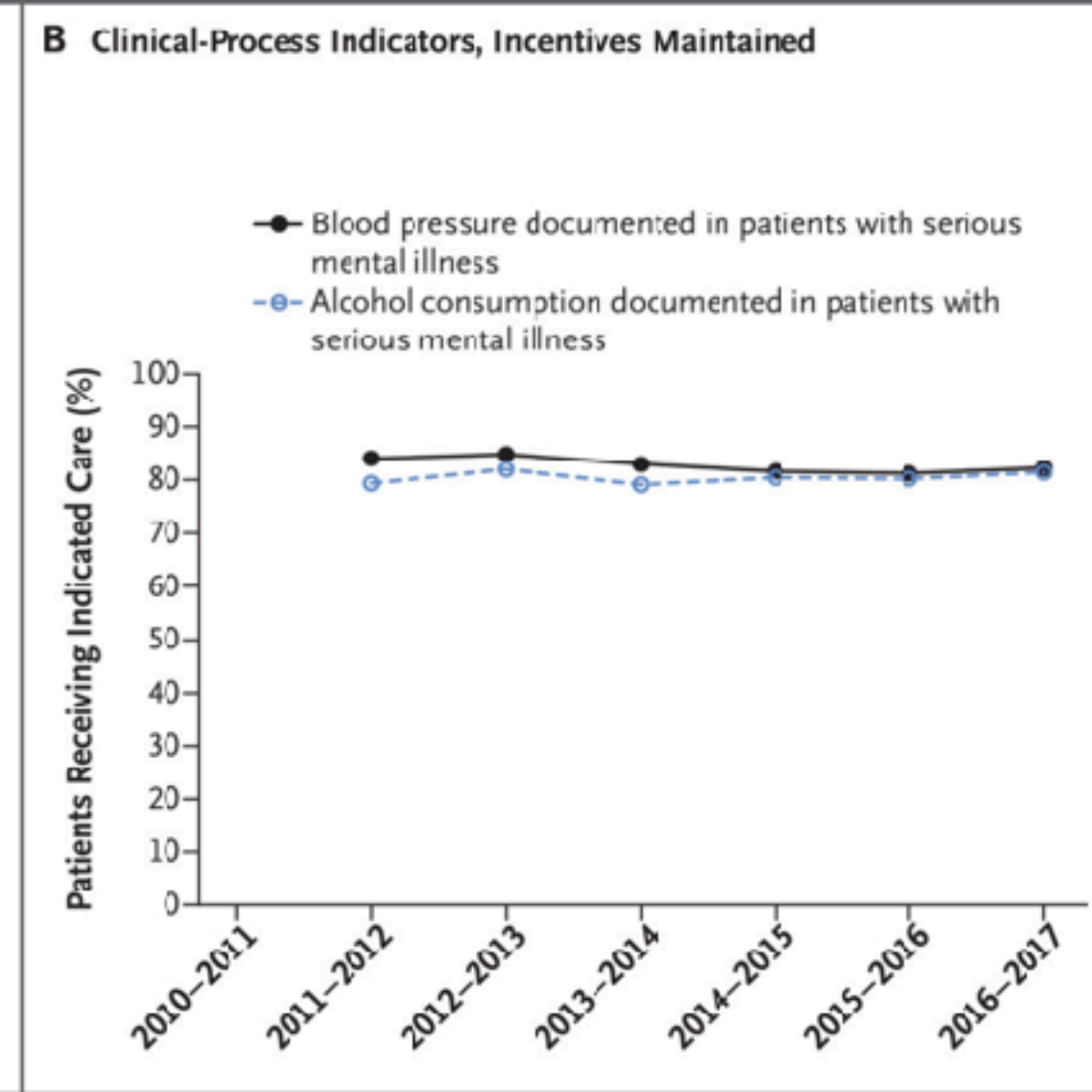
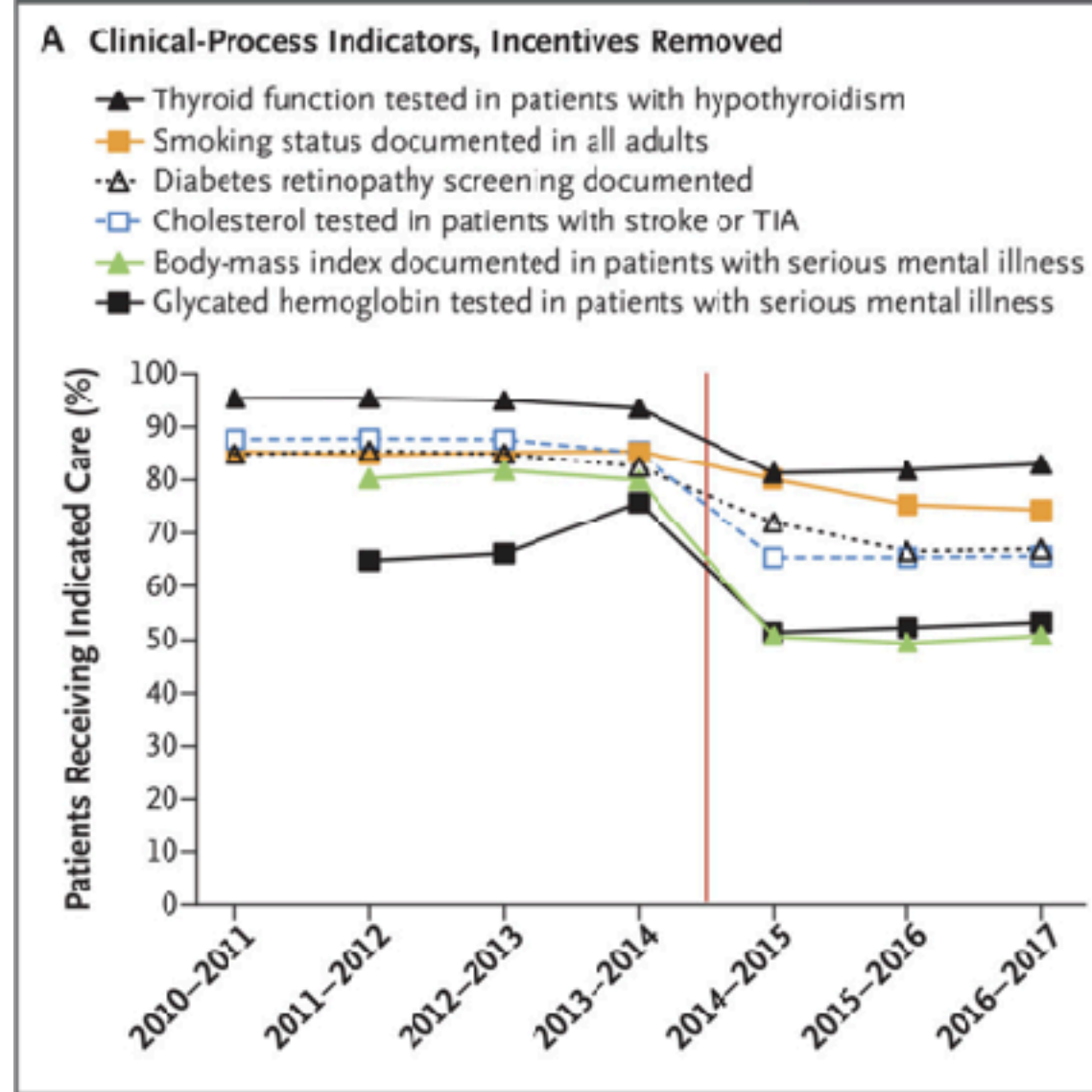


Patient perspectives





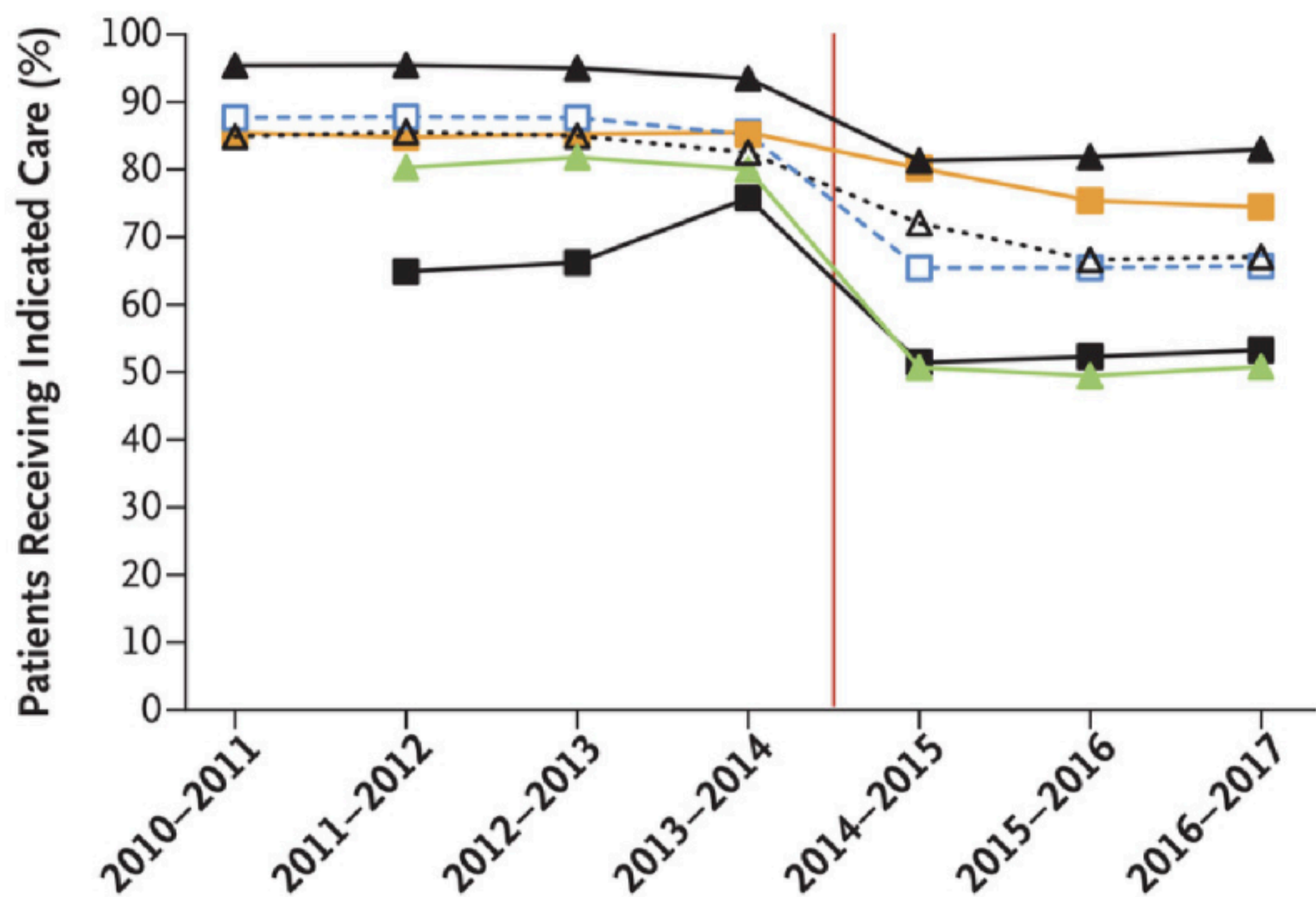




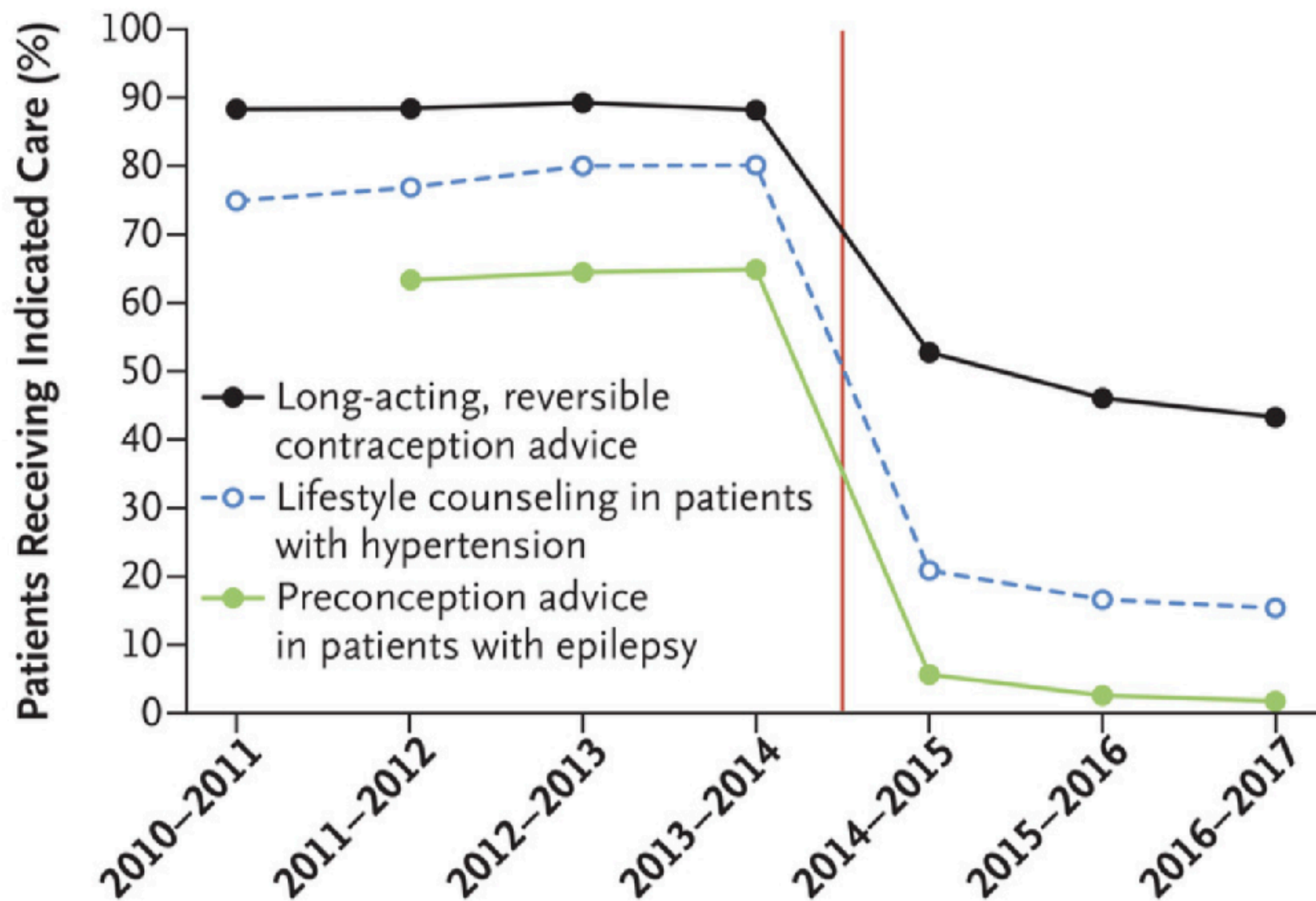


### A Clinical-Process Indicators, Incentives Removed

- ▲ Thyroid function tested in patients with hypothyroidism
- Smoking status documented in all adults
- ▲ Diabetes retinopathy screening documented
- Cholesterol tested in patients with stroke or TIA
- ▲ Body-mass index documented in patients with serious mental illness
- Glycated hemoglobin tested in patients with serious mental illness

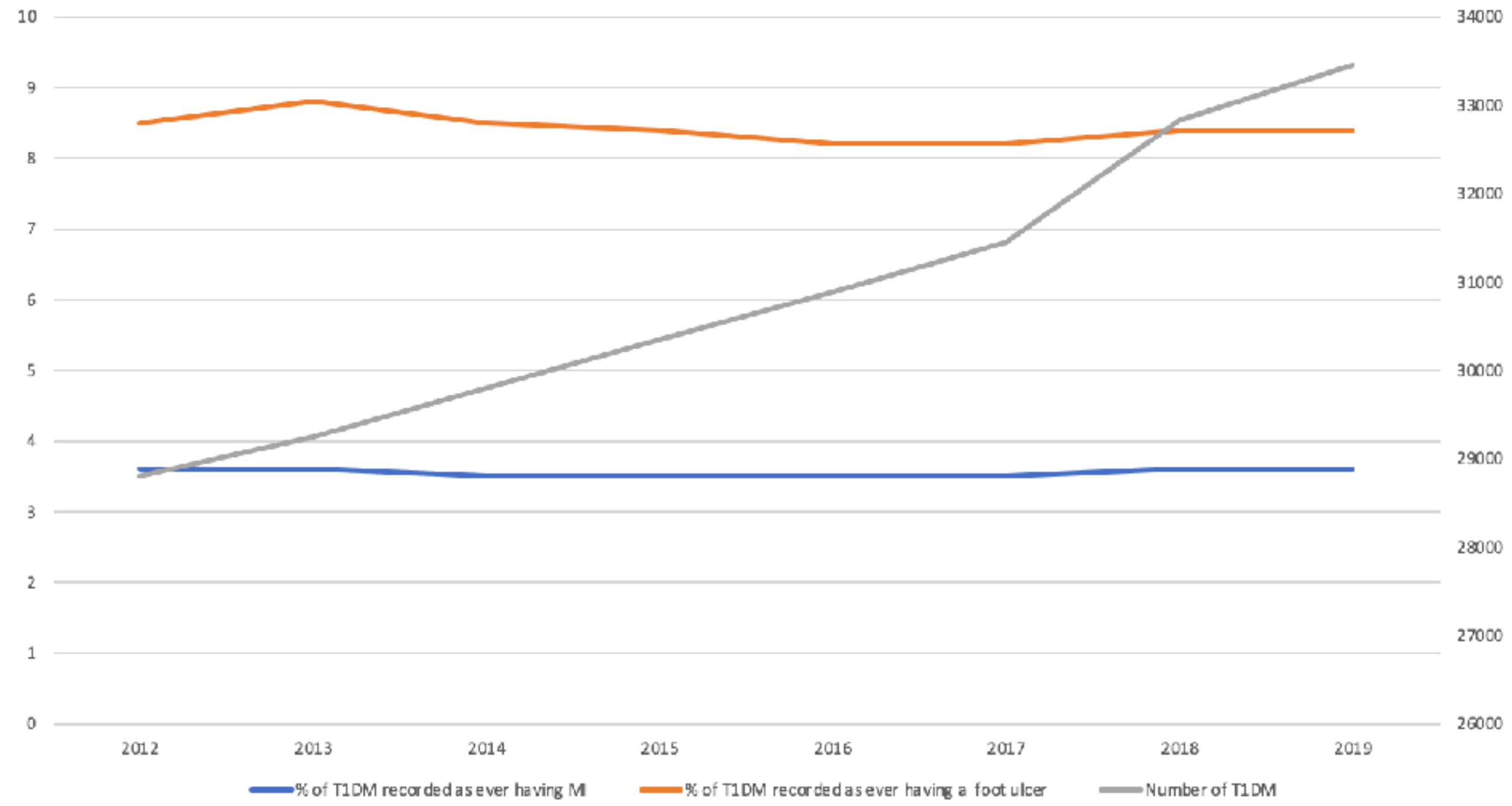


### E Health-Advice Indicators, Incentives Removed

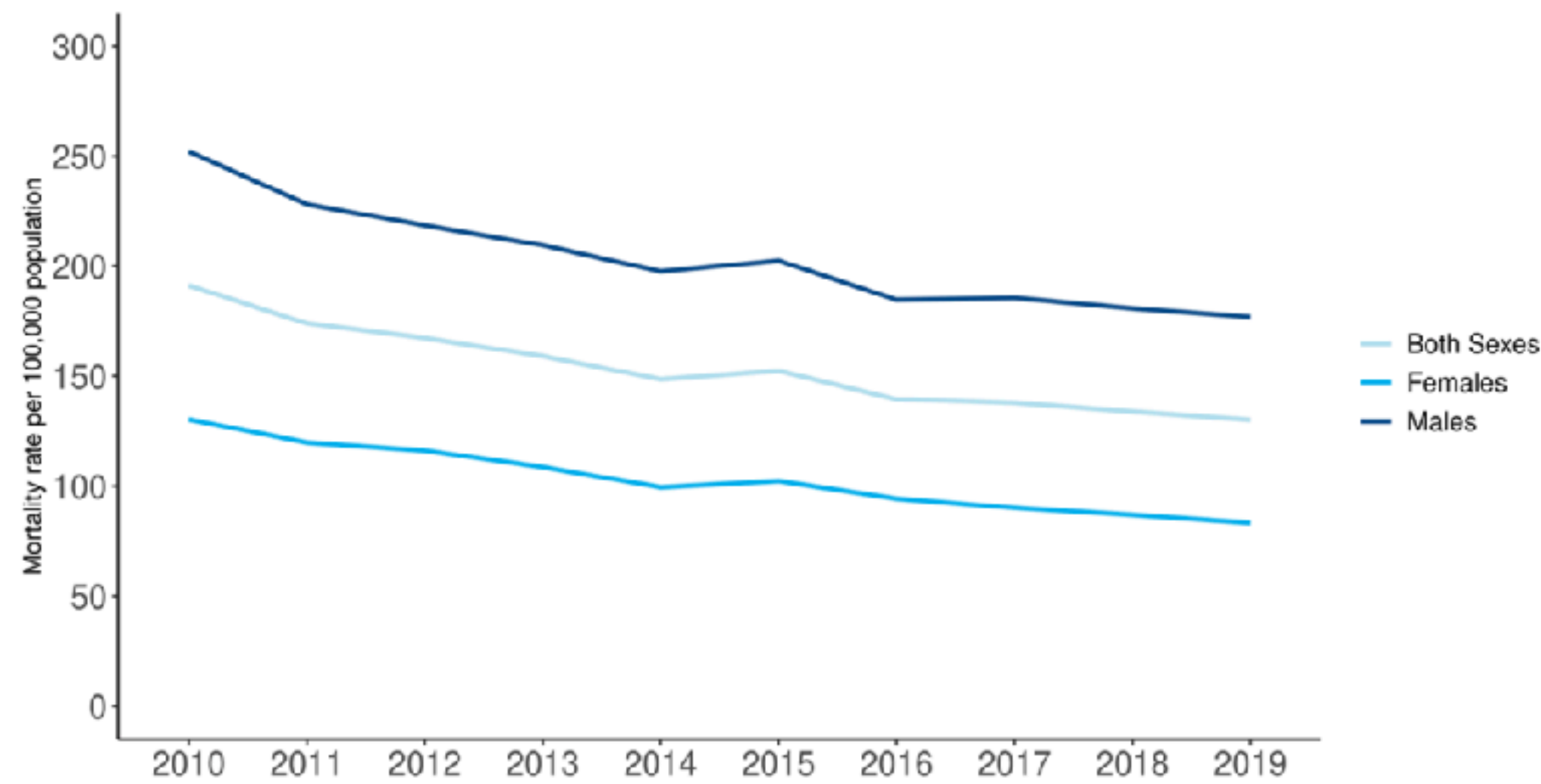




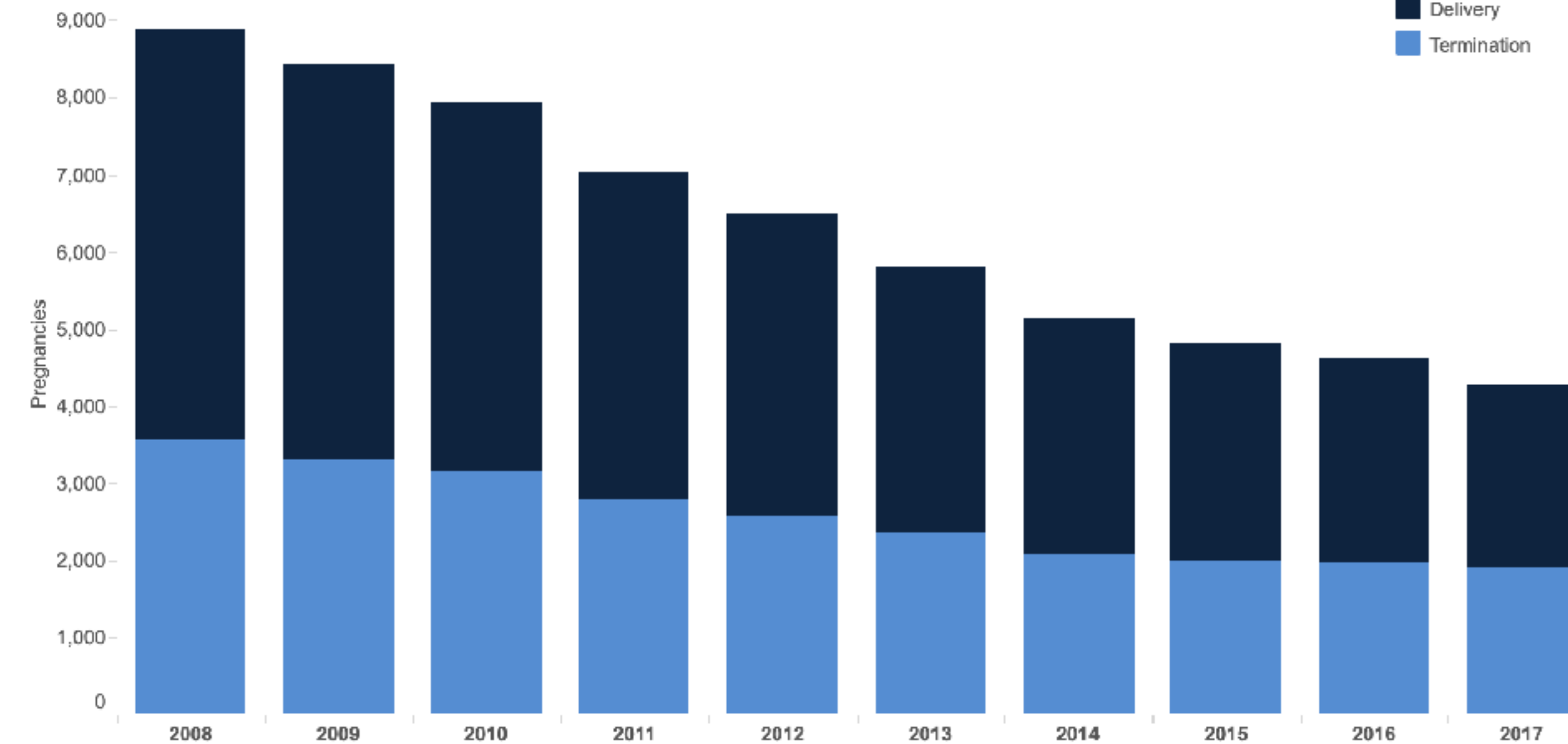
### Type 1 Diabetes Outcomes



### Coronary heart disease – age and sex adjusted mortality rates per 100,000 population, Scotland, 2010 to 2019



### Number of teenage pregnancies in Scotland, 2008-2017





# Pharmacological blood pressure lowering for primary and secondary prevention of cardiovascular disease across different levels of blood pressure: an individual participant-level data meta-analysis

The Blood Pressure Lowering Treatment Trialists' Collaboration\*

## Summary

**Background** The effects of pharmacological blood pressure lowering at normal or high-normal blood pressure ranges in people with or without pre-existing cardiovascular disease remains uncertain. We analysed individual participant data from randomised trials to investigate the effects of blood pressure lowering treatment on the risk of major cardiovascular events by baseline levels of systolic blood pressure.

**Methods** We did a meta-analysis of individual participant-level data from 48 randomised trials of pharmacological blood pressure lowering medications versus placebo or other classes of blood pressure-lowering medications, or between more versus less intensive treatment regimens, which had at least 1000 persons-years of follow-up in each group. Trials exclusively done with participants with heart failure or short-term interventions in participants with acute myocardial infarction or other acute settings were excluded. Data from 51 studies published between 1972 and 2013 were obtained by the Blood Pressure Lowering Treatment Trialists' Collaboration (Oxford University, Oxford, UK). We pooled the data to investigate the stratified effects of blood pressure-lowering treatment in participants with and without prevalent cardiovascular disease (ie, any reports of stroke, myocardial infarction, or ischaemic heart disease before randomisation), overall and across seven systolic blood pressure categories (ranging from <120 to  $\geq$ 170 mm Hg). The primary outcome was a major cardiovascular event (defined as a composite of fatal and non-fatal stroke, fatal or non-fatal myocardial infarction or ischaemic heart disease, or heart failure causing death or requiring admission to hospital), analysed as per intention to treat.

**Findings** Data for 344716 participants from 48 randomised clinical trials were available for this analysis. Pre-randomisation mean systolic/diastolic blood pressures were 146/84 mm Hg in participants with previous cardiovascular disease (n=157728) and 157/89 mm Hg in participants without previous cardiovascular disease (n=186988). There was substantial spread in participants' blood pressure at baseline, with 31239 (19.8%) of participants with previous cardiovascular disease and 14928 (8.0%) of individuals without previous cardiovascular disease having a systolic blood pressure of less than 130 mm Hg. The relative effects of blood pressure-lowering treatment were proportional to the intensity of systolic blood pressure reduction. After a median 4.15 years' follow-up (Q1–Q3 2.97–4.96), 42324 participants (12.3%) had at least one major cardiovascular event. In participants without previous cardiovascular disease at baseline, the incidence rate for developing a major cardiovascular event per 1000 person-years was 31.9 (95% CI 31.3–32.5) in the comparator group and 25.9 (25.4–26.4) in the intervention group. In participants with previous cardiovascular disease at baseline, the corresponding rates were 39.7 (95% CI 39.0–40.5) and 36.0 (95% CI 35.3–36.7), in the comparator and intervention groups, respectively. Hazard ratios (HR) associated with a reduction of systolic blood pressure by 5 mm Hg for a major cardiovascular event were 0.91, 95% CI 0.89–0.94 for participants without previous cardiovascular disease and 0.89, 0.86–0.92, for those with previous cardiovascular disease. In stratified analyses, there was no reliable evidence of heterogeneity of treatment effects on major cardiovascular events by baseline cardiovascular disease status or systolic blood pressure categories.

**Interpretation** In this large-scale analysis of randomised trials, a 5 mm Hg reduction of systolic blood pressure reduced the risk of major cardiovascular events by about 10%, irrespective of previous diagnoses of cardiovascular disease, and even at normal or high-normal blood pressure values. These findings suggest that a fixed degree of pharmacological blood pressure lowering is similarly effective for primary and secondary prevention of major cardiovascular disease, even at blood pressure levels currently not considered for treatment. Physicians communicating the indication for blood pressure lowering treatment to their patients should emphasise its importance on reducing cardiovascular risk rather than focusing on blood pressure reduction itself.

5 mm Hg reduction of systolic blood pressure reduced the risk of major cardiovascular events by about 10%, irrespective of previous diagnoses of cardiovascular disease, and even at normal or high-normal blood pressure values



# Your results may vary: the imprecision of medical measurements

BMJ 2020 ; 368 doi: <https://doi.org/10.1136/bmj.m149> (Published 20 February 2020)

Cite this as: BMJ 2020;368:m149

thebmj Interactive



## Your results may vary

A tool for visualising the variability of lab test results

Version 1.0  
19 Feb 2020

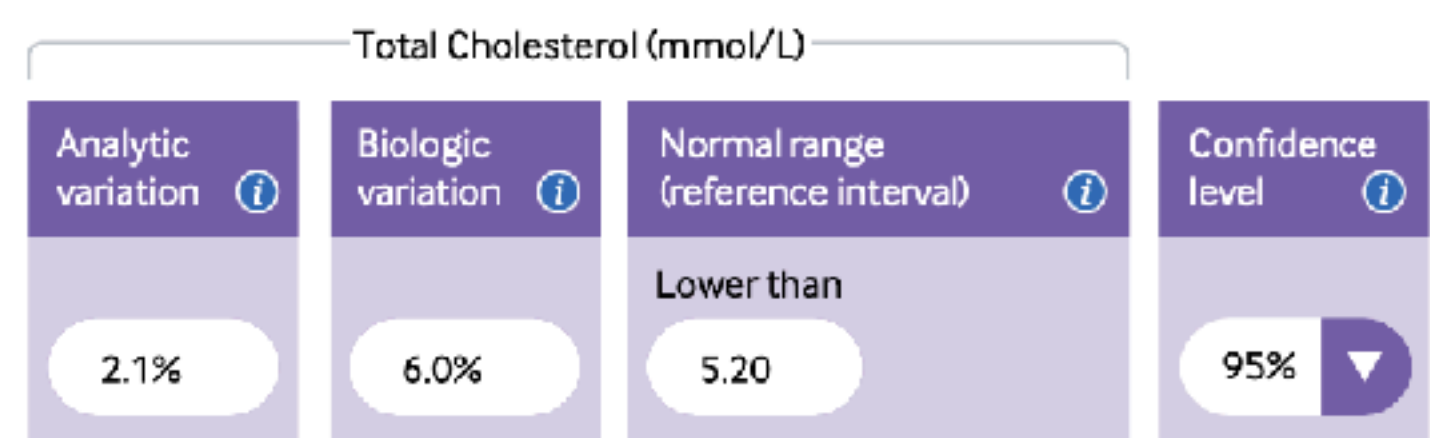
Interpreting results can be challenging for patients and clinicians alike. Results can be affected by measurement uncertainty, and by variation caused by biological processes. This tool (based on data in the article below) is designed to help you decide if two consecutive results can be considered truly different after these kinds of variation have been taken into account.

### 1 Choose a test

Total Cholesterol (mmol/L)

### 2 Adjust variables

These boxes are automatically populated with reasonable estimates of the analytic variation (authors' lab) and biologic variation (published research). These can be adjusted as needed.



### 3 Enter lab results

Enter one or, if available, two serial lab results

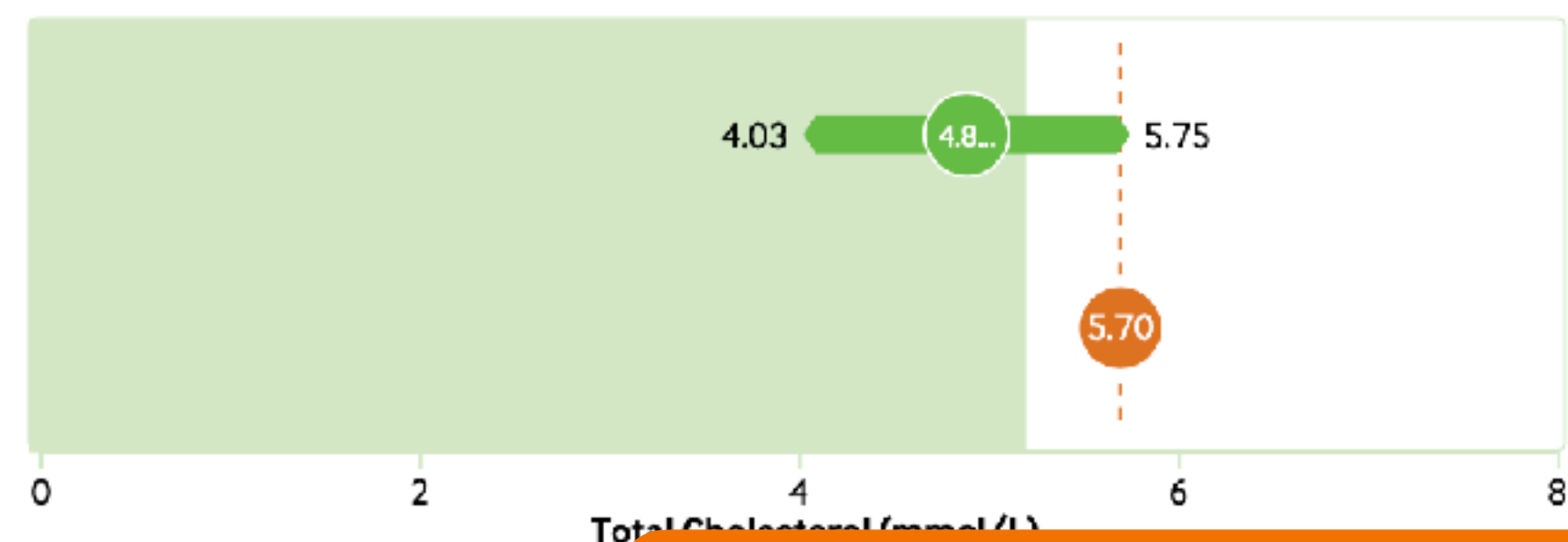
Result 1 4.89

Result 2 5.70

Show

### 4 View estimates

The minimum change required to conclude that two serial measurements are likely different is called the "reference change value" (RCV). Arrows to the left and right of your first result show the RCV for this test. For serial results, measurements can be considered different if the second is outside the RCV of the first.



Normal range  
Outside normal range

Result 2 is within the RCV, so the difference may be due to the combined effects of analytic and biological variation

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# Your results may vary: the imprecision of medical measurements

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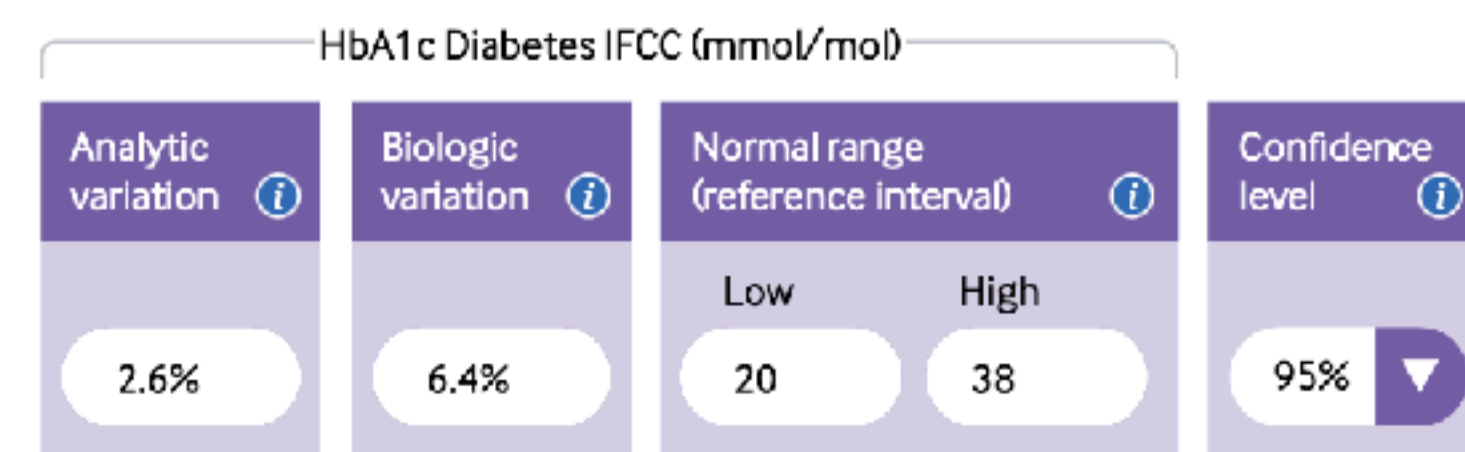
Interpreting results can be challenging for patients and clinicians alike. Results can be affected by measurement uncertainty, and by variation caused by biological processes. This tool (based on data in the article below) is designed to help you decide if two consecutive results can be considered truly different after these kinds of variation have been taken into account.

### 1 Choose a test

HbA1c Diabetes IFCC (mmol/mol)

### 2 Adjust variables

These boxes are automatically populated with reasonable estimates of the analytic variation (authors' lab) and biologic variation (published research). These can be adjusted as needed.



### 3 Enter lab results

Enter one or, if available, two serial lab results

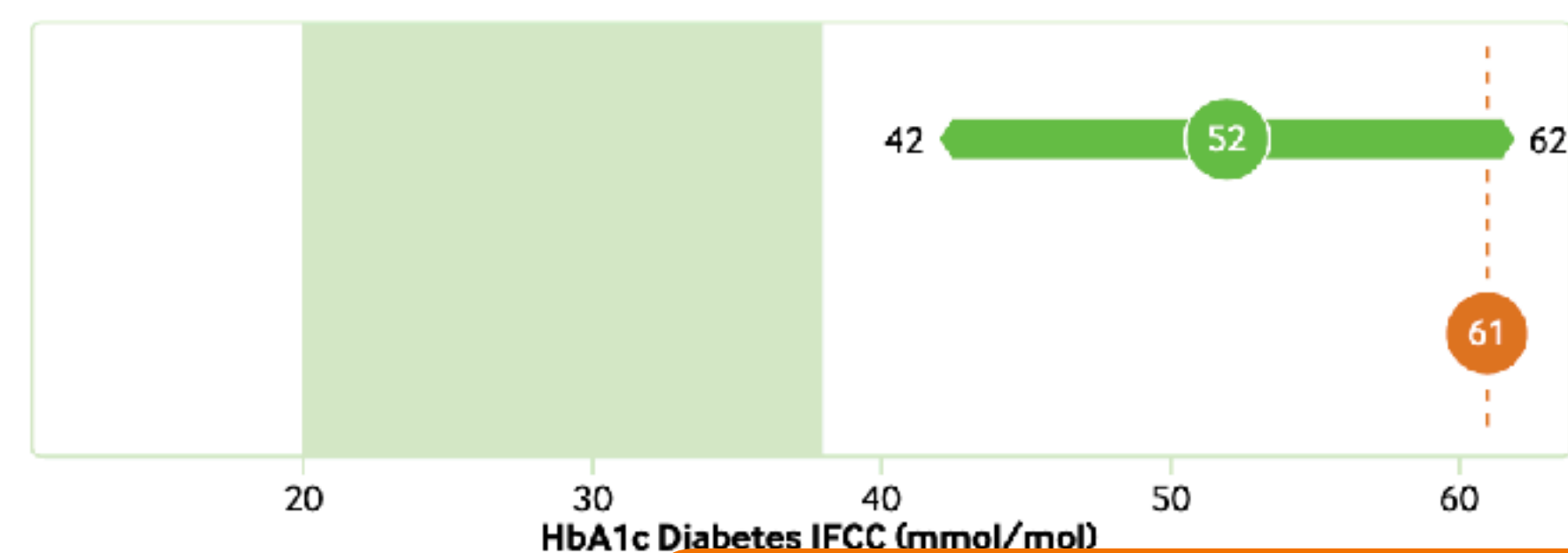
Result 1 52

Result 2 61

Show

### 4 View estimates

The minimum change required to conclude that two serial measurements are likely different is called the "reference change value" (RCV). Arrows to the left and right of your first result show the RCV for this test. For serial results, measurements can be considered different if the second is outside the RCV of the first.



Normal range  
Outside normal range


Result 2 is within the RCV, so the difference may be due to the combined effects of analytic and biological variation

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# Suggestions For Drug Monitoring in Adults in Primary Care

September 2020



A Collaboration between London & South East Medicines Service, South West Medicine Information Service and Croydon Clinical Commissioning Group

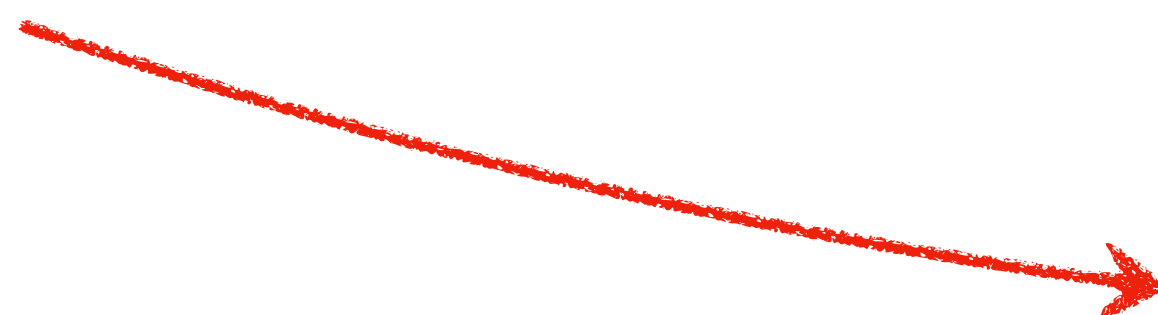
The monitoring parameters cited are derived from a range of guideline sources, other reference sources and expert opinion and must therefore be considered suggestions only. Adherence to them will not ensure a successful outcome in every case. The ultimate judgement regarding a particular clinical result must be made by the doctor in light of the clinical data presented by the patient and the diagnostic and treatment options available. For any enquiries contact David Erskine [david.erskine@gstt.nhs.uk](mailto:david.erskine@gstt.nhs.uk) and Alison Alvey [Alison.Alvey@uhbw.nhs.uk](mailto:Alison.Alvey@uhbw.nhs.uk)

*New - SPS is changing the way we will present drug monitoring material in the future. We believe that there is a better way to display this high quality material to better meet users' needs. We are creating an interactive on-line tool for therapeutic drug monitoring content which we are planning to release by the end of January 2021. If you are involved with drug monitoring as part of your role and you would like to share your experience please get in touch ([silvia.ceci@nhs.net](mailto:silvia.ceci@nhs.net)).*



# Improving together

A National Framework  
for Quality and GP Clusters  
in Scotland



# National Guidance for GP Clusters

A resource to support GP Clusters and support [Implementing Improving Together](#)



# Why do LTC Care?

- Optimise patient health (and well-being) outcomes into the future
- Selected patients who suffer a particular conditions
- In whom an intervention **could** improve an outcome



# WHICH CONDITIONS

## *TRADITIONALLY*

- HYPERTENSION
- CKD
- DEMENTIA
- EPILEPSY
- CHD/IHD/PAD/AF/HF
- STROKE/TIA
- RA
- COPD/ASHMA
- CANCER
- OBESITY
- MENTAL HEALTH
- PALLIATIVE CARE
- DIABETES
- OSTEOPOROSIS

# ORGANISATION

- **Primary/Secondary Prevention**

- HYPERTENSION
- CKD
- IHD/PAD/AF/HF
- STROKE/TIA
- DIABETES
- OSTEOPOROSIS
- MENTAL HEALTH
- RA

- **Improved Care**

- CANCER
- DEMENTIA
- PALLIATIVE CARE

- **Public Health**

- OBESITY

- **Ongoing Active Management**

- EPILEPSY
- COPD/ASTHMA



# HOW COULD YOU DO THIS?

## Data gathering vs review







Scott Jamieson  
Client

Client Dashboard

Setup Guide <

Manage Users

Manage Practices <

My MedLinks

Patient Feedback

My Documents

Responses <

My Profile

Logout

# MedLink Dashboard



Total MedLinks  
**441**



Max / Avg Age  
**87 / 52**



Remote Review  
**91%**



Recommend  
**91%**

Kirriemuir Medical Practice - S13532

Click to expand / hide **+**

Review	Submissions	Max Age	Average Age	Remote Review	Recommend
<b>Total</b>	<b>441</b>	<b>87</b>	<b>52</b>	<b>91%</b>	<b>91%</b>
Asthma	132	85	51	86%	93%
POP	49	54	38	96%	100%
COPD	37	81	65	-	86%
Contact	35	83	59	-	-
Healthcheck	34	87	68	-	97%
HRT	31	65	56	97%	93%
COCP	29	61	32	97%	100%
Diabetes	26	79	65	-	64%
Blood Pressure	24	80	61	-	95%
Depression	18	66	49	94%	83%





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**Patient Feedback**

My Documents

Responses <

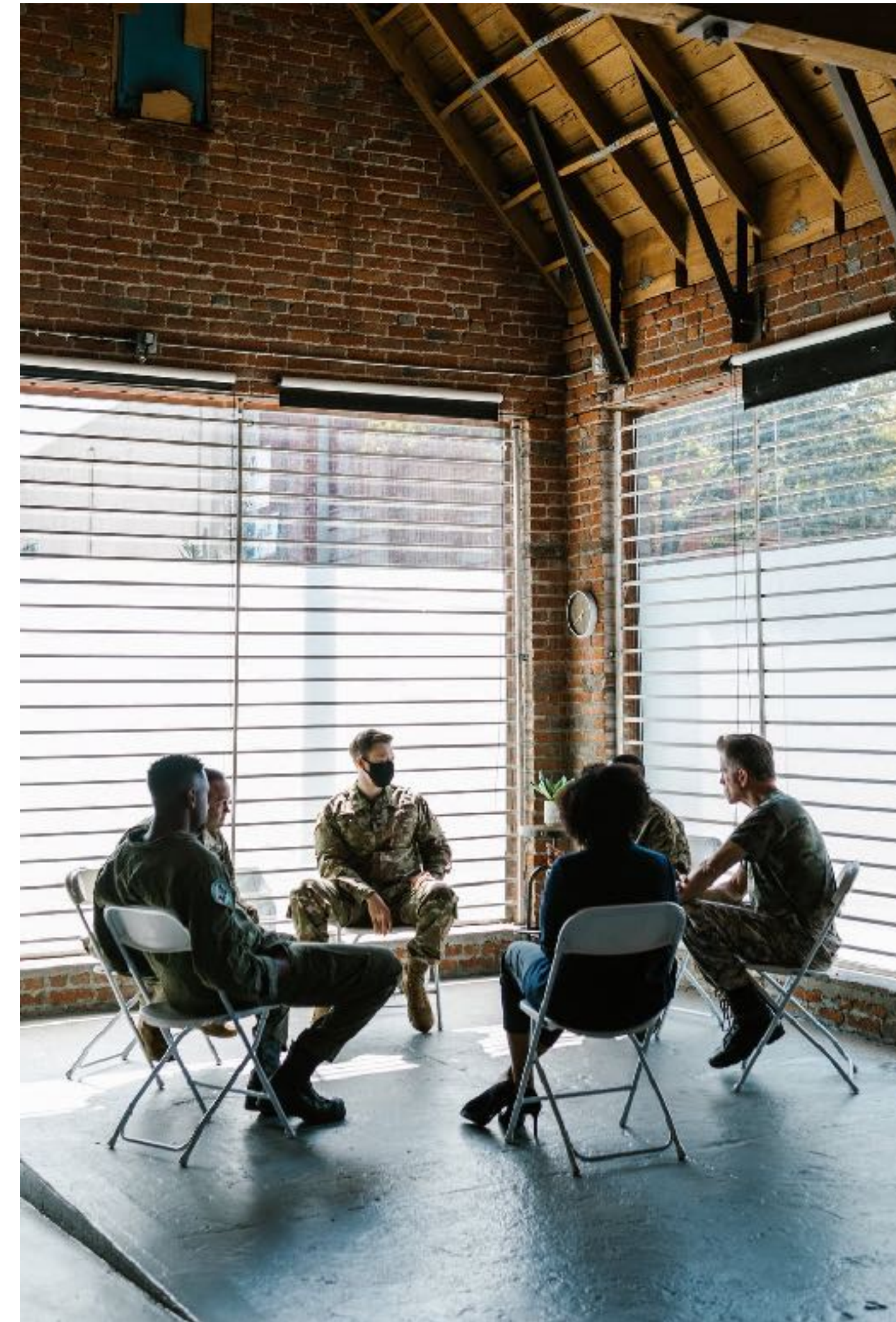
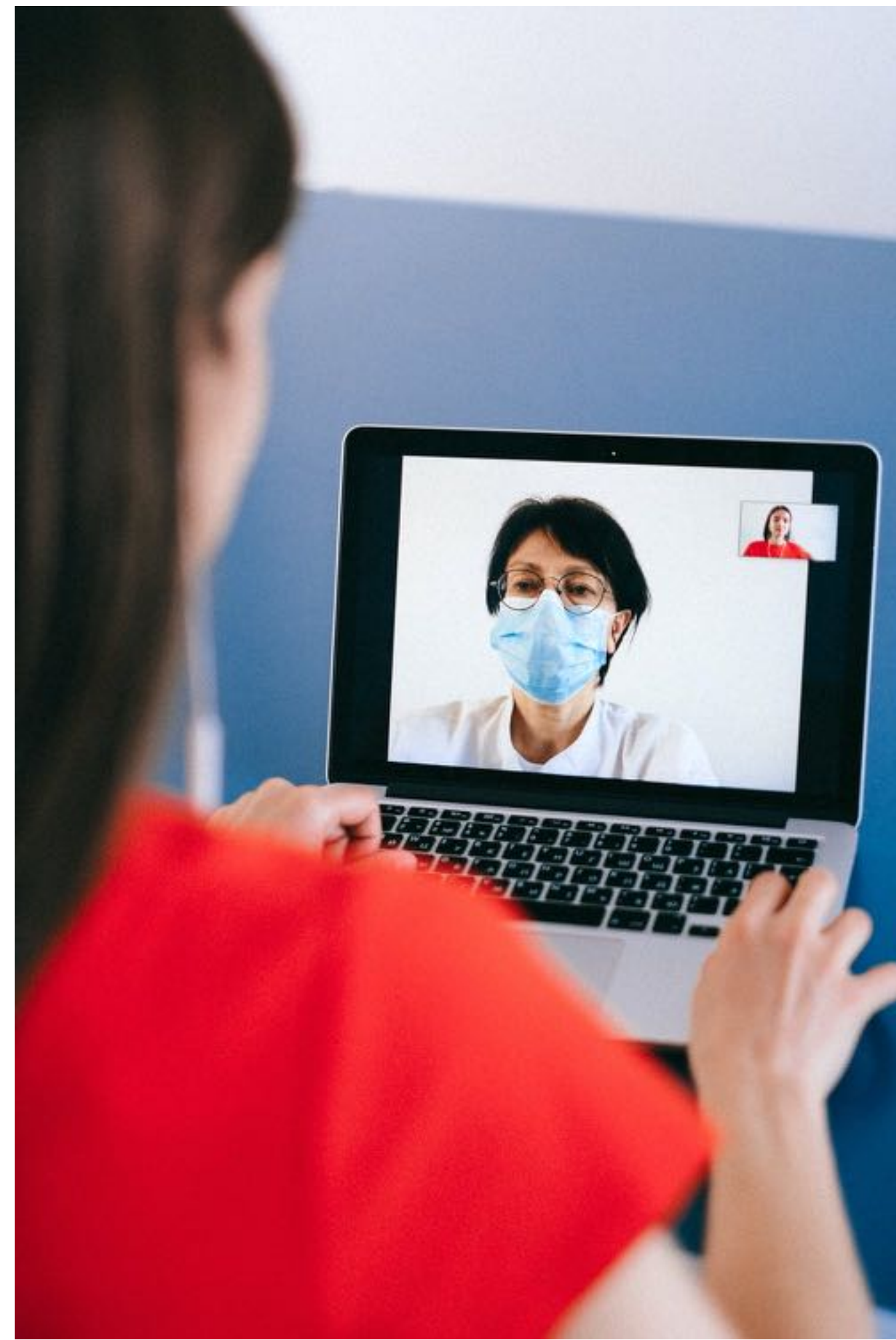
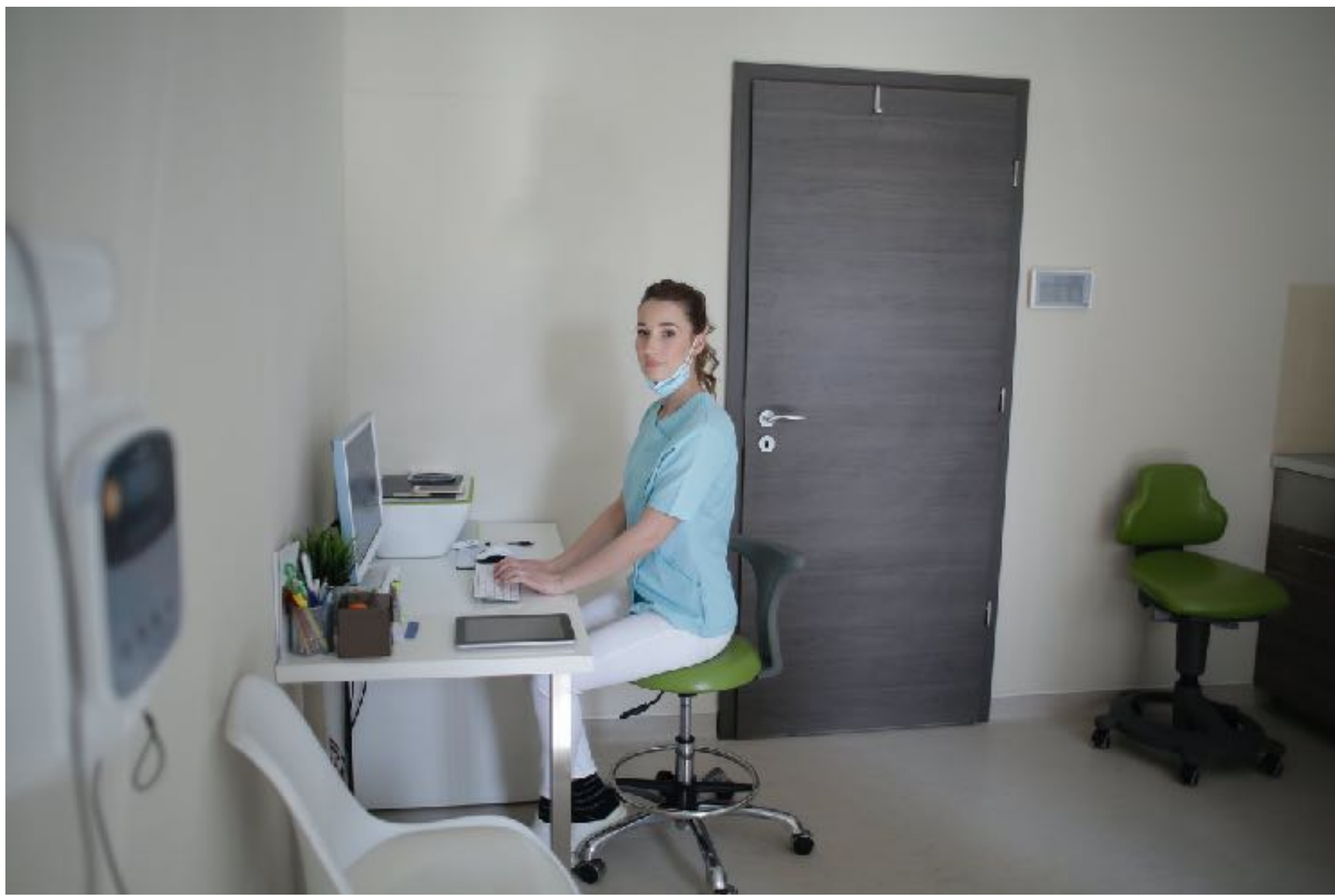
My Profile

Logout

## Patient Feedback

Review	Practice	Feedback	Date
HRT	Kirriemuir	Very easy to use Convenient	18/May/2021
Asthma	Kirriemuir	It reminds you of when to seek further assistance and helps you to guage if your medication is enough to maintain normal breathing	12/May/2021
Asthma	Kirriemuir	Very efficient and easy to complete I like that the answers are still reviewed and that it doesn't replace a direct consultation if needed	12/May/2021
Healthcheck	Kirriemuir	Easy to use and follow	12/May/2021
POP	Kirriemuir	Easy to do and save bother nurses	26/Apr/2021
COCP	Kirriemuir	Really easy to complete	08/Mar/2021
COCP	Kirriemuir	Really liked having this as an option to use instead of visiting the GP especially during current times Would much prefer to do this way in future too	27/Feb/2021
POP	Kirriemuir	Very handy especially in this climate!	12/Jan/2021
COPD	Kirriemuir	Very easy to use	14/Dec/2020







# WHAT SHOULD YOU CHECK? PRINCIPLES

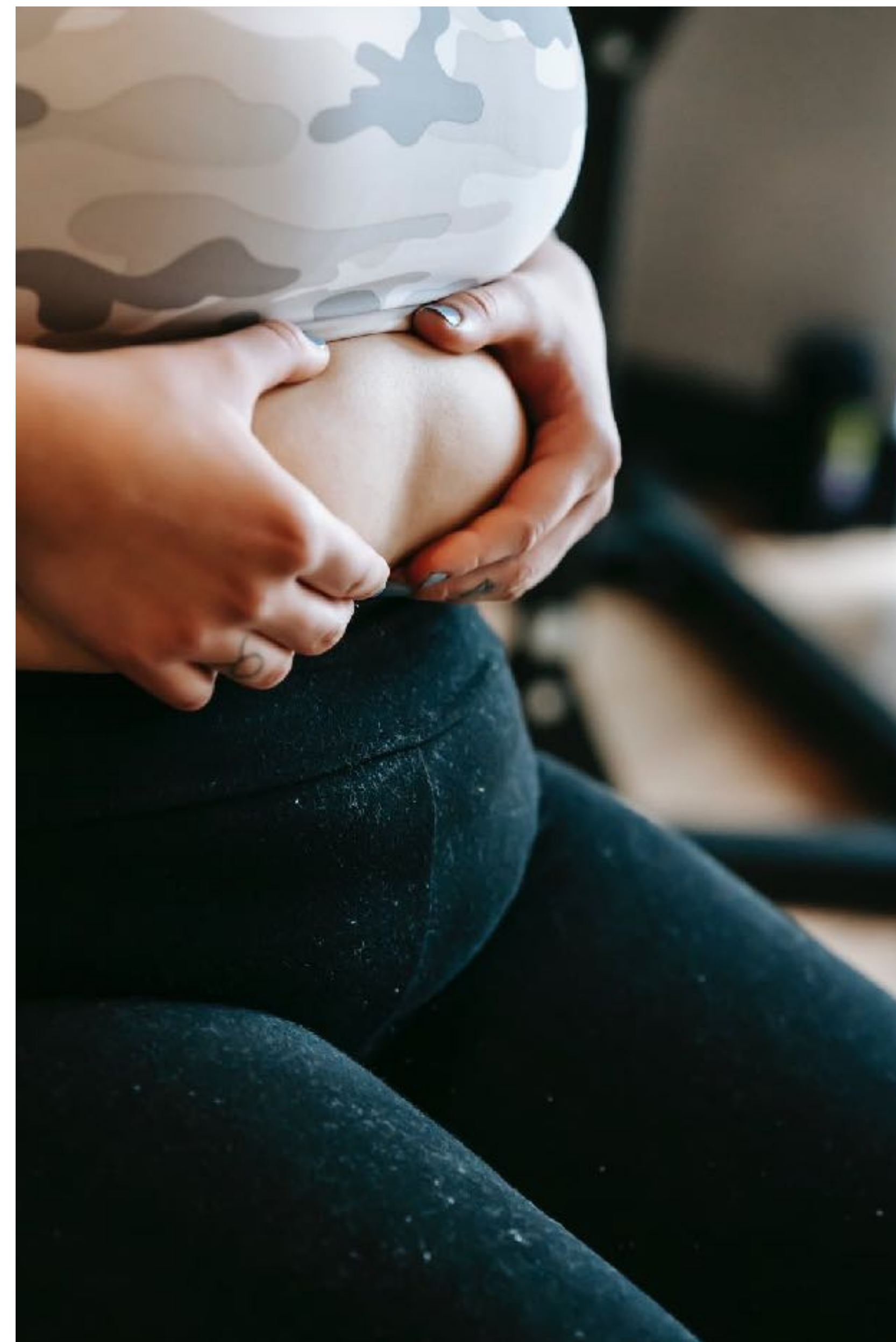
- Evidence in general is not strong almost all build upon consensus/opinion. Very few things have absolute clarity of what to do
- There is very little evidence on frequency of review. Success in Lothian for 2 yearly review of stable T4
  - In T2DM SIGN check eGFR annually; NICE advises person-centred depending on previous...
- No mention of checking FBC at almost any LTC review (bar CKD 3B/4/5)
- **Cardiovascular risk is measures in years.**
- For those on statins (NICE CG 181)
  - Only check ALT/AST before, 3m and 12m
  - At 3m check 40% reduction in non-HDL cholesterol
  - **NEVER AGAIN**

## Population screening is not UKNSC recommended for:

- Alcohol misuse
- AF
- Bladder cancer
- Coeliac
- COPD
- Dementia
- Depression
- Diabetes
- Familial hypercholesterolaemia
- Hypertension
- Kidney disease
- Lung cancer
- Osteoporosis
- Partner violence
- Thyroid disease
- Vascular risk



# RISKS AND SCREENING





# WHAT TO CHECK

- **Primary/Secondary Prevention**

- HYPERTENSION

- CKD

- CHD/PAD/AF/HF

- STROKE/TIA

- DIABETES

- OSTEOPOROSIS

- MENTAL HEALTH

- RA

- **Improved Care**

- CANCER

- DEMENTIA

- PALLIATIVE CARE

- **Public Health**

- OBESITY

- **Ongoing Active Management**

- EPILEPSY

- COPD/ASTHMA (Page 30)



Heart failure - chronic:

# Scenario: Information and advice, follow-up, and referral

Last revised in January 2017

Summary
Have I got the right topic?
How up-to-date is this topic?
Goals and outcome measures
Background information
Diagnosis
Management
Scenario: Confirmed heart failure with reduced ejection fraction
Scenario: Confirmed heart failure with preserved ejection fraction

From age 16 years onwards.

[Print this page](#)

On this page

- Information and Advice
- Referral
- Follow-up

## What information and advice should I give to a person with confirmed heart failure?

- Advise the person about reporting symptoms of worsening heart failure, including increasing breathlessness, fatigue, ankle or abdominal swelling, and rapid weight gain.
  - Advise them to seek urgent medical advice if symptoms deteriorate.
- Consider advising the person to monitor their weight at home to detect fluid retention of worsening heart failure, if practical.
  - Advise the person to check their weight, for example daily, weekly or fortnightly, depending on clinical judgement.
    - Advise the person to weigh themselves at the same time of day (for example after waking and voiding but before dressing or eating).
    - Advise what to do if there is a sudden and sustained weight gain (for example more than 2 kg in 3 days). Options include seeking medical advice, increasing the diuretic dose, reducing fluid intake, or a combination of actions.
  - The person should understand that deterioration can occur without weight gain.

Risk category	Clinical factor
Non-modifiable risk factors	previous fracture parental history of osteoporosis history of early menopause (before age of 40)
Modifiable risk factors	low BMI (<20 kg/m <sup>2</sup> ) smoking low bone mineral density
Coexisting diseases	alcohol intake diabetes inflammatory rheumatic diseases (RA or SLE) inflammatory bowel disease and malabsorption institutionalised patients with epilepsy human immunodeficiency virus primary hyperparathyroidism and endocrine disorders chronic liver disease neurological diseases (including Alzheimer's disease, Parkinson's disease, multiple sclerosis, stroke) moderate to severe chronic kidney disease arthritis
Drug therapy	long term antidiabetics anticoagulants aromatase inhibitors long term GABA Corticosteroids in men with prostate cancer HMGs oral glucocorticoids 100s

Risk category	Affected group	Recommendation
Alcohol	people who consume more than 31 units per week of alcohol	reduce alcohol intake to nationally recommended levels (14 units per week)
Smoking	all smokers people with low BMI (<20 kg/m <sup>2</sup> )	stop smoking achieve and maintain a BMI level of 20-25 kg/m <sup>2</sup>

**Risk factors**  
Risk factors associated with fragility fracture which should prompt consideration of fracture risk assessment

**Sources of further information**  
Royal Osteoporosis Society  
Cameron, Bath, BA2 0PU  
Helpline: 0800 800 3035  
Helpline email: nurse@ross.org.uk  
www.ross.org.uk

The Royal Osteoporosis Society is a UK charity dedicated to improving the diagnosis, prevention and treatment of osteoporosis. It runs a dedicated helpline (by phone, email and post) on weekdays between 9am and 5pm to answer medical queries relating to osteoporosis. The website provides a large volume of information and advice on living with the condition, current news and support groups.

**Age Scotland**  
Cassidayside House, 160 Cassidayside, Edinburgh, EH6 1PE  
Helpline: 0800 12 44 222  
www.ageuk.org.uk/scotland  
Email: helpline@ageukscotland.org.uk

Age Scotland is a charity which represents all older people in Scotland. It campaigns, commissions research and facilitates to support a better quality of life for everyone in later life. Age Scotland provides a wide range of confidential, impartial and simple information and promotes healthy living and active ageing. It also helps people to claim their entitlements and provides access to financial services targeted towards older people.

**NHS Inform**  
www.nhsinform.scot  
Tel: 0800 22 44 88

This is the national health and care information service for Scotland. It includes medicines and links to resources to support people with osteoporosis.  
www.nhsinform.scot/illnesses-and-conditions/muscle-bone-and-joints/conditions/osteoporosis

**Realistic treatment Scotland**  
**SIGN**  
Management of osteoporosis and the prevention of fragility fractures

**Quick reference guide**  
First published March 2015  
Revised June 2020  
Revised January 2021

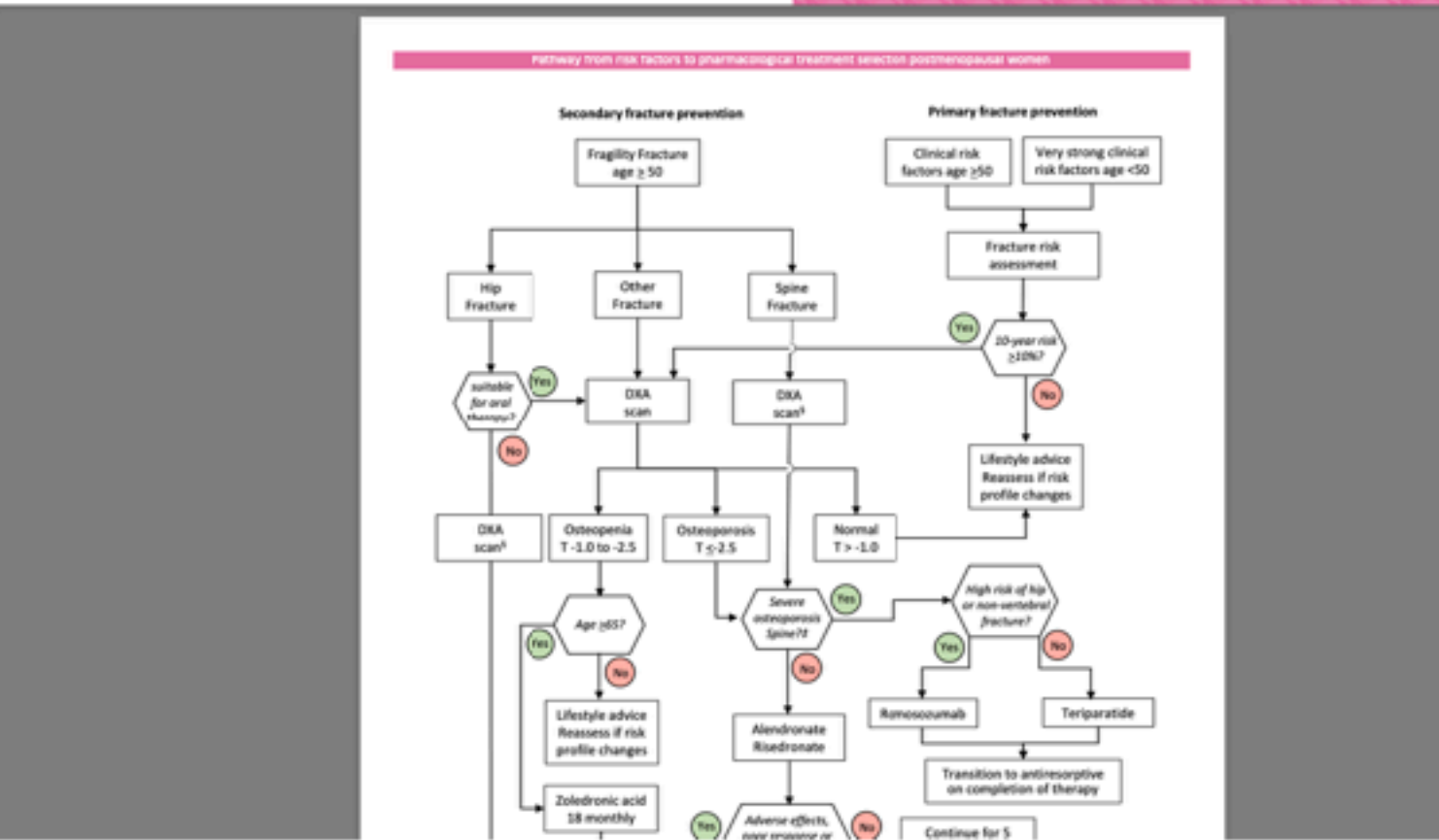
This Quick Reference Guide provides a summary of the main recommendations in SIGN 142 Management of osteoporosis and the prevention of fragility fractures.

Recommendations are awarded to indicate the strength of the supporting evidence. Good practice points are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

This QRG is also available as part of the SIGN Guidelines app.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: www.sign.ac.uk

Treatment options discussed with the person and their views and preferences taken into account. This should include assessment of the risks of fracture without treatment, and the risks and benefits of treatment and the options to have drug treatment.



Stroke and TIA:

# Scenario: Secondary prevention following stroke and TIA

Last revised in August 2020

Summary
Have I got the right topic?
How up-to-date is this topic?
Goals and outcome measures
Background information
Diagnosis
Management
Scenario: Suspected acute stroke
Scenario: Suspected transient ischaemic attack
Scenario: Secondary prevention following stroke

From age 16 years onwards.

[Print this page](#)

On this page

- Secondary prevention following stroke and TIA

## How should I follow up a person who has had a stroke or TIA?

- Secondary preventative measures are initiated at diagnosis in secondary care.
  - Arrange follow up in primary care on discharge, at 6 months and then at least annually to review health, social care needs (such as access to benefits, community participation, housing and return to work), ongoing risk factors, and secondary prevention.
  - Arrange review of carers of people with stroke at 6 months and then annually to assess their health and social care needs.
- Offer information on stroke, transient ischaemic attack (TIA) and vascular risk factors to people with stroke or TIA and their family/carers:
  - Patient information is available from the Stroke Association.
  - Provide advice about driving if appropriate.
  - Provide advice about returning to work if appropriate.
- Advise the person on lifestyle measures:

Dementia:

# Scenario: Follow up of confirmed dementia in primary care

Last revised in October 2020

Summary
Have I got the right topic?
How up-to-date is this topic?
Goals and outcome measures
Background information
Diagnosis
Management
Scenario: Suspected dementia
Scenario: Follow up of confirmed dementia in primary care

From age 30 years onwards.

[Print this page](#)

On this page

- Follow up in primary care

## How should I follow up a person who has been diagnosed with dementia?

- Following a diagnosis of dementia:
- Discuss the diagnosis and give written information to the person and their family/carer.
    - Explain the symptoms, treatment, and prognosis of dementia to the person and, if the person consents, their carer/family.
    - Give written information on local dementia support services and sources of information, for example voluntary support organizations, advocacy services, and sources of financial and legal advice.
  - Identify the person's wishes for future care (advance care planning) while the person still has mental capacity. This should include discussion on:

Epilepsy:

# Scenario: Routine epilepsy review

Last revised in March 2021

Summary
Have I got the right topic?
How up-to-date is this topic?
Goals and outcome measures
Background information
Diagnosis
Management
Scenario: Suspected epilepsy
Scenario: Managing an epileptic seizure
Scenario: Routine epilepsy review

From birth onwards.

## How should I routinely review a person with confirmed epilepsy?

Undertake a routine review of all people with epilepsy in primary care at least once a year.

- Ensure the person and their carers are aware of who to contact if there are problems relating to their epilepsy, such as a named epilepsy specialist nurse.
  - Ensure all children and young people are reviewed by an epilepsy specialist at least once a year.
  - Specialist review of other people with epilepsy is at the discretion of the specialist once the diagnosis is confirmed and treatment is planned.
- Assess seizure control by asking about seizure frequency and severity, and any changes since the person was last reviewed.
  - For people who have more than one type of seizure, identify how frequently they have each seizure type. If seizures are uncontrolled, see When to seek specialist help.

# What is the role of primary care in the management of someone with confirmed rheumatoid arthritis?

- The role of primary care as part of the multidisciplinary team managing people with rheumatoid arthritis (RA) is to:
  - Ensure that all adults with RA have:
    - Rapid access to specialist care for flares.
  - Information about when and how to access specialist care – for example, check the person has a named rheumatology specialist nurse who coordinates care and has access to physiotherapy, occupational therapy and podiatry services for advice on mobility, pain control, work-related issues and foot health.
  - Ongoing drug monitoring – offer regular medication reviews to check concordance, ask about adverse effects and manage where appropriate. For more information, see the CKS topics on DMARDs (for details of the blood monitoring required for individual DMARDs if this is not carried out in secondary care) and NSAIDs - prescribing issues.
  - Ensure all people with RA, including those who have achieved the treatment target, are offered an annual review (this may be coordinated by rheumatology) to:



Coronary/cerebrovascular Disease Review (20 minutes)  
(includes AF, CHD, Angina, PVD, Stroke/TIA)

Document:

Symptoms of disease (chest pain/angina/palpitations/SOB/TIAs/ Claudication)

Smoking status/cessation advice/Lifestyle/eating/exercise advice

FAST screen (#338u) and Alcohol Consumption Counseling (#9k11) if applicable (LES)

Medication compliance

NYHA Class [in heart failure]

Measure:

BMI [In moderate/severe heart failure advise home monitoring of weight on waking in the AM. If sudden gain in 3-4lbs (1.5-2kg) with increase in SOB symptoms get a GP review soon.

BP [preferably HBPM]

In heart failure: Pulse rhythm & rate– aim for resting pulse around 60. Get pt to measure resting pulse at home before referring to GP if needed to increase BB dose.

Send: C&E

Fasting glucose every 3 years if not diabetic [if previously raised also do HBA1c]

Anaemic screen if on DOAC or warfarin and has symptoms of anaemia

Check: All on ACE-I or ARB (unless AF alone)

AF should be considered warfarin or DOAC if CHADSVASc >1. Also BB, diltiazem or digoxin

Angina/previous MI on beta blocker

Cerebrovascular or PVD on clopidogrel

Coronary Artery disease (MI/angina) on aspirin [heart failure alone doesn't need aspirin]

ALL on a statin (80mg atorvastatin if PVD)

\*\*\*If any of above not met, pass name to GP for virtual review\*\*\*

Give influenza vaccination if not already had that season

Follow up: Annual or review with GP if symptoms worsening

No requirement to check: Urinalysis, LFTs, cholesterol [as all should be on statin], FBC, ACR. Should patients wish a letter to explain rationale for not checking annual cholesterol, provide practice



# TAKE HOME MESSAGES

- Stick to only what is clearly mentioned as it stands **and no more**
- **Be assured, there is not evidence to say you are wrong!**
- Be creative and develop processes to suit patient need
- Consider dividing data capture & management. [CTAC/online etc]
- Be safe. If you don't maintain systems, outcomes **could** worsen
- There should be agreement across Scotland (or summarise from NICE) the basic data captures which have some evidence where possible which could be **offered** at each type of LTC review

DEMAND  
EVIDENCE  
AND  
THINK  
CRITICALLY