GP Diabetes Injectables Masterclass 2018

Saturday 24 November 2018

Hosted by: Diabetes, Obesity and Metabolism Translational Research Unit (DOMTRU)

DOMTRU

NSW GOVERNMENT Health South Western Sydney Local Health District

C

DIABETES INJECTABLES

Welcome

A Continuation of the Diabetes Treatment Algorithm

Acknowledgement to Country

I would like to acknowledge the Dharawal people who are the traditional custodians of this land on which we stand upon today.

I would also like to pay respect to the elders, past and present of the Dharawal nation and extend that respect to other Aboriginal people present.

Housekeeping

- Breaks
    - Morning Tea 10.30pm – 10.50am
    - Lunch 1.00pm – 1.45pm
    - Afternoon Tea 3.45pm – 4.00pm

- Facilities
    - Restrooms are located just outside of the room.

- It would be appreciated if mobile phones could be switched off or onto silent.

- DOMTRU information is located at the back of the room for your perusal.

Thank you to our sponsors

Gold Sponsors

Silver Sponsors

Exhibitors

Diabetes Obesity and Metabolism Translational Research Unit (DOMTRU)

- DOMTRU works with multiple agencies, organisations and communities to facilitate and research a population base approach to reducing the impact of the diabetes and obesity epidemics.

- DOMTRU also works together with general practice teams to improve diabetes services capacity in primary care, support GPs in their management of patients with diabetes and coordinate diabetes related CPD in the primary care sphere.

- DOMTRU educates health professionals in the management and prevention of diabetes. The unit supports health education of people with diabetes in the South Western Sydney.

Diabetes, Obesity and Metabolism Translation Research Unit

Integrated Diabetes Care Case Conferencing

A local hospital diabetes specialist will visit you in your practice to discuss any patients with Type 1 and Type 2 Diabetes. Patient criteria applicable.

Diabetes Contraception and Pre-Pregnancy Programme

DCAPP aims to raise awareness of risk of unplanned pregnancy and contraception methods in health care professionals and women of childbearing age with Type 1 and Type 2 Diabetes.

DOMTRU

Aus-CDEP

Competency based online diabetes training program available to all health professionals in primary and hospital care in South West Sydney. Topics are fundamental to manage patients and is designed to improve quality of care.

Wollondilly Diabetes Program

WDP offer an integrated approach for Type 2 Diabetes management and prevention. Clinical service offered are group education, individual appointments, clinic appointments, Endocrinologist Specialist consult and peer support.

DIABETES CLINICAL TRIALS

DOMTRU Events 2019

- 17 and 18 May 2019 – Diabetes Tech and Talk Conference 2019
- Practice Nurse Workshops – March to June 2019

DOMTRU Programs

- Case Conferencing for GPs
- DCAPP for GPs, Pharmacists, Public and Private Clinics
- AusCDEP

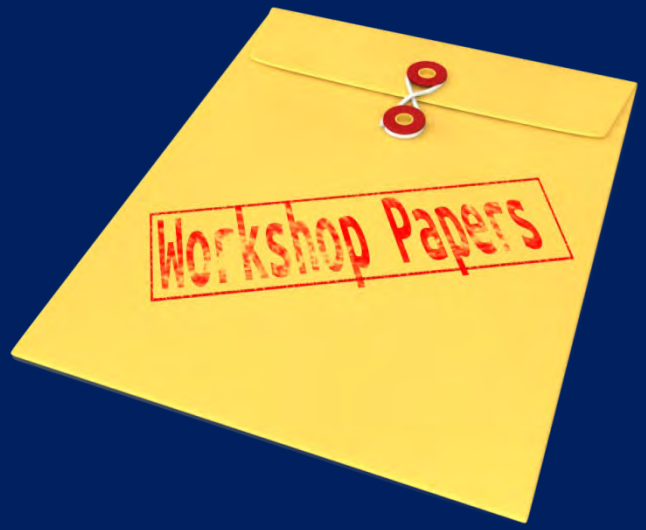
Steering Committee

We acknowledge the contributions of the following in the development of the Workshop:

Dr John Barlow (GP)
Dr Chee Khoo (GP)
Dr Hamish Russell (Endocrinologist)
Dr Manimegalai Manoharan (Endocrinologist)
Therese Fletcher (Educator)
Simone Bennetts (DOMTRU)
Susan Brown (SWS LHD)

What's in your folder?

1. Workshop Agenda
2. (Pre Workshop Questionnaire)
3. Case history – Jim
4. Injectable Checklist
5. AUS-CDEP Quiz
6. Post Workshop Questionnaire
7. Evaluation
8. Healthpathways Access



Co-chair, Education
Working Party, DOMTRU

dr chee khoo

solo gp

Why are we here today?

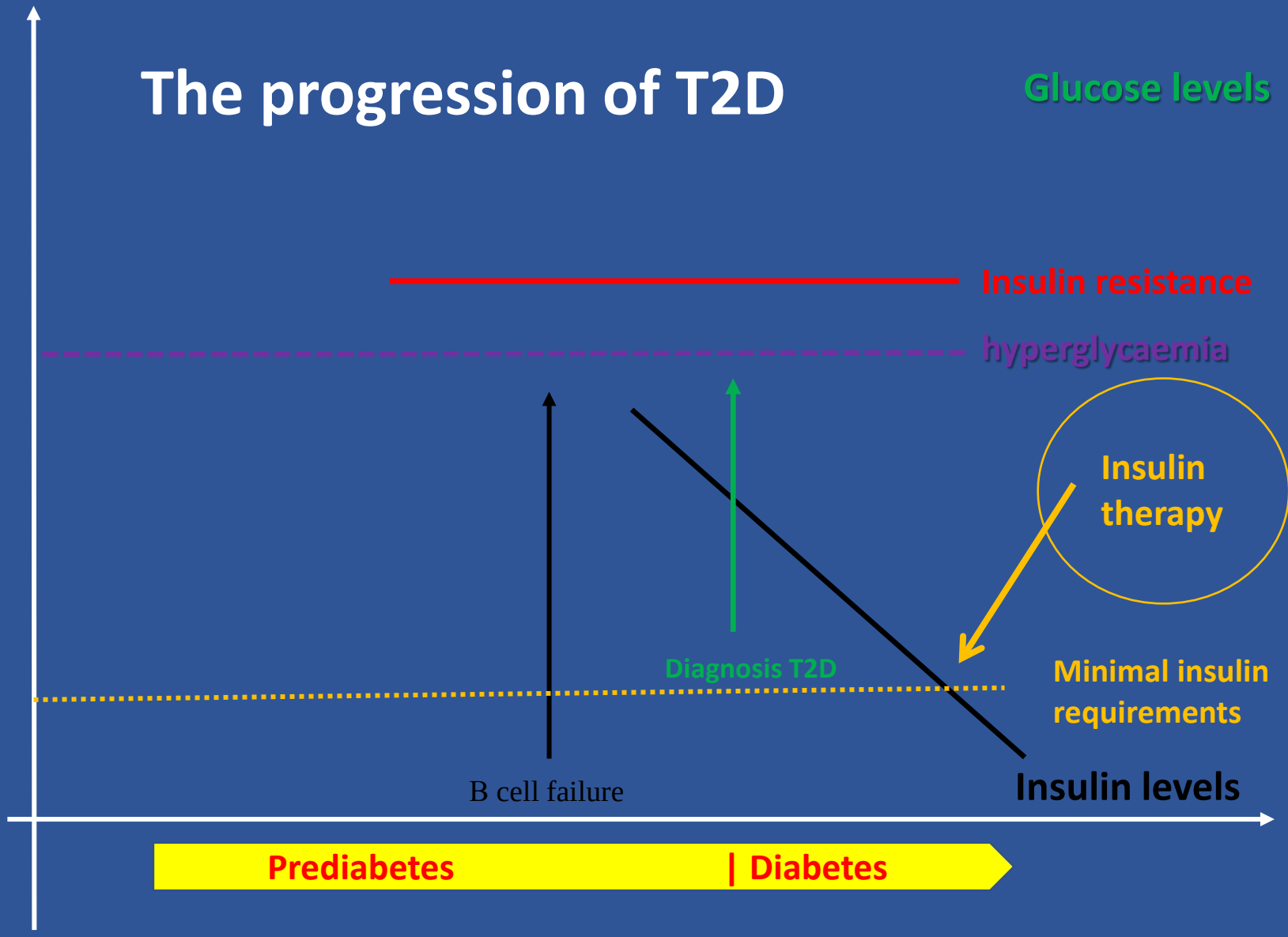
Dr John Barlow

So, why are we here?

- Number of people with T2D in Australia is expected to reached > 2mil in 20 years
- Increasing T2D caseloads in primary care
- Increasing T2D complications → increasing workload in primary and secondary care
- A significant proportion of these patients will require injectables including insulin therapy

J

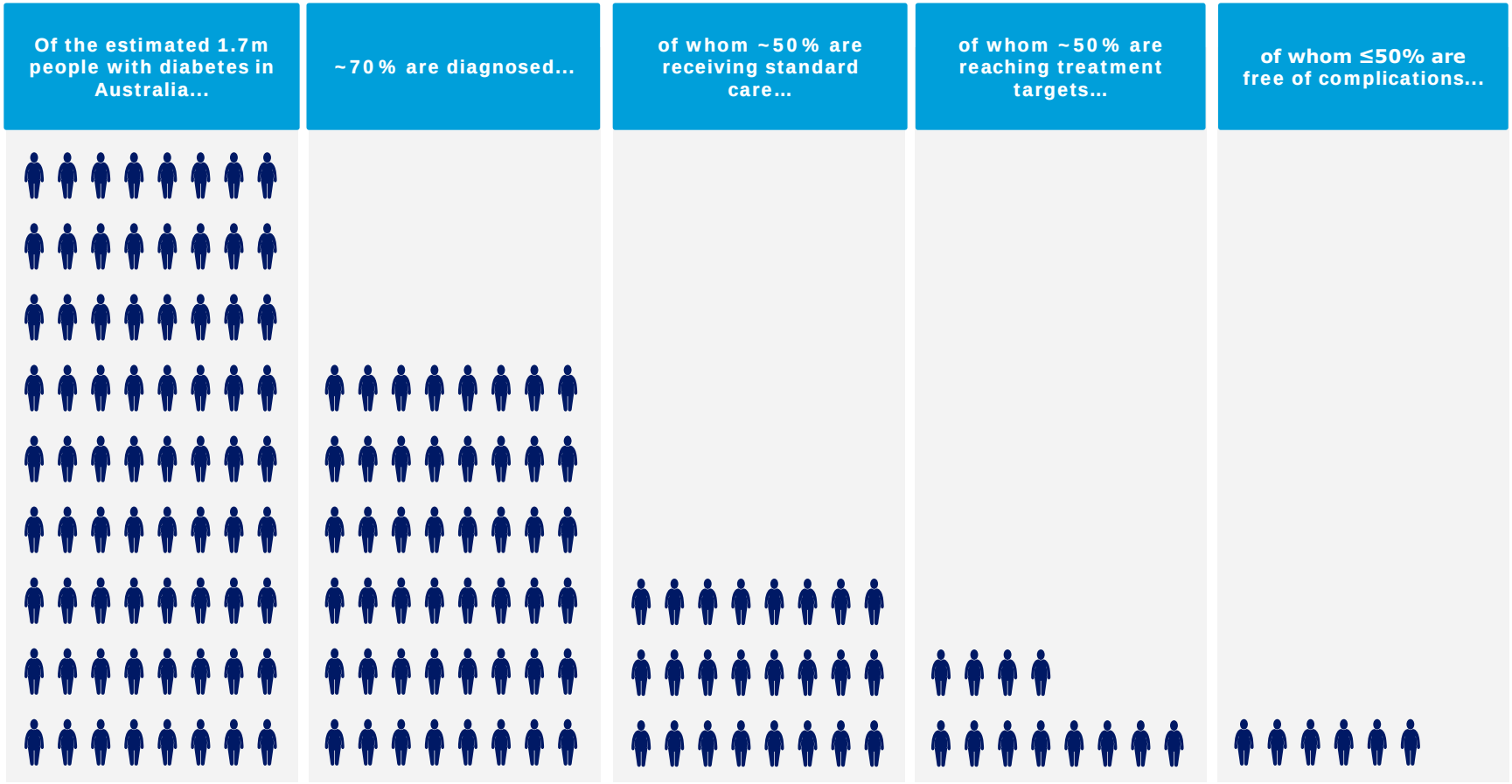
The progression of T2D



A report card

How good a job are we doing?

There are significant gaps in the management of diabetes in Australia[1]



1. Sainsbury E, *et al.* Burden of diabetes in Australia: it's time for more action. Preliminary Report July 2018. Available at: http://www.sydney.edu.au/medicine/research/units/boden/recently-published.php. Accessed: 1 August 2018

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Are you one of them?

Glycaemic Control - Why bother?

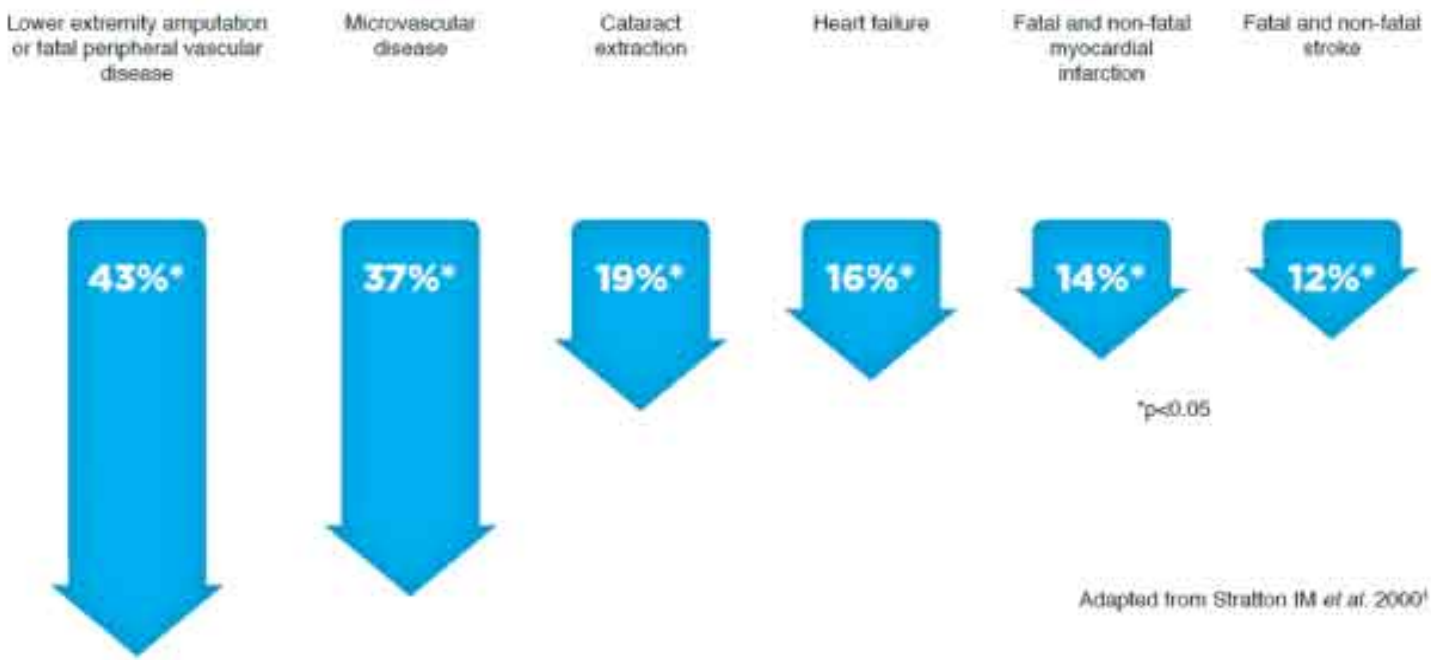
- It’s the end of the road. Is it still worthwhile?
- Do the risk of harm outweigh the benefits?
- I really don’t have the time
- Diabetes is just another disease
- I can always “individualise”!
- All too hard for me → refer to the endo
- All too hard for me → refer to the diabetes educator

Glycaemic Control - Is it still worthwhile?

Dr Manohoran

Benefits of controlled HbA1c in T2D[1]

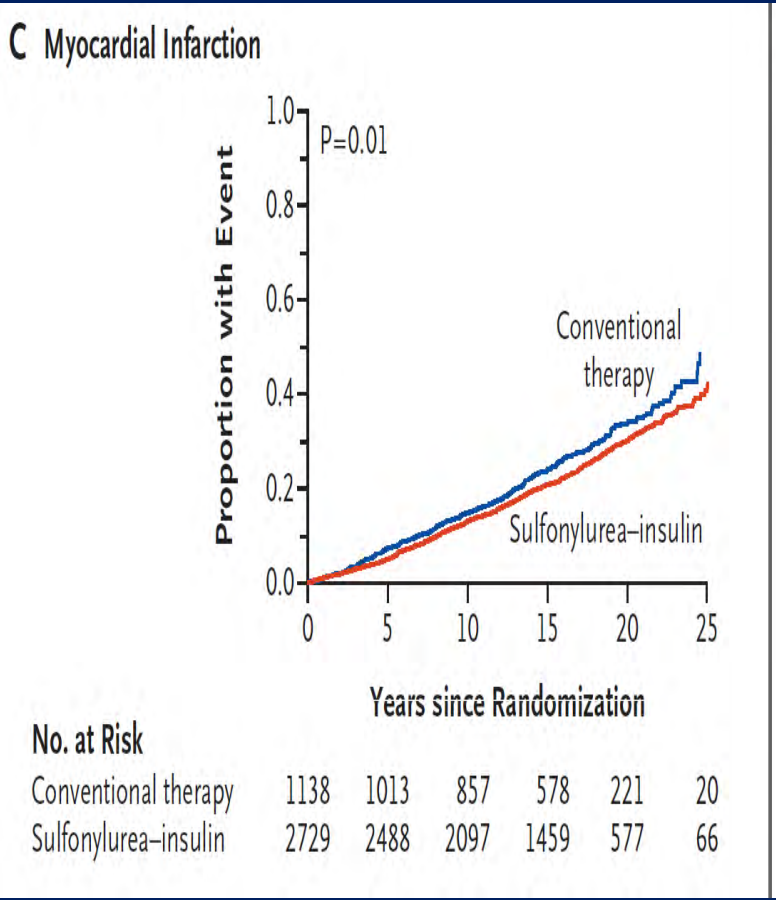
Each 1% fall in HbA1c represents a decrease in risk of...

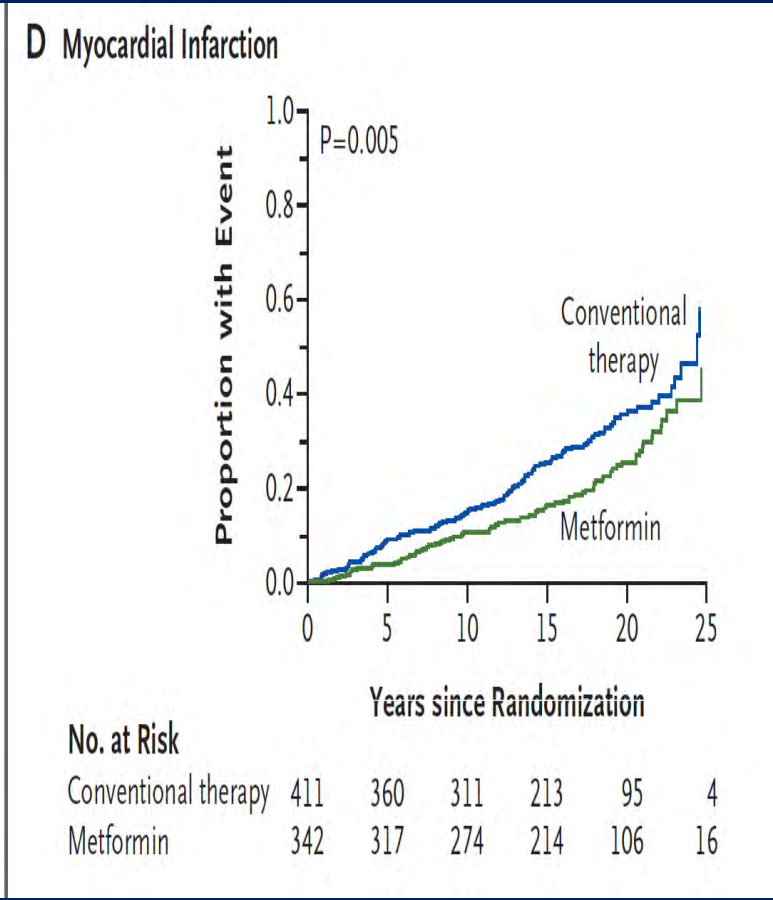


Adapted from Stratton IM *et al.* 2000[1]

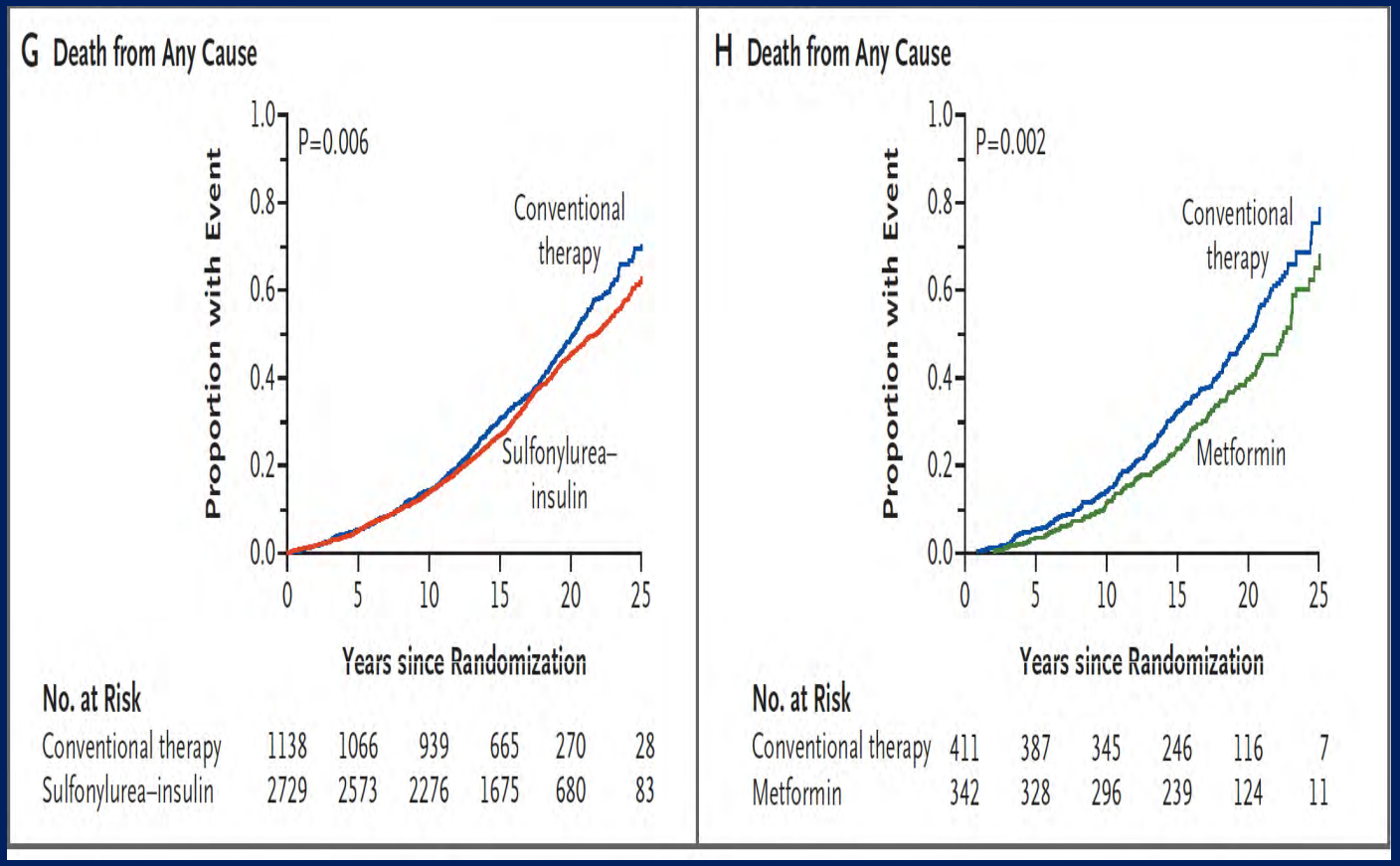
M

UKPDS Follow up

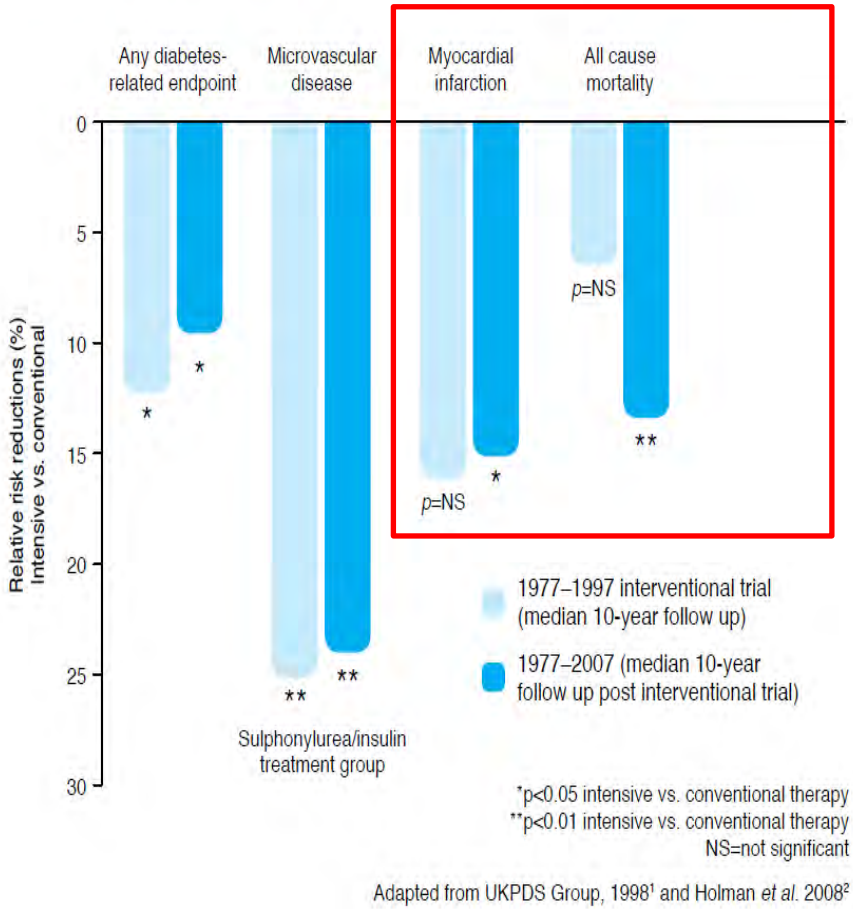




UKPDS Follow up



CV and microvascular benefits (legacy effect) of early and intensive glycaemic control[1]



Adapted from UKPDS Group, 1998[1] and Holman *et al.* 2008[2]

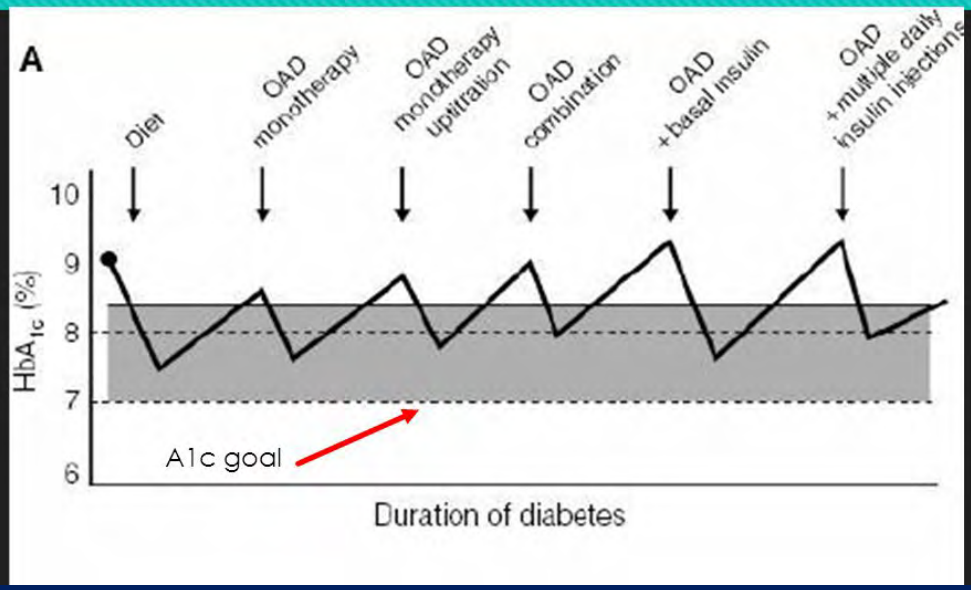
Legacy Effect

Early optimal glycaemic control:

- Enduring microvascular benefits
- Cardiovascular benefits later
- Lower targets early
- Relaxed targets later
- **Maximum impact in primary care**

On the ground…

Treat-to-Failure Approach: Suboptimal Glycemic Control



OAD = Oral Antidiabetic Drug

Reasons for inertia?

- Management complexity
- PBS complexity
- Physician confidence
- Avoidance of confrontation
- Physician barriers to injectables
- Patient barriers to injectables
- Defeatist attitude
- Sceptical about benefits

Harm of Clinical Inertia

	n (%) by time to intensified treatment categories			Time to intensification median (IQR), months		
	<6 months	<1 year	<2 years	Time to IT	Time to 2 OADs	Time to 3 ADDs
HbA1c ≥7% (≥53 mmol/mol)						
Consistently during 1 year	5,768 (27)	8,776 (40)	14,101 (65)	16 (5, 32)	17 (6, 32)	37 (20, 60)
Consistently during 2 years	4,696 (28)	6,864 (40)	10,904 (64)	17 (5, 31)	17 (6, 32)	36 (20, 58)
HbA1c ≥7.5% (≥58 mmol/mol)						
Consistently during 1 year	3,783 (29)	5,869 (46)	9,284 (72)	14 (5, 26)	14 (5, 27)	33 (18, 54)
Consistently during 2 years	2,774 (32)	3,999 (46)	6,171 (70)	14 (4, 27)	15 (5, 28)	31 (18, 52)

Paul *et al. Cardiovasc Diabetol (2015)*

Harm of Clinical Inertia

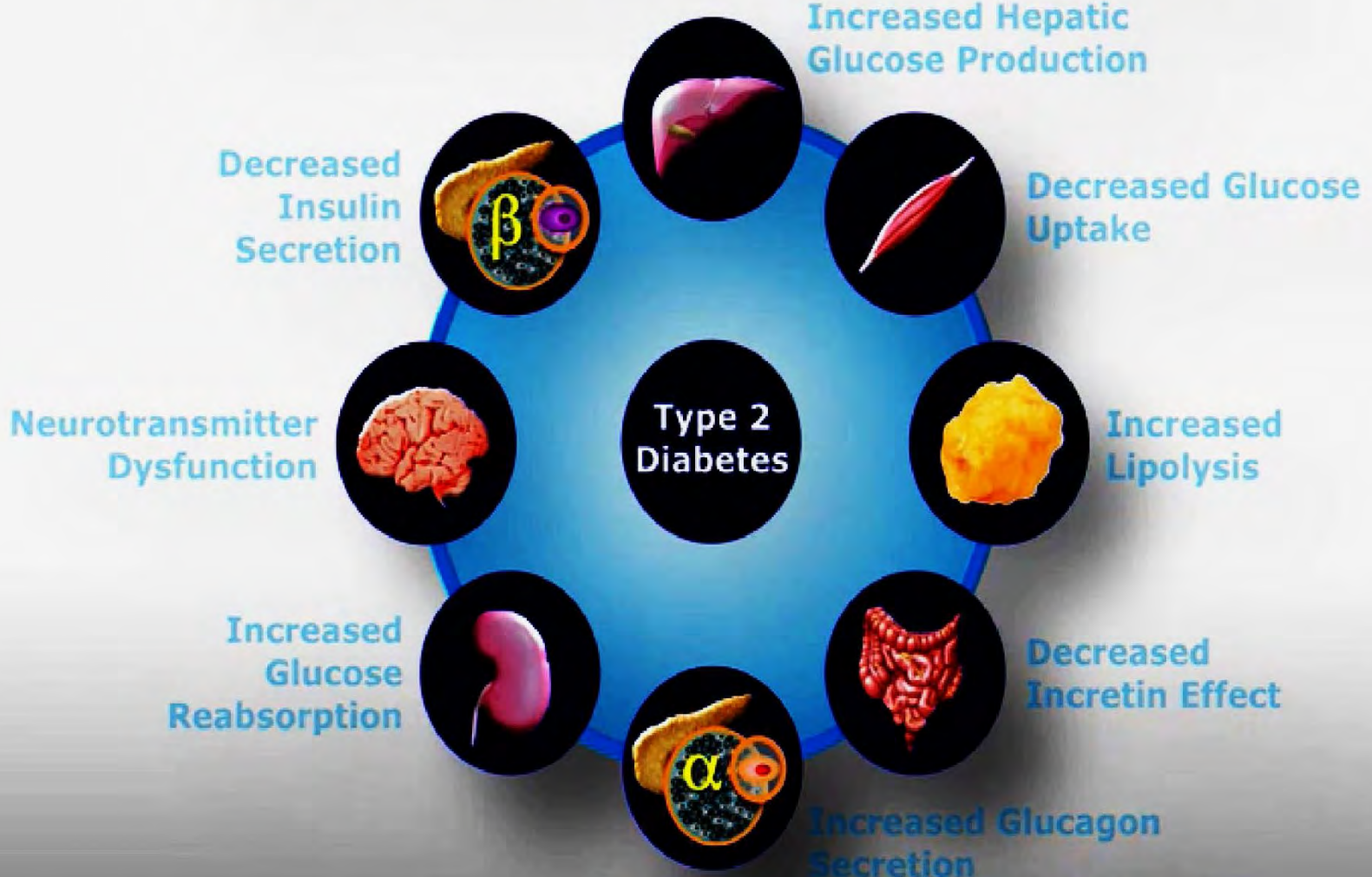
After average of 5.4 years follow up:

If treatment intensified within 12 months of diagnosis

38% reduction in CV events
(HR 1.24 vs 1.62)
p< 0.01

Started with twin defects

Core Defects in Type 2 Diabetes

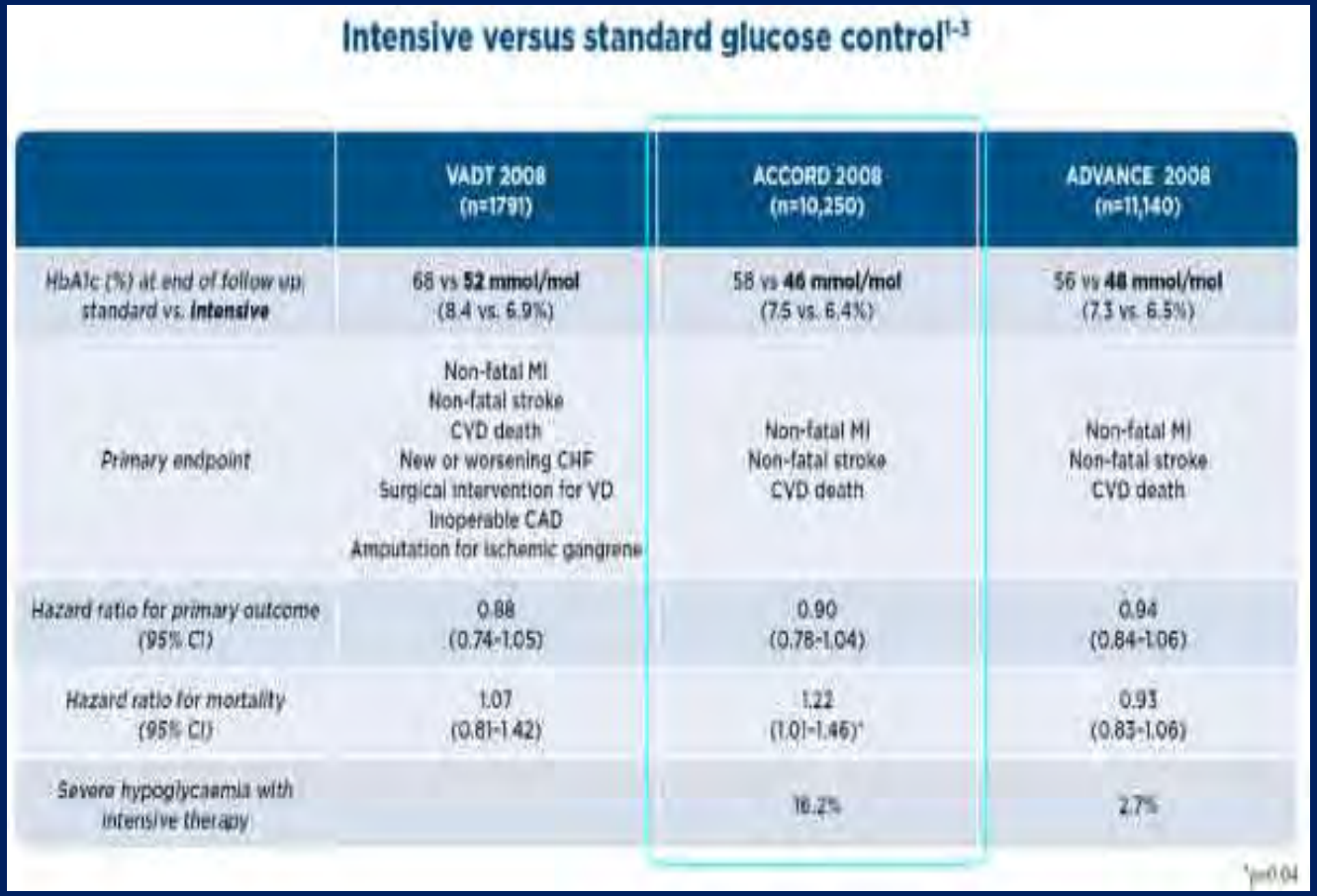


Reproduced from DeFronzo RA. *Diabetes.* 2009;58(4):773-795.

Advanced stage T2D

- Potential limited beta cell reserve
- Potential limited alpha cell response
- Hypoglycaemia risk
- Potential atherosclerotic vascular disease (ASCVD)
- Potential myocardium compromise → heart failure
- Potential autonomic neuropathy → high cardiac risk
- Potential renal impairment

The potential harm of hypoglycaemia

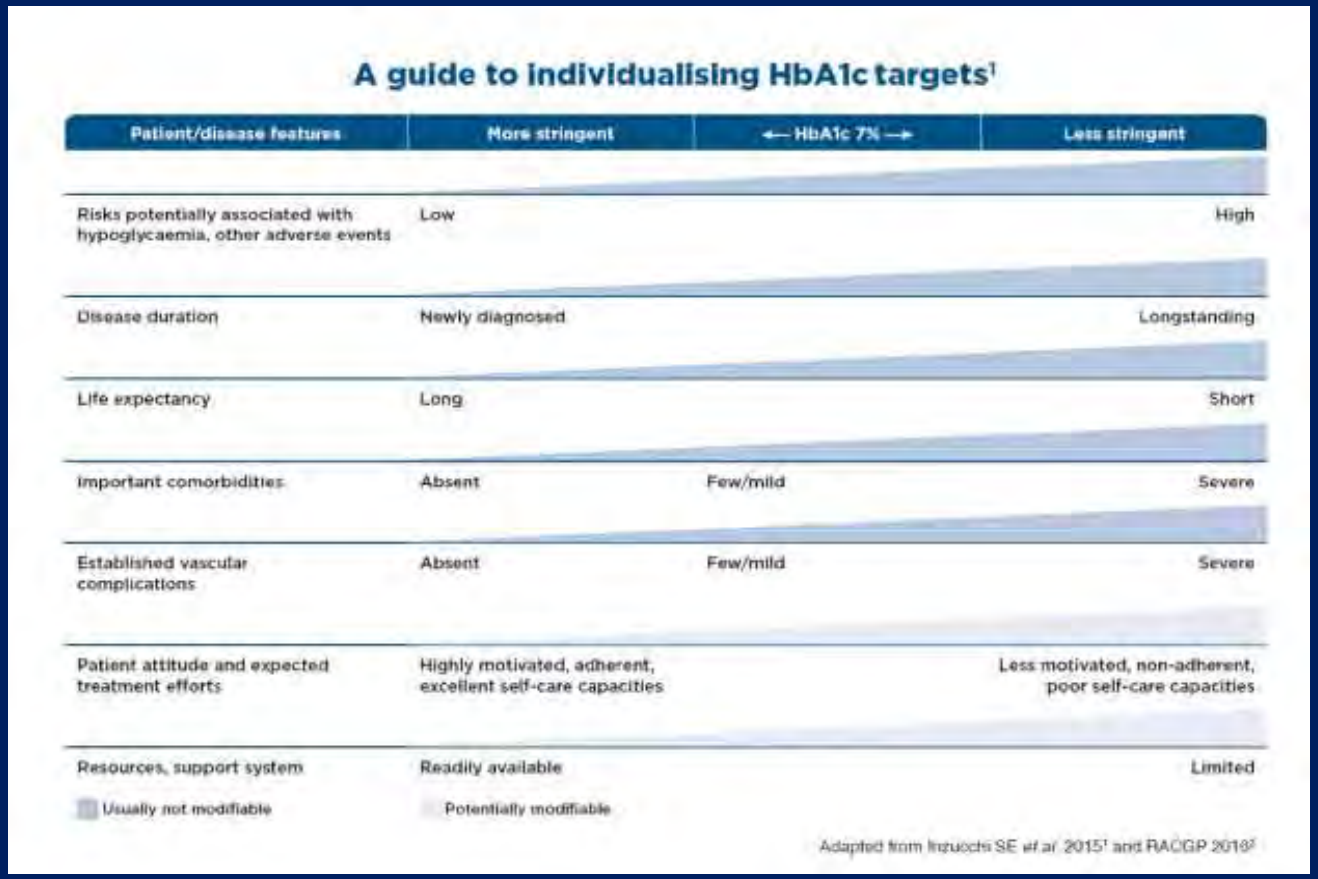


Intensive versus standard glucose control[1-3]

	VADT 2008 (n=1791)	ACCORD 2008 (n=10,250)	ADVANCE 2008 (n=11,140)
HbA1c (%) at end of follow up: standard vs. **intensive**	68 vs **52 mmol/mol** (8.4 vs. 6.9%)	58 vs **46 mmol/mol** (7.5 vs. 6.4%)	56 vs **48 mmol/mol** (7.3 vs. 6.5%)
Primary endpoint	Non-fatal MI Non-fatal stroke CVD death New or worsening CHF Surgical intervention for VD Inoperable CAD Amputation for ischemic gangrene	Non-fatal MI Non-fatal stroke CVD death	Non-fatal MI Non-fatal stroke CVD death
Hazard ratio for primary outcome (95% CI)	0.88 (0.74-1.05)	0.90 (0.78-1.04)	0.94 (0.84-1.06)
Hazard ratio for mortality (95% CI)	1.07 (0.81-1.42)	1.22 (1.01-1.46)*	0.93 (0.83-1.06)
Severe hypoglycaemia with intensive therapy		16.2%	2.7%

*p=0.04

All a balancing act



A guide to individualising HbA1c targets[1]

Patient/disease features	More stringent	← HbA1c 7% →	Less stringent
Risks potentially associated with hypoglycaemia, other adverse events	Low		High
Disease duration	Newly diagnosed		Longstanding
Life expectancy	Long		Short
Important comorbidities	Absent	Few/mild	Severe
Established vascular complications	Absent	Few/mild	Severe
Patient attitude and expected treatment efforts	Highly motivated, adherent, excellent self-care capacities		Less motivated, non-adherent, poor self-care capacities
Resources, support system	Readily available		Limited

Usually not modifiable Potentially modifiable

Adapted from Inzucchi SE *et al.* 2015[1] and RACGP 2016[2]

Why must T2D be managed in primary care?

Dr Barlow

It’s up to us in primary care…

- There are only ~400 endocrinologists in Australia
- Even fewer Diabetes Educators
- Who will titrate or intensify treatment?
- Who will manage intercurrent illnesses?
- Who will manage the related co-morbidities?
- Who will coordinate peri-op management?
- What about driver’s licence?
- What about hypoglycaemia recognition and management?

In summary

- T2D is more than just insulin resistance and beta cell failure
- Progressive nature of diabetes
- Many will progress to needing injectable therapy
- Early glycaemic control has “legacy effect”
- Optimal glycaemic control have benefits at all stages of diabetes
- Advanced stage diabetes have potentially hidden risks
- Individualisation is about a balancing act

Agenda

- Jim the truckie – case history
- When tablets are not enough
  – how do we know when it's time?
- The new **ADA/EASD 2018** guidelines
  - choosing the ***right*** injection
- Horses for courses – Different insulins different GLP1 injectables, different patient
- Become an Expert: Initiating, titrating & intensifying
- After sales services – supporting your patient
- The fine print – nitty gritty stuff

Learning objectives

1. Importance of early glycaemic control
2. Benefits of glycaemic control at all stages of diabetes
3. Understand the role of GLP1 RA and insulin in the management of hyperglycaemia
4. Familiar with initiation, titration and intensification of treatment with injectables
5. Familiar with use of combination agents in management of hyperglycaemia
6. Able to support patients' safe use of injectable therapy