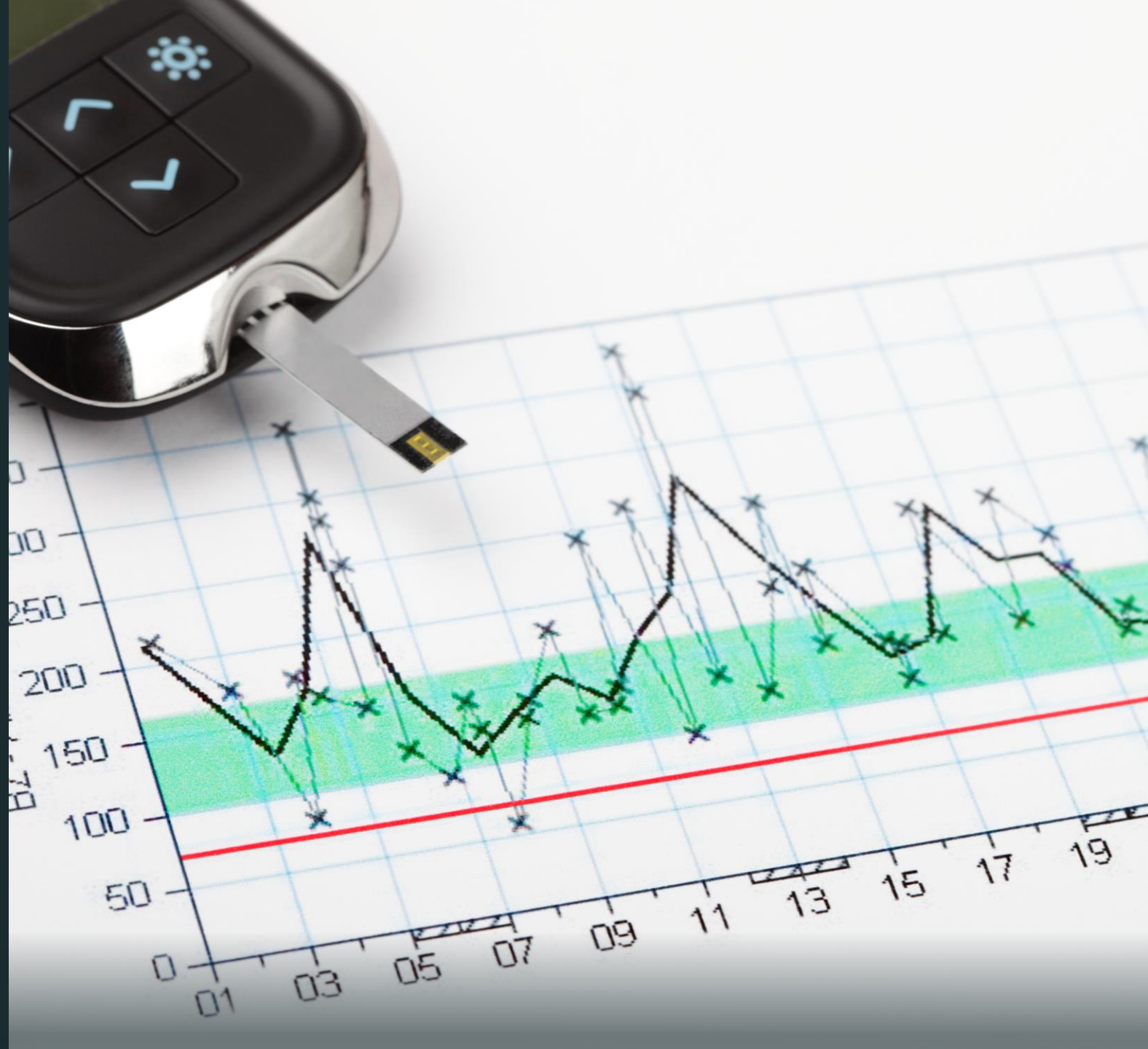


Diabetes GP Audits to Improve Practice

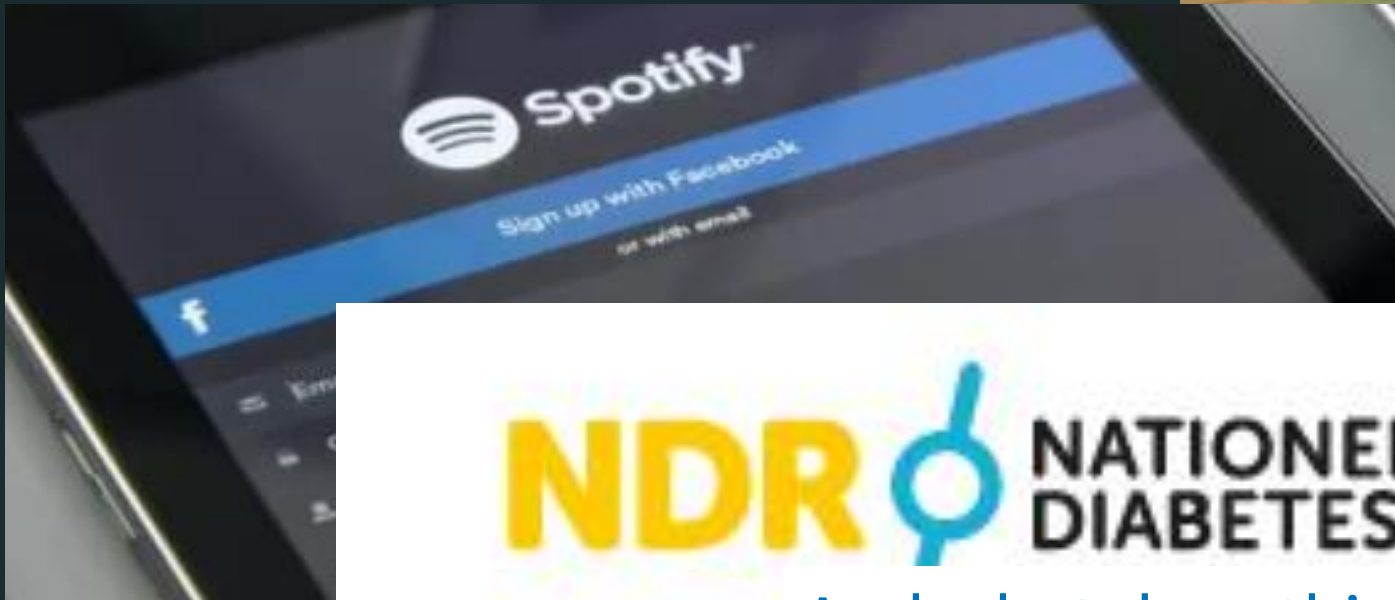
Dr Margaret Lynch

MBBS FRACGP MPH MMed

Glendale Medical Centre, Glendale NSW 2285



SWEDEN WHAT IS IT FAMOUS FOR?



NDR  **NATIONELLA
DIABETESREGISTRET**

And what does this have to do with
Australian general practice?



How data informs practice in Sweden (1)

The Swedish National Diabetes Register (NDR) serves as a useful tool for providers of everyday care

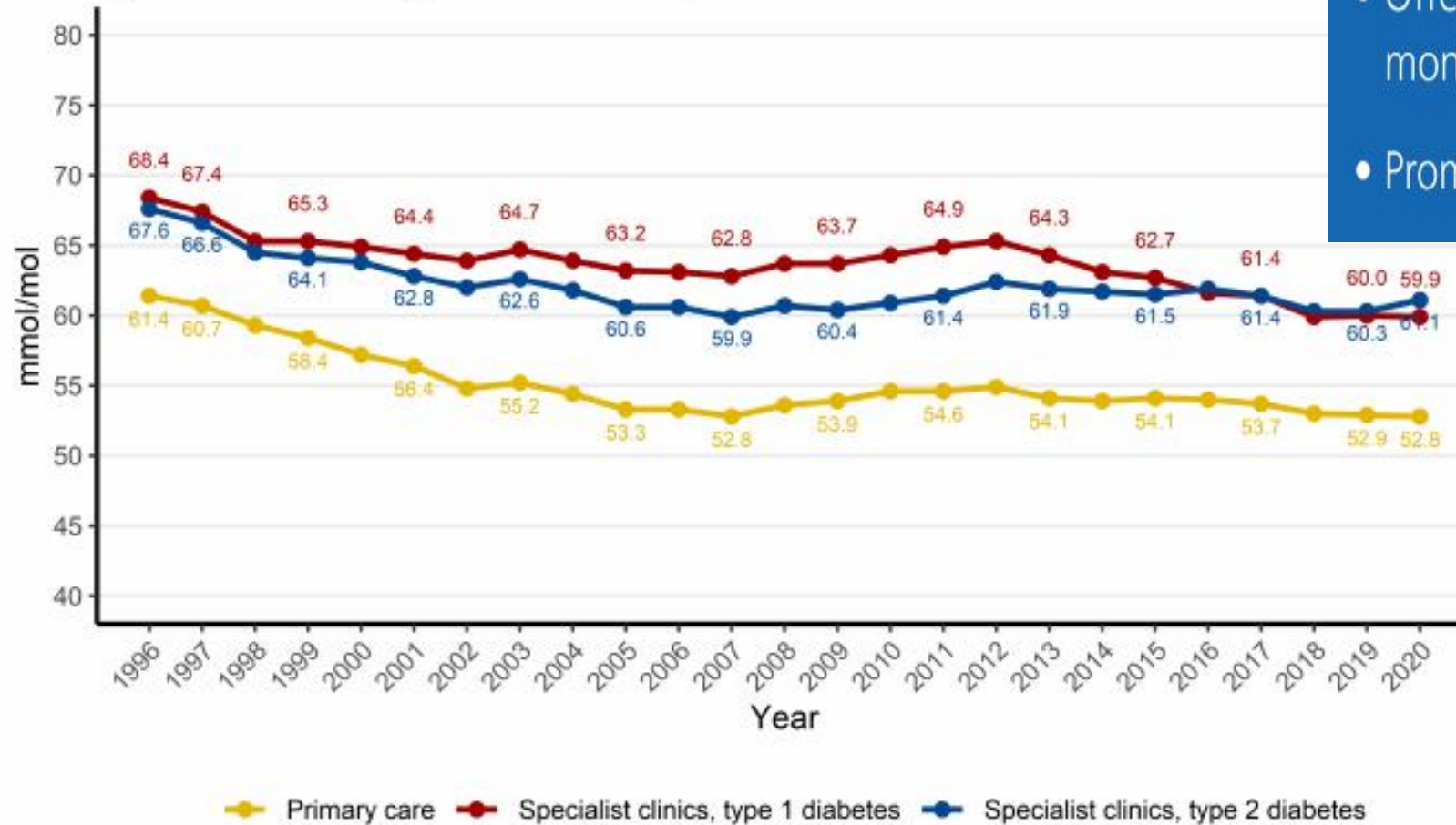
Chronic diseases place a heavy burden not only on patients and their families, but on healthcare systems around the world. Such pressure on the infrastructure and organisation of the systems often leads to poor management of chronic conditions. The resulting complications reduce quality of life and dramatically increase healthcare costs. The personal and social repercussions are enormous. Diabetes management has a

Evidence suggests that use of the register leads to better long-term outcomes.



How data informs practice in Sweden (2)

Figure 11. Mean HbA1c levels (IFCC, mmol/mol) over time in primary care, type 1 diabetes and type 2 diabetes in specialist clinics.



- Offers a clinical tool for risk assessment, monitoring and comparison.
- Promotes improvement through measurement.


The Swedish National Diabetes Register (NDR) - Nationwide results 1996 - 2020 : https://www.ndr.nu/pdfs/NationWideResults_1996-2020.pdf

The magic of

Statistics

The profile

See key indicators for county councils, hospitals or health centers.

 Search here for county council, hospital or health

The button

Choose from ready-made comparisons or produce your own customized statistics.

OPEN

Annual report

Conclusions in digital or downloadable format.

DOWNLOAD

About the statistics

[Indicator list](#)

Here you will find information about which indicators are in the Button.

[Variable list for NDR and Swediabkids](#)

What variables are included and have existed in NDR?

[Interpret results](#)

The results can be an important basis for the own improvement work, but all interpretation of data requires a knowledge of local conditions, coverage and registration quality and also of the composition of patient groups at the various health centers and clinics.

READ MORE

<https://www.ndr.nu/#/statistik>

**AUSTRALIAN
NATIONAL
DIABETES
AUDIT**

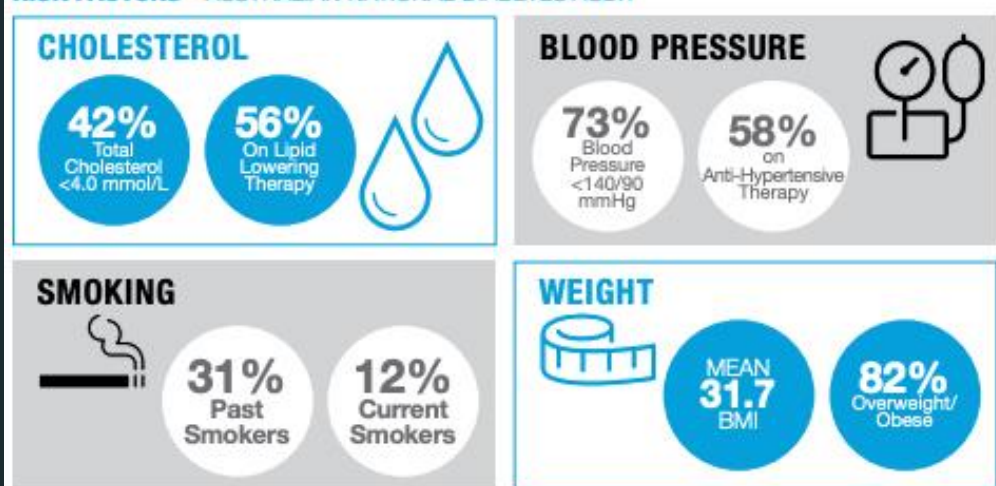
ANNUAL REPORT 2019



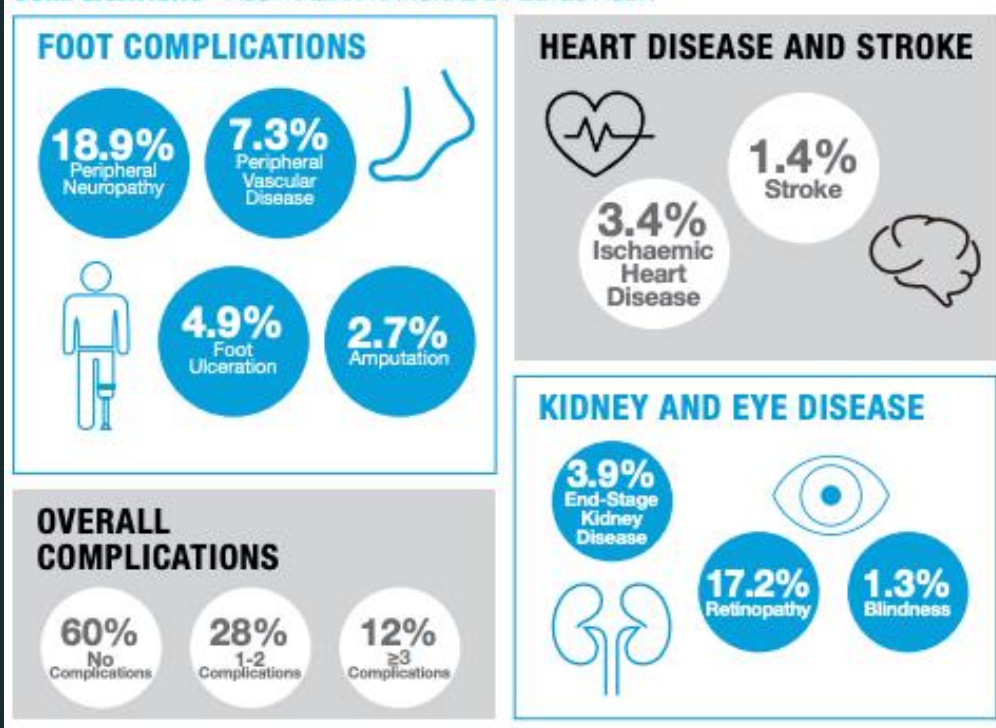
Australian data

<https://nadc.net.au/wp-content/uploads/2020/03/ANDA-AQCA-2019-Annual-Report.pdf> [Accessed 19 September 2021]

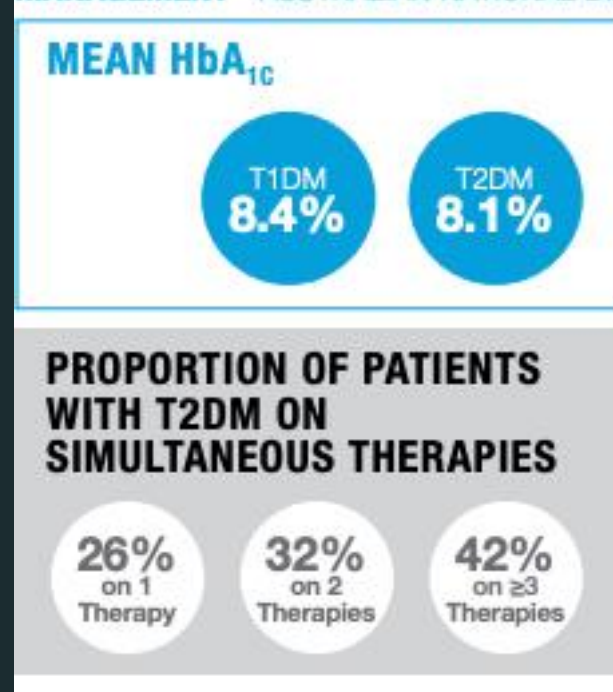
RISK FACTORS - AUSTRALIAN NATIONAL DIABETES AUDIT



COMPLICATIONS - AUSTRALIAN NATIONAL DIABETES AUDIT



MANAGEMENT - AUSTRALIAN NATIONAL DIABETES AUDIT



How does
your
practice
compare?

Centre Types - Participating Sites

Centres of Excellence and Tertiary Care Diabetes Services N= 42

Secondary Care Diabetes Services and Primary Care Diabetes Services N=38

Does clinical audit make a difference?

https://www.cochrane.org/CD000259/EPOC_audit-and-feedback-effects-on-professional-practice-and-patient-outcomes [Accessed 19 September 2021]

The effect of audit and feedback on professional behaviour and on patient outcomes ranges from little or no effect to a substantial effect. The quality of the evidence is moderate.

Audit and feedback may be most effective when:

1. the health professionals are not performing well to start out with;
2. the person responsible for the audit and feedback is a supervisor or colleague;
3. it is provided more than once;
4. it is given both verbally and in writing;
5. it includes clear targets and an action plan.

In addition, the effect of audit and feedback may be influenced by the type of behaviour it is targeting. It is uncertain whether audit and feedback is more effective when combined with other interventions.

Authors' conclusions:

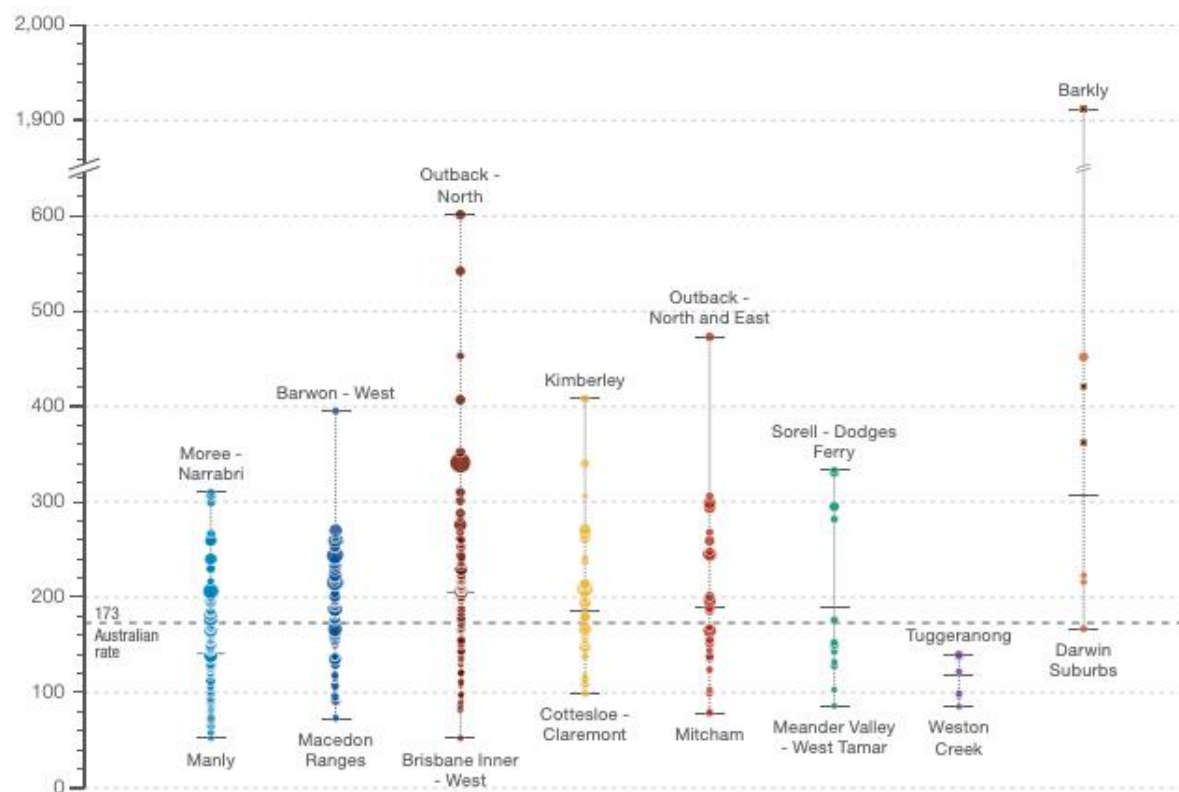
Audit and feedback generally leads to small but potentially important improvements in professional practice. The effectiveness of audit and feedback seems to depend on baseline performance and how the feedback is provided. Future studies of audit and feedback should directly compare different ways of providing feedback.

How well are GPs performing?

Diabetes complications

Figure 1.29: Number of potentially preventable hospitalisations – diabetes complications per 100,000 people, age and sex standardised, by Statistical Area Level 3 (SA3), state and territory, 2014–15

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Highest rate	310	395	601	408	473	333	140	1,912*
State/territory	141	173	205	186	190	190	118	307
Lowest rate	52	72	52	99	78	86	85	167
No. hospitalisations	11,660	10,968	10,120	4,892	3,714	1,119	443	643



[Australian Atlas of Healthcare Variation 2017: 1.5 Diabetes complications](https://www.safetyandquality.gov.au/sites/default/files/migrated/1.5-Diabetes-complications.pdf)

<https://www.safetyandquality.gov.au/sites/default/files/migrated/1.5-Diabetes-complications.pdf>
[Accessed 19 September 2021]

Therapeutic inertia (1)

“Therapeutic inertia, defined as the failure to initiate or intensify therapy in a timely manner according to evidence-based clinical guidelines, is a key reason for uncontrolled hyperglycaemia in patients with type 2 diabetes. ”

“In most studies, the median time to treatment intensification after a glycated haemoglobin (HbA1c) measurement above target was more than 1 year (range 0.3 to >7.2 years). ”

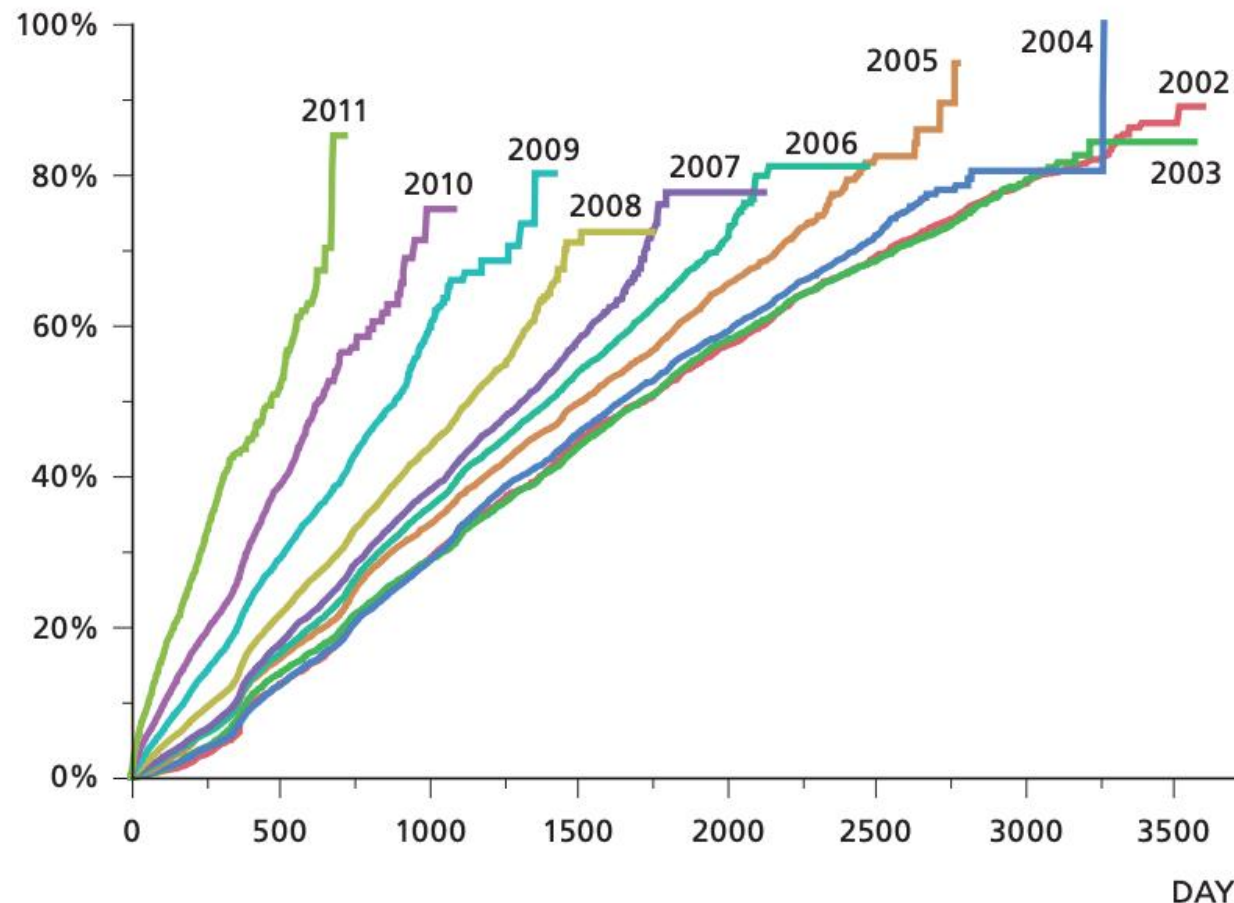
Therapeutic inertia in the treatment of hyperglycaemia in patients with type 2 diabetes: A systematic review .August 2017 [Diabetes Obesity and Metabolism](#) 20(suppl 1).

https://www.researchgate.net/publication/319234861_Therapeutic_inertia_in_the_treatment_of_hyperglycaemia_in_patients_with_type_2_diabetes_A_systematic_review [Accessed 19 September 2021]

Therapeutic inertia (2)

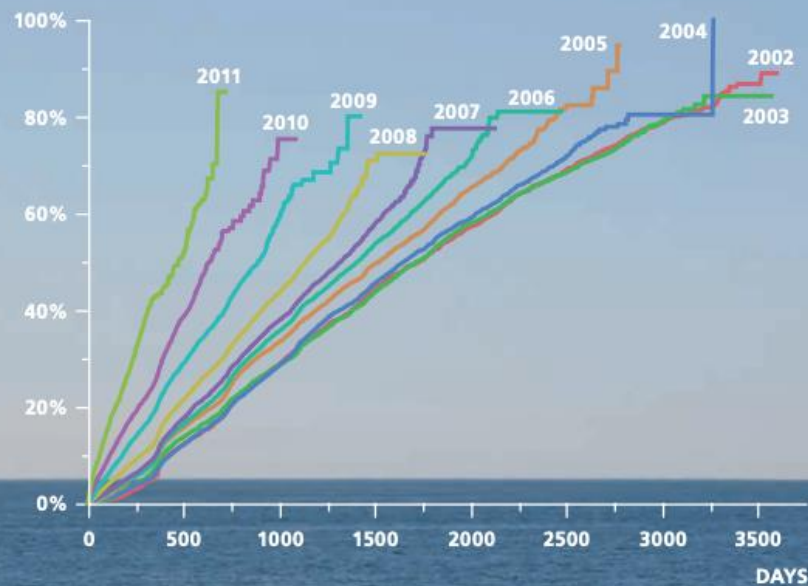
Time to pharmacological treatment has been reduced from year 2002 to 2011.

PATIENTS



Time to pharmacological treatment has been reduced from year 2002 to 2011.

PATIENTS



Why therapeutic inertia matters



 **Cardiovascular Diabetology**

[Home](#) [About](#) [Articles](#) [Submission Guidelines](#)

Original investigation | [Open Access](#) | [Published: 07 August 2015](#)

Delay in treatment intensification increases the risks of cardiovascular events in patients with type 2 diabetes

[Sanjoy K Paul](#) , [Kerenaftali Klein](#), [Brian L Thorsted](#), [Michael L Wolden](#) & [Kamlesh Khunti](#)

[Cardiovascular Diabetology](#) **14**, Article number: 100 (2015) | [Cite this article](#)

12k Accesses | **107** Citations | **40** Altmetric | [Metrics](#)

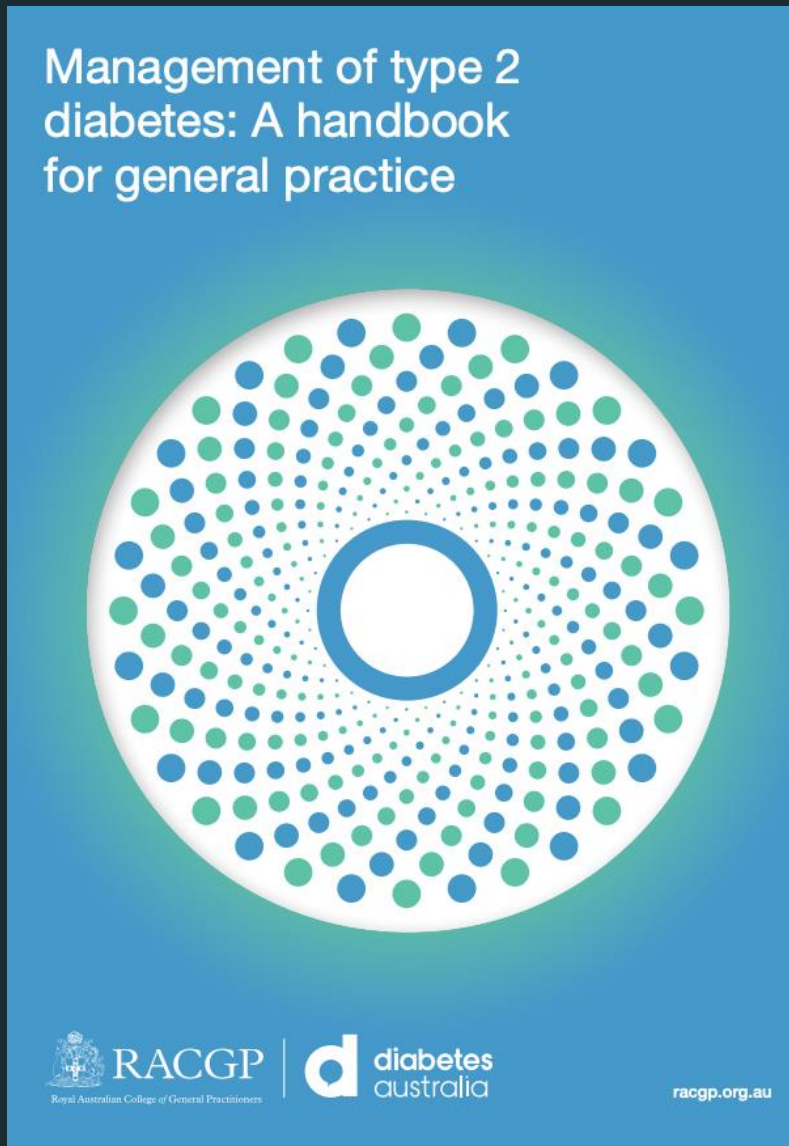
Abstract

Background

The aim of the study was to evaluate the effect of delay in treatment intensification (IT; clinical inertia) in conjunction with glycaemic burden on the risk of macrovascular events (CVE) in type 2 diabetes (T2DM) patients.


<https://cardiab.biomedcentral.com/articles/10.1186/s12933-015-0260-x> [Accessed 19 September 2021]


GP knowledge (1)



<https://www.racgp.org.au/getattachment/41fee8dc-7f97-4f87-9d90-b7af337af778/Management-of-type-2-diabetes-A-handbook-for-general-practice.aspx> [Accessed 19 September 2021]

GP knowledge (2)

**Hunter New England**

**Community HealthPathways**

Hunter New England

COVID-19

About HealthPathways

Acute Services

Allied Health Referrals

Child Health

Care in the Last 12 Months of Life

Investigations

Lifestyle & Preventive Care

Medical

Assault or Abuse

Assessing Genetic Risk



Cardiology



Dermatology

Diabetes


Diabetes Annual Cycle of Care


Diabetes Eye Disease Screening


 /  / [Insulin Therapy in Type 2 Diabetes](#) / [Preparation for Initiating Insulin in Type 2 Diabetes](#)





Preparation for Initiating Insulin in Type 2 Diabetes



[Education](#) 


[Self-monitored blood glucose monitoring \(SMBG\)](#) 


[Types of insulin](#) 

[Insulin devices and needles](#) 

[Individualised HbA1c targets](#) 





[Overcoming barriers to insulin initiation](#)  

[Insulin initiation](#) 

[Other topics to cover](#) 

For initiating and titrating insulin schedules, see "starting insulin" in the [Insulin Therapy in Type 2 Diabetes](#) pathway.

Information

 [For patients](#)   

© 2021 HealthPathways. All rights reserved. | [Terms of Use](#) | [View on classic HealthPathways](#)

How big is the implementation gap in our practice?

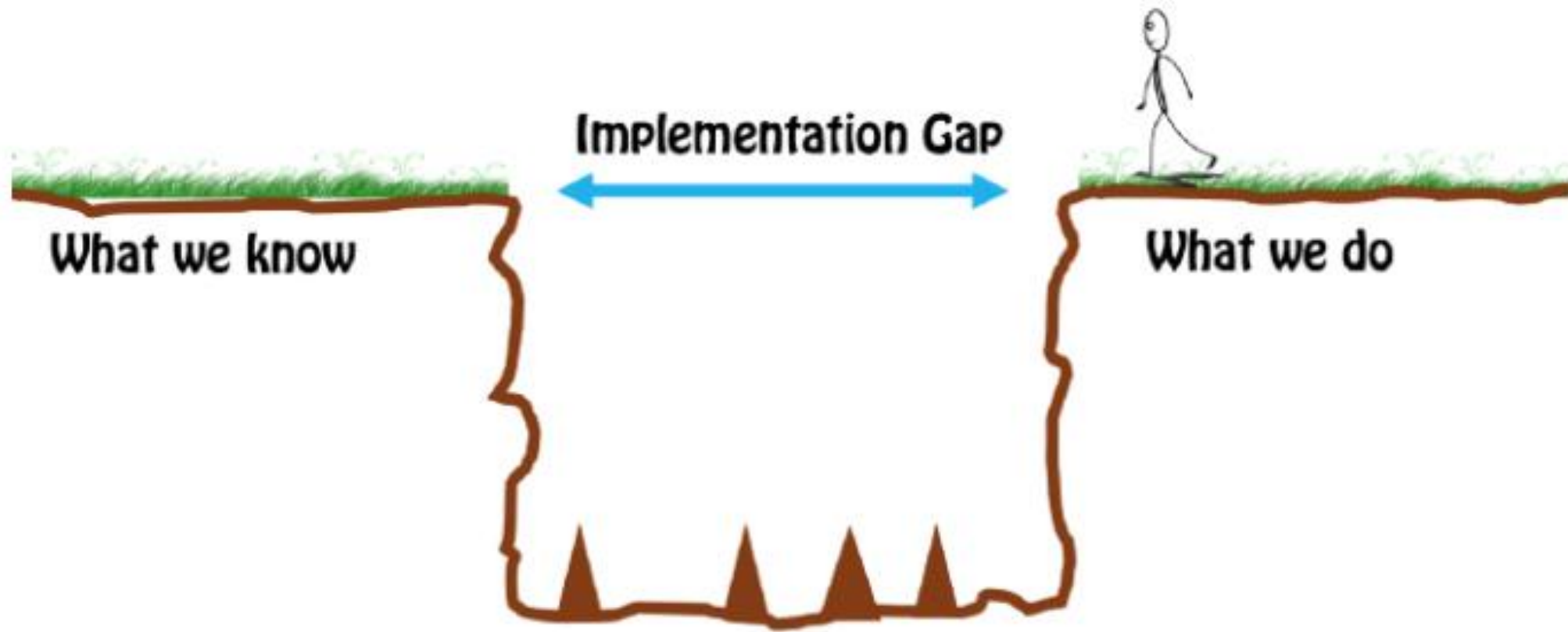
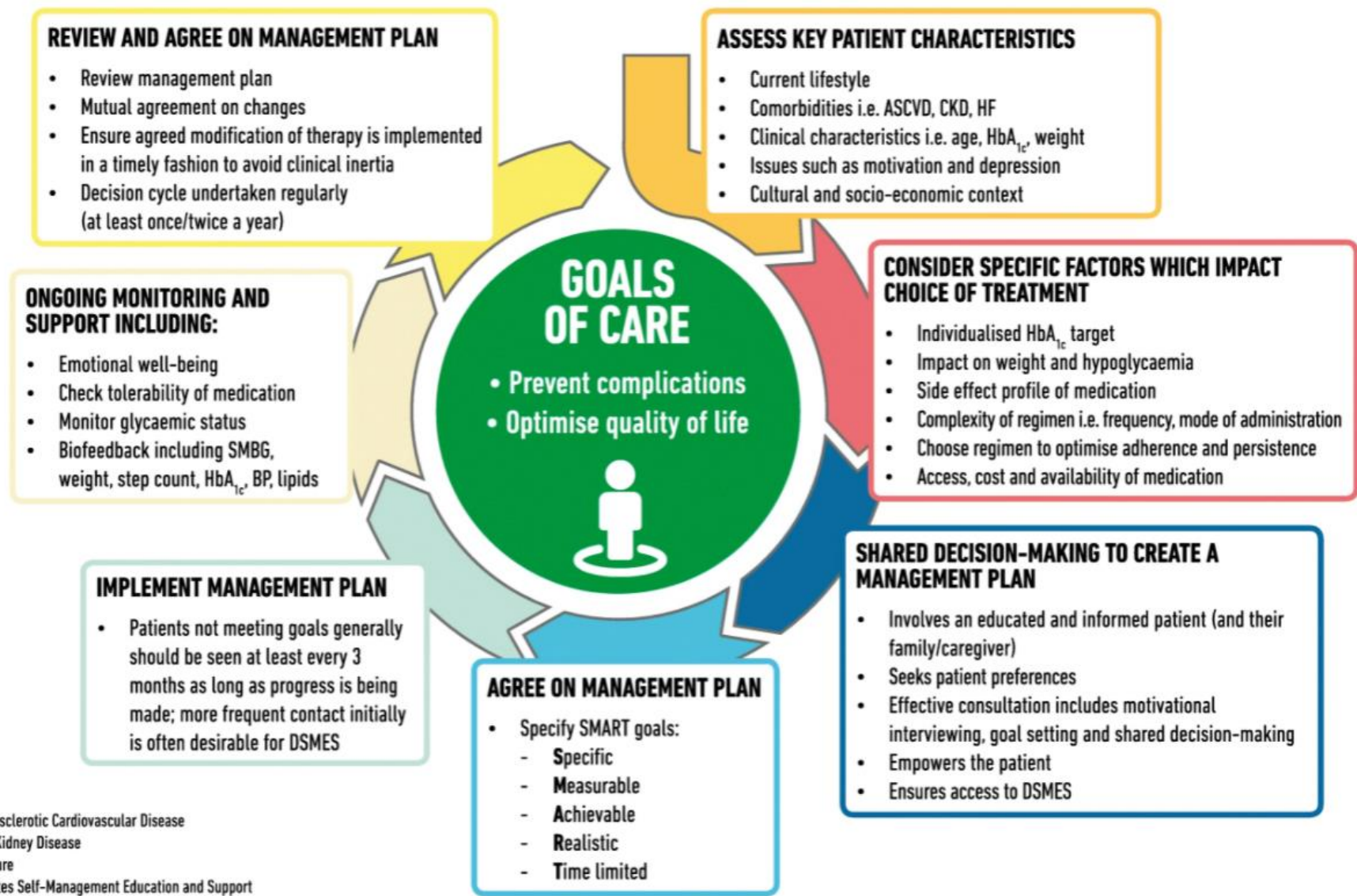


Image from: <https://medium.com/@adrian.ireland107/do-less-3a4bcfeb6a35> [Accessed 19 September 2021]

DECISION CYCLE FOR PATIENT-CENTRED GLYCAEMIC MANAGEMENT IN TYPE 2 DIABETES



ASCVD = Atherosclerotic Cardiovascular Disease
CKD = Chronic Kidney Disease
HF = Heart Failure
DSMES = Diabetes Self-Management Education and Support
SMBG = Self-Monitored Blood Glucose

Potential focus areas for practice improvement?

Why should GPs consider participating?

1. Improve patient outcomes
2. Provide accountability
3. Practice team satisfaction
4. Meet CPD requirements



Audit = CPD

Current CPD: 2020- 2022 triennium



Education

Clinical resources

Running a practice

Advocacy

News

Search

LOGIN / JOIN

Measuring outcomes

Professional Development Plan
(15 pts per year upon completion of annual reflection)

Audit focused on GPs own practice:
Activities using audit of patient outcome data and
feedback from patients, peers, colleagues)
to assess patient outcomes and implement quality improvements

Future CPD requirements: From January 2023

The 50 hours of CPD per year will consist of:

- 25 hours of active CPD – reviewing outcomes and measuring performance (GPs can decide the best mix for these activities to suit their practice, with five hours minimum of each type)
- 12.5 hours traditional learning or educational activities – eg reading, lectures, conferences
- 12.5 hours – GPs can choose across the three types of CPD.

A patient perspective* (Dunning Kruger effect?)

So, how does this relate to our healthcare system?

We brag about our excellent care, our great hospitals and doctors...

“Our actual outcomes, quality of care, and equity are all woefully mediocre on a number of measures.”

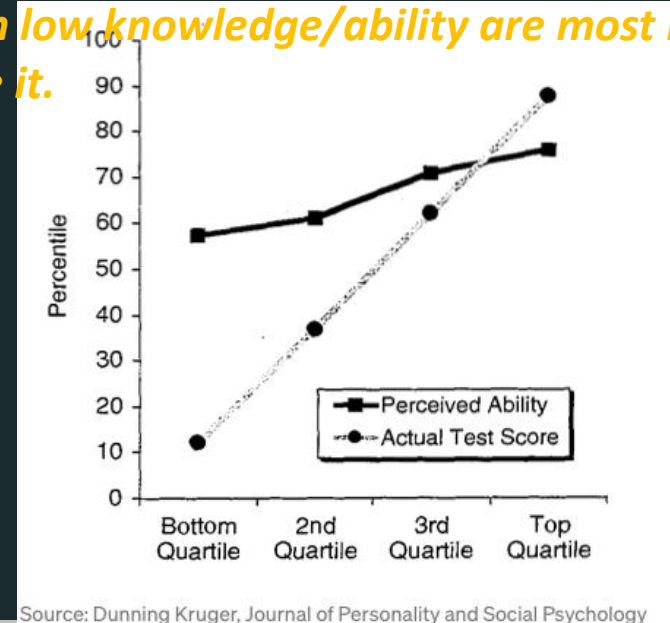
“Similarly, how many of us like to believe that our doctors are “the best”? Perhaps they even have “best doctors” plaques in their offices to support this claim. Again, it’s possible that they are, but, in most cases, those beliefs are not likely to be true.

Statistically speaking, most of us receive average care, and some of us receive sub-standard care. We don’t live in Lake Wobegon. We can’t all be getting the best care, or even above-average care.”

* USA perspective

<https://tincture.io/our-dunning-kruger-healthcare-system-e4d74d8400bf> [Accessed 20 September 2021]

Dunning-Kruger effect.....refers to the cognitive bias that leads people to overestimate their knowledge or expertise.those with low knowledge/ability are most likely to overestimate it.



“It is widely accepted that as much as a third of our healthcare services are unnecessary or inappropriate — even physicians admit that — but, of course, it is *other* physicians doing all that. No one likes to believe it is their doctor, and few doctors will admit that they are the problem. Dunning-Kruger, indeed.”

Accountability

“Much as they’d like us to, it is not enough for us to always assume that our healthcare professionals and institutions are qualified, much less “the best.” It is not enough for us to trust that their opinions are enough to base our care recommendations on. It is not enough to believe that local practice patterns are right for our care, even when they are at variance with national norms or best practices.

“Trust” is seen as essential to the patient-physician relationship, the supposed cornerstone of our healthcare system, but trust needs to be earned. **We need facts. We need data. We need empirically-validated care. We need accountability “**

<https://tincture.io/our-dunning-kruger-healthcare-system-e4d74d8400bf> [Accessed 20 September 2021]

But.....

I don't have time

I can't afford it

COVID

Yes – time investment will be required – talk to your PHN to maximise efficiency, get support (e.g PENCAT or POLAR GP data extraction tools)

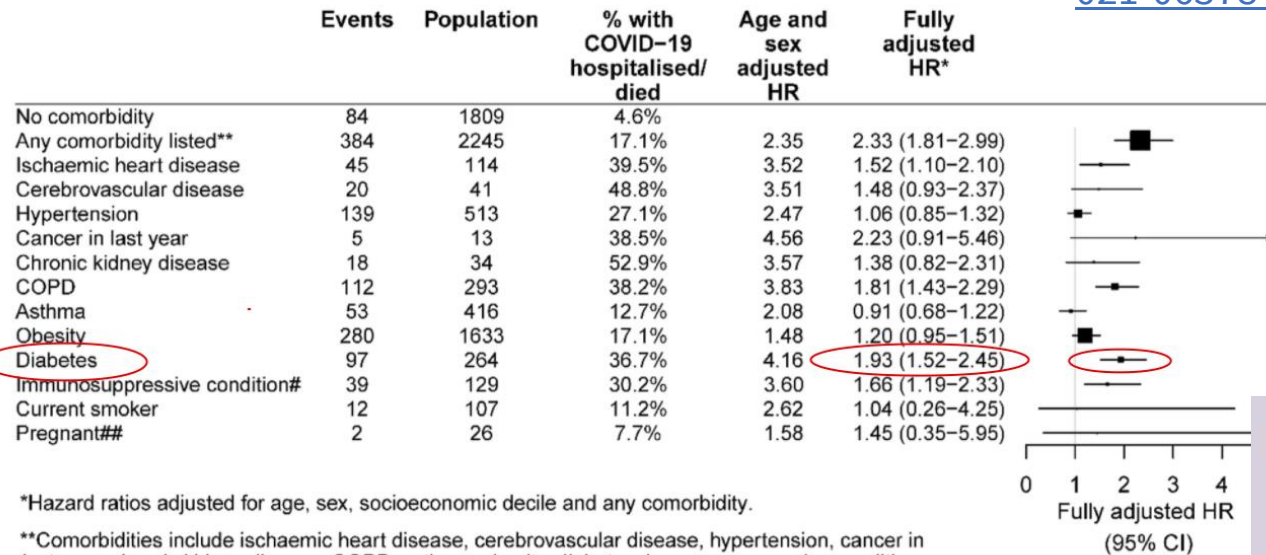
At worst cost neutral – at best increased revenue (eg PIP QI payments:

<https://www.racgp.org.au/FSDEDEV/media/documents/Running%20a%20practice/Security/PIP-QI-factsheet.pdf>)

“ Underlying conditions” = worse COVID outcomes

COVID & diabetes

From: [High risk groups for severe COVID-19 in a whole of population cohort in Australia](#)



Hazard ratios for risk of severe COVID-19 (hospitalisation or death) according to co-morbidities and other factors compared to those without each comorbidity

Diabetes management during the coronavirus pandemic: Be proactive and prepared

<https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-021-06378-z> - NSW study [Accessed 20 September 2021]

Article | Published: 10 July 2020

Fasting blood glucose at admission is an independent predictor for 28-day mortality in patients with COVID-19 without previous diagnosis of diabetes: a multi-centre retrospective study

Sufei Wang, Pei Ma, Shujing Zhang, Siwei Song, Zhihui Wang, Yanling Ma, Juanjuan Xu, Feng Wu, Limin Duan, Zhengrong Yin, Huilin Luo, Nian Xiong, Man Xu, Tianshu Zeng & Yang Jin ✉

Diabetologia 63, 2102–2111 (2020) | [Cite this article](#)

Research in context

What is already known about this subject?

- Hyperglycaemia is associated with an increased risk of mortality in community-acquired pneumonia, stroke, acute myocardial infarction, trauma and surgery

What is the key question?

- Is fasting blood glucose (FBG) a risk factor for 28-day mortality in COVID-19 patients without previously diagnosed diabetes?

What are the new findings?

- FBG was an independent risk factor for fatality in COVID-19 patients not previously diagnosed as having diabetes
- Patients with serum glucose concentration ≥ 7.0 mmol/l had a higher risk of death
- Hyperglycaemic patients were more likely to develop complications

How might this impact on clinical practice in the foreseeable future?

- Addressing elevated FBG at an early stage can help clinicians better manage the condition and lower the mortality risk of COVID-19 patients

<https://link.springer.com/article/10.1007%2Fs00125-020-05209-1> [Accessed 20 September 2021]

https://www.racgp.org.au/getmedia/97a5abb4-1290-42cb-91c0-eabcaa8ca590/Diabetes-management-during-coronavirus-pandemic_1.pdf.aspx [Accessed 20 September 2021]