The epidemic of non-adherence

Nudging the nudgers to nudge

John Kennelly

Department of General Practice and Primary Health Care

Yulong Gu

National Institute for Health Innovation

Jim Warren

Computer Science

University of Auckland

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"…adherence to medicines…is assumed…"

Journal of Health Services Research & Policy 2009;14(1):58–61

"substantial gains could be made by patients and health systems if patients, practitioners, researchers and policy-makers worked together to improve this crucial area of health behaviour"

"You can't stay in your corner of the Forest
waiting for others to come to you.
You have to go to them sometimes."

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Adherence is not solved

"Current methods of improving adherence for chronic health problems are mostly complex and not very effective…"

Haynes RB et al. Interventions for enhancing medication adherence. Cochrane Database of Systematic Reviews 2008

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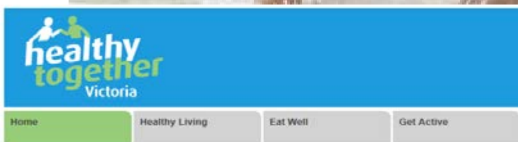
The big picture
Lifestyle vs rescue remedies

Vs



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Non-adherence to rescue remedies

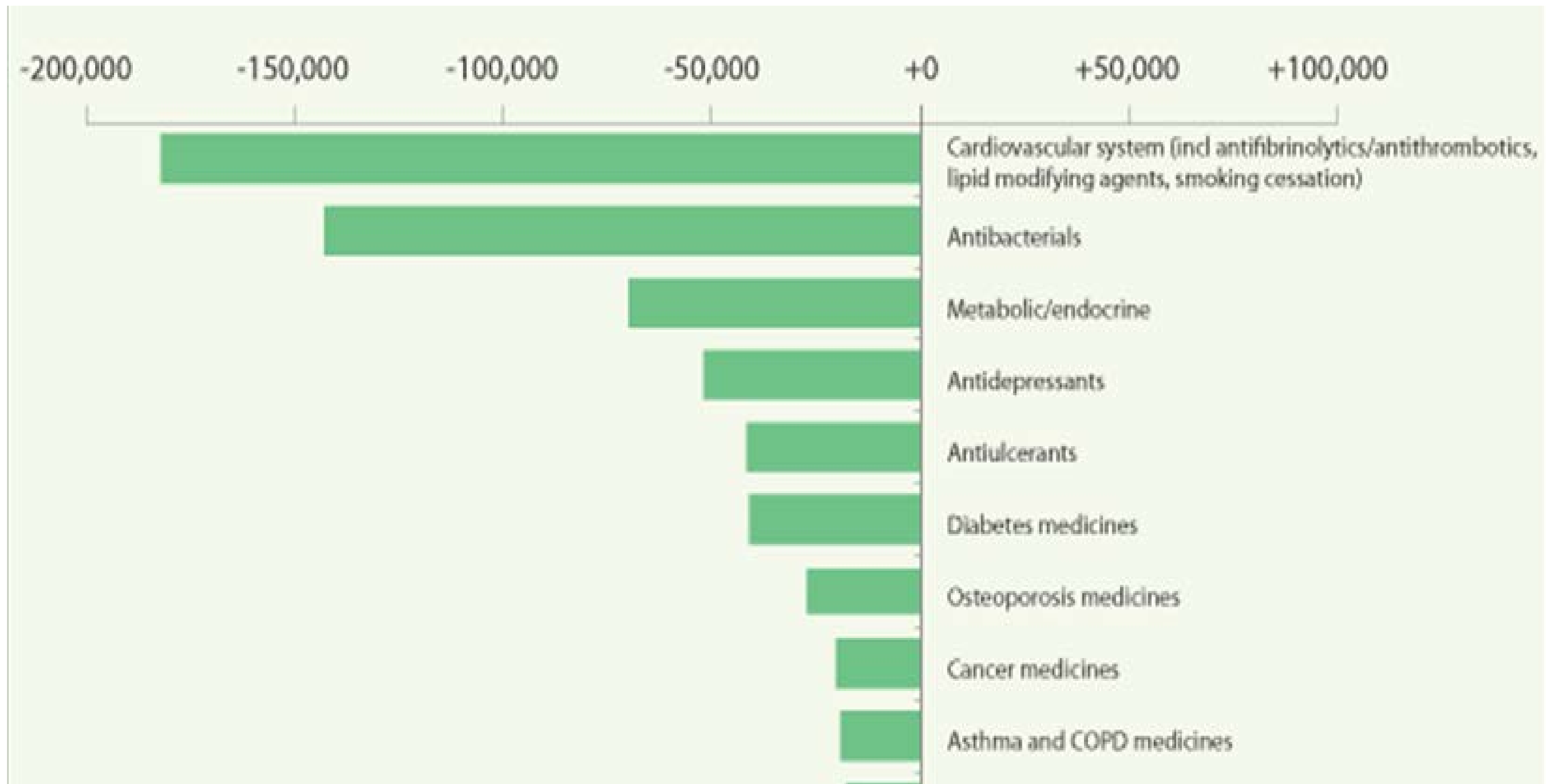

Figure 1: Deficits (–) or excesses (+) in dispensed medicines for Māori compared with non-Māori, adjusted for age and relative disease burden (DALY loss)[1]

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Risks of non-adherence

Māori

- 4.5 X rate of diabetes
- 2 X cardiovascular disease

(From Mortality and Demographic Data 2010)

Pacific people

- 7X rate of renal failure
- 2.5X rate of IHD
- 2X rate of death from stroke

Huakau, J. 2009. *Health Needs Assessment for Pacific People in Waitemata. February 2009*

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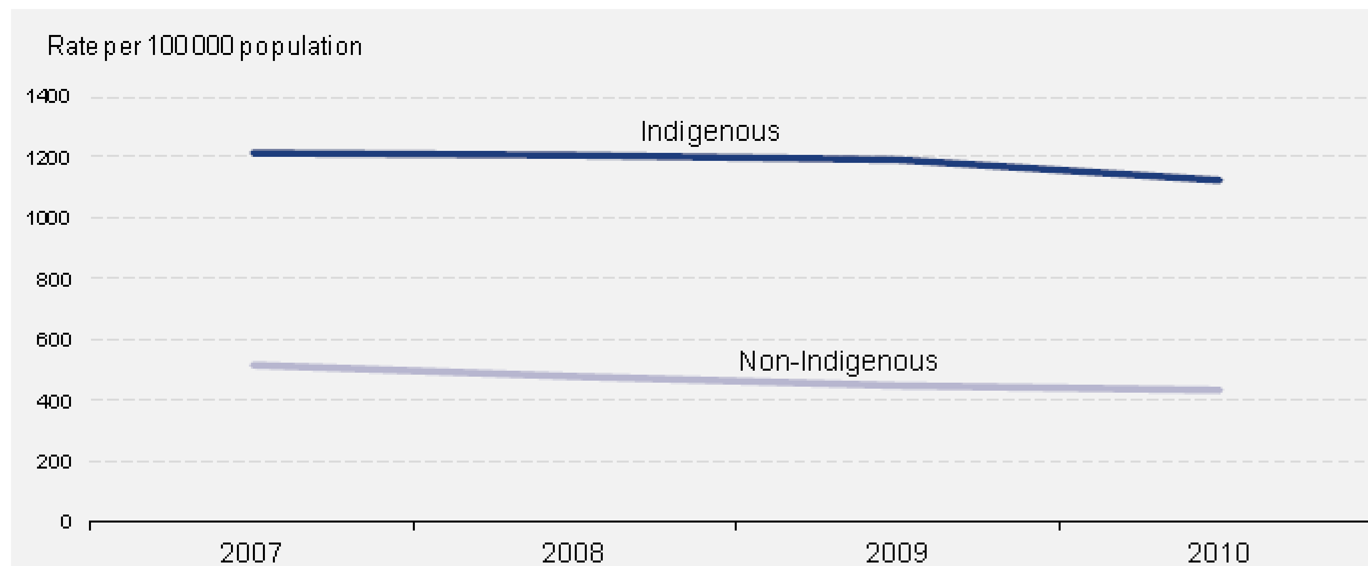
Indigenous Australians

Figure 1.13 Rate of heart attacks by Indigenous status, 2007 to 2010



Notes:

1. Data in this graph are based on selected states only—NSW, Queensland, Western Australia, South Australia and the Northern Territory.

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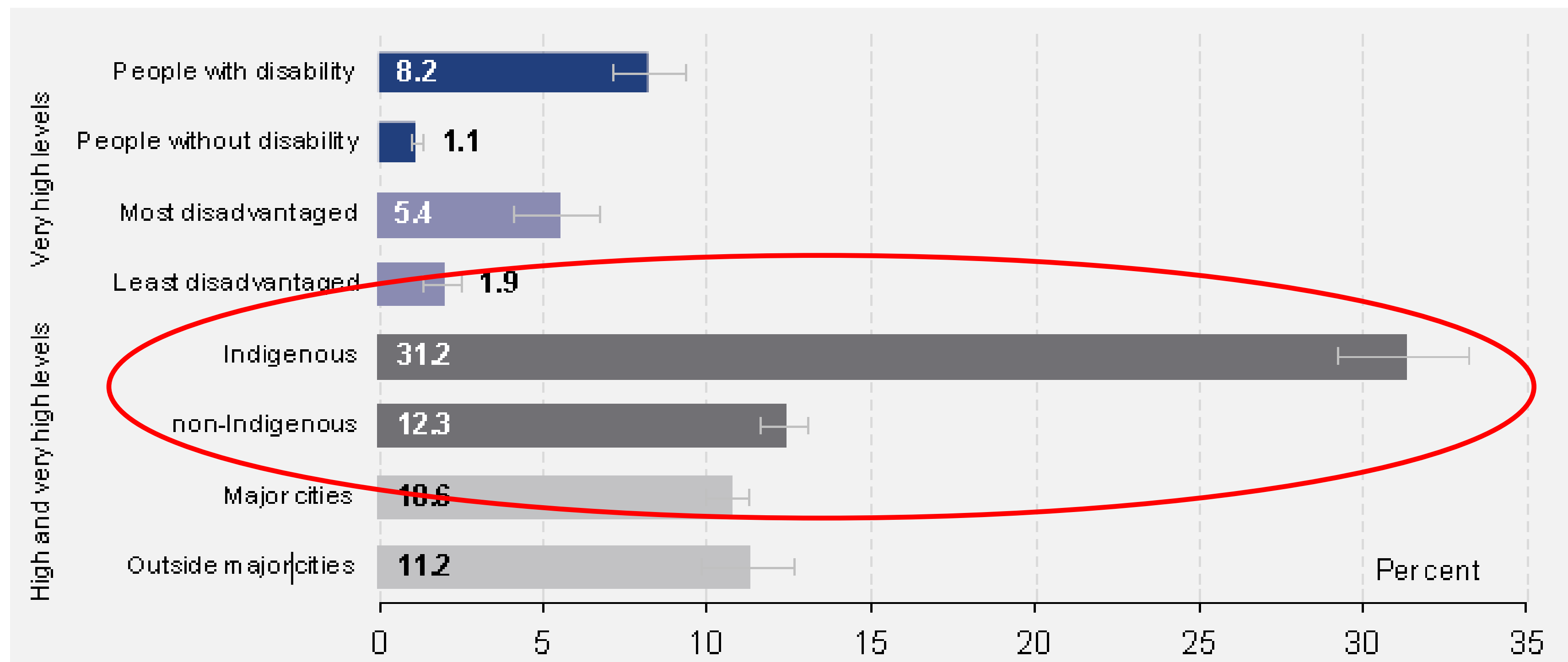
Psychological distress

Figure 1.15 High/very high psychological distress by disability status, area of socio-economic disadvantage and geographic location, 2011–12, and Indigenous status, 2008



Before the nudge – what works? (Nudge-worthiness)

1. Financial incentive appropriate?
2. Implementation?

Glasziou PP et al. When financial incentives do more good than harm: a checklist *BMJ*.e5047 (2012): 345-350

- Who do you nudge?
  - patients, practitioners, policy-makers

The business case - good adherence saves money

Annual coronary artery disease costs

- Improved health outcomes
- US$294-868 per patient annually
  - high vs low adherence groups

Bitton A, et al. The impact of medication adherence on CAD costs and outcomes: a systematic review. Am J Med 2013;126(4):357

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Nudging with information alone ?

- QOF cost >£1billion
- Cochrane review: "insufficient evidence"
- "…increase in measuring the measurable…has proven again that physicians will do what they are paid to do."

Starfield B An international prespective on the bbasis for pay for performance. Quality in Primary care 2010; 18: 399

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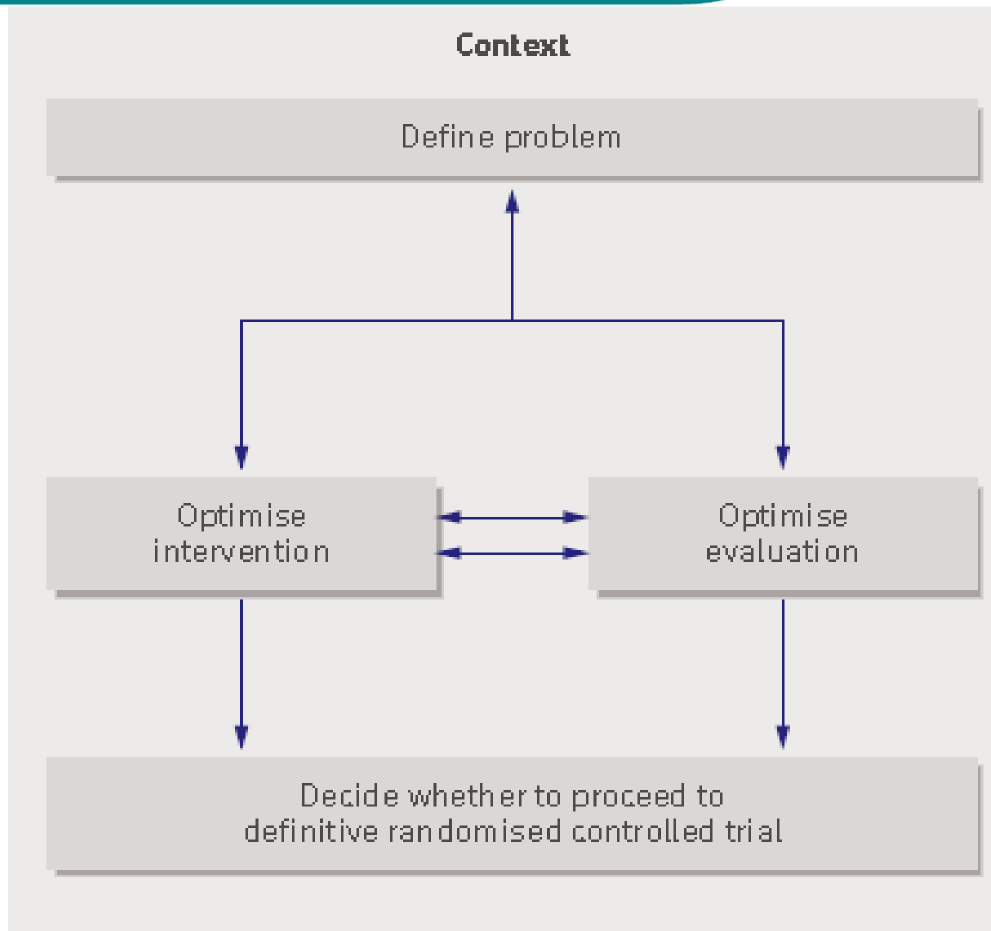

Relation between context, problem definition, intervention, and evaluation for complex interventions

- Structure
- Process
- Outcome

Donabedian, The Milbank Memorial Fund Quarterly, 1966; 44(3):166

Campbell M, Fitzpatrick R, Haines A, Kinmonth AL, Sandercock P, Spiegelhalter D, et al. Framework for design and evaluation of complex interventions to improve health. ***BMJ 2000;321:694-6***

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Perspectives on adherence to blood pressure–lowering medications among Samoan patients: qualitative interviews

Kuinileti Chang Wai MBChB, MMedSci(Hons); **C Raina Elley** MBChB, PhD; **Vili Nosa** BA, MA (Hons), PhD; **John Kennelly** MBChB; **Thusitha Mabotuwana** BE (Hons); **Jim Warren** PhD

ABSTRACT

AIM: To explore influences on adherence to taking long-term medications among Samoan patients in an Auckland general practice.

METHODS: Twenty Samoan participants from an Auckland general practice were identified and interviewed about their views on adherence or non-adherence to taking blood pressure–lowering medications.

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Defining the problem

Patient and provider adherence

3 practices in Auckland/Waikato region

	Practice A	Practice B	Practice C
A lapse in BP lowering drugs of >30 days	355 (59%)	230 (34%)	355 (68%)
Classified with renal impairment and on BP drugs	39 (6%)	21 (3%)	42 (8%)

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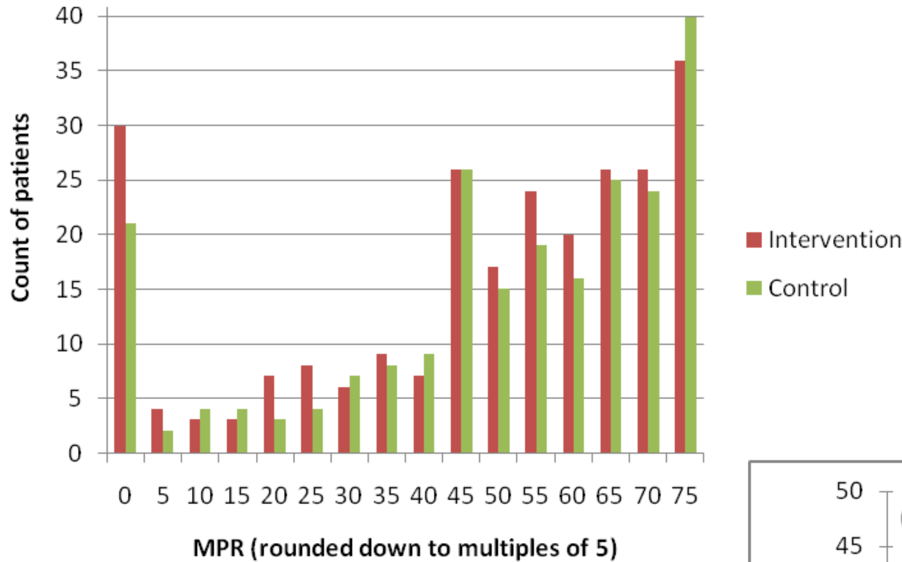
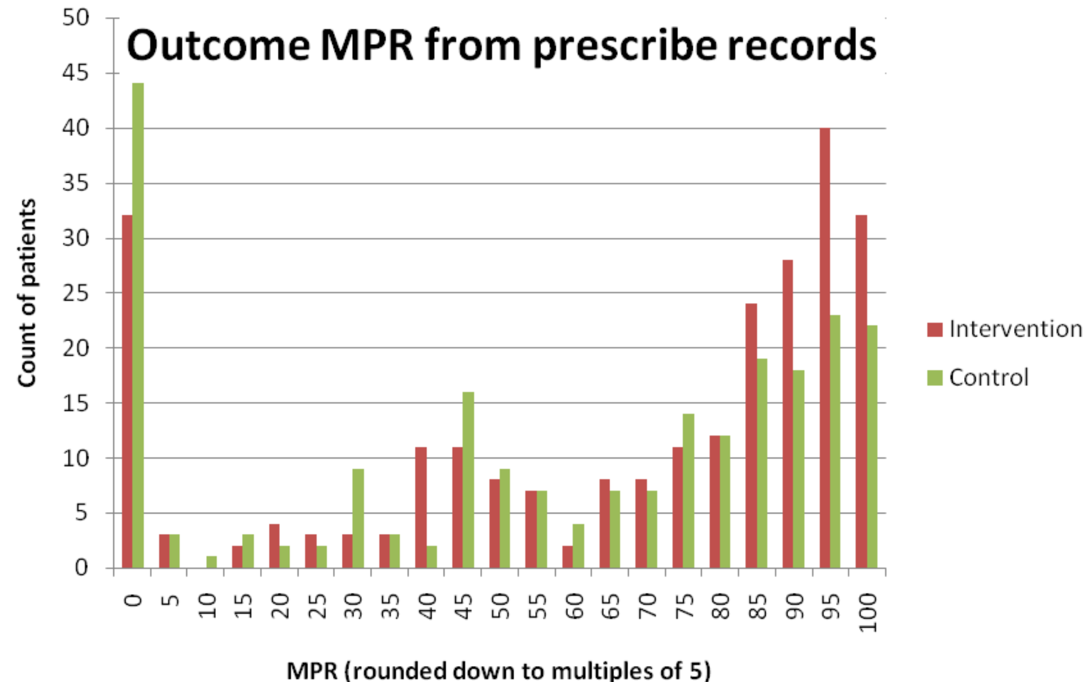
Nudging with better care and good data



MPR is percent of days a patient is in supply of a medication

Eg 80% = 80 days medication to cover 100 days of Rx



MPR effect

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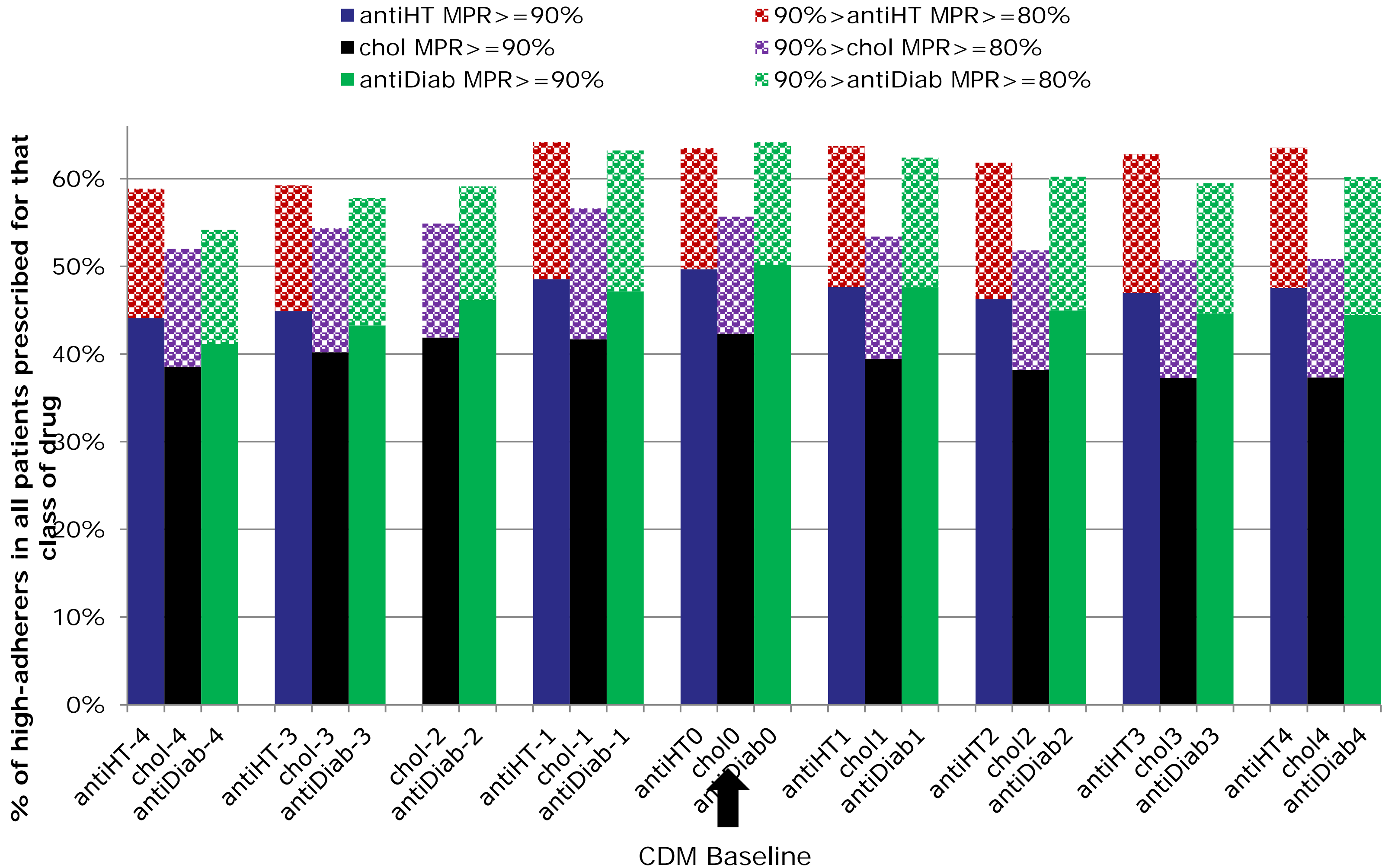

Summary

- What do we nudge?
  - “low hanging fruit”
  - Good business case

- Who do we nudge?
  - politicians, policy makers, providers and patients

- Incentives
  - Refer to the 9-steps for addicted incentivisers