Diabetes Care Models and the ANDS

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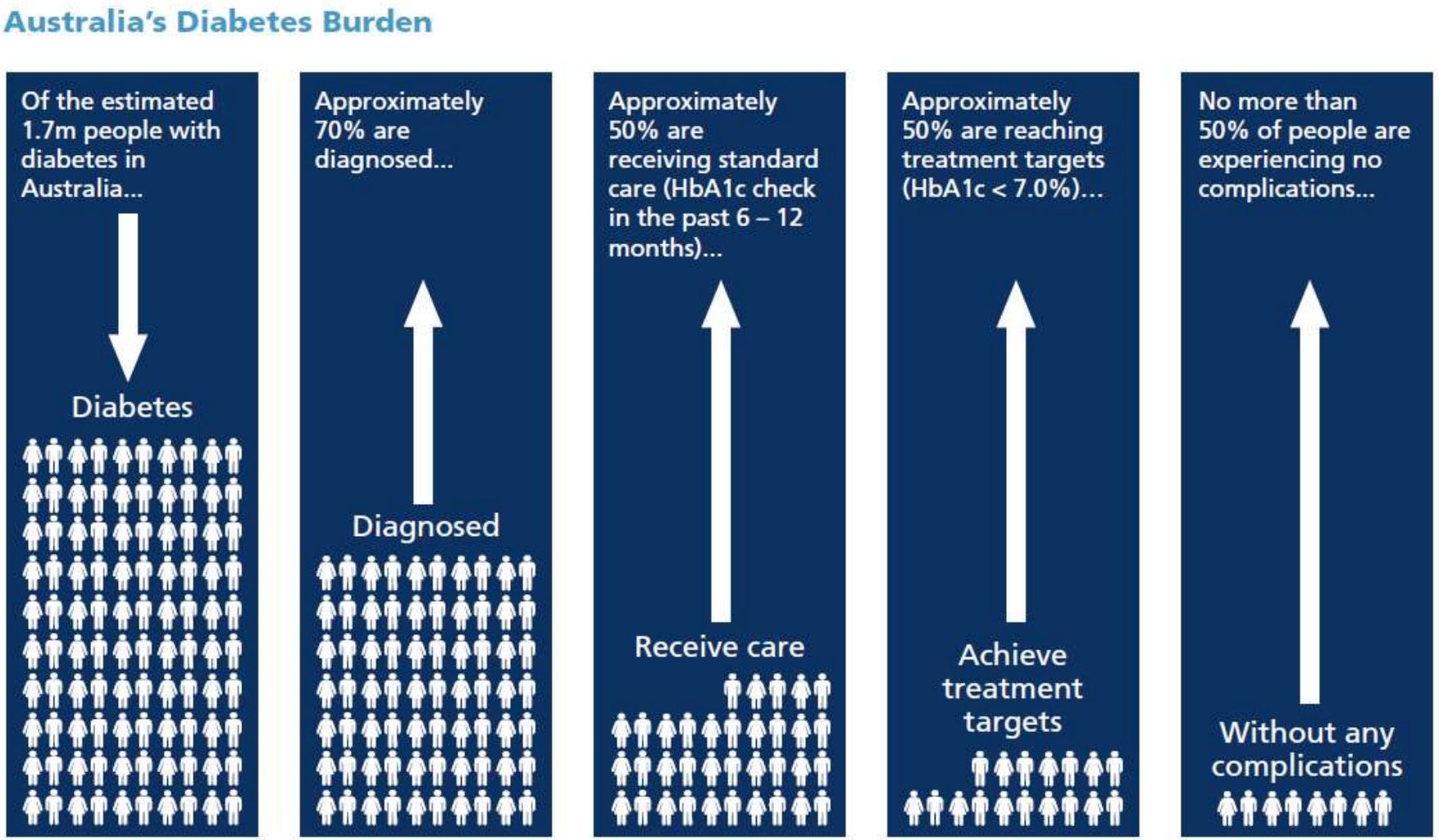
Outline regarding Models of Care

- Is there an issue with management of diabetes in Australia?
- What does the National Diabetes Strategy recommend?
- Where could reconsideration around models of care address the goals of the NDS?
- What is happening internationally?
- What is happening nationally?
- What is the NADC doing about it?

Rule of Halves



www.sydney.edu.au/medicine/research/units/boden/recently-published.php 2018

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Australian Government
Department of Health

Australian National Diabetes Strategy 2016–2020

The five guiding principles of the National Diabetes Strategy are:

1. Collaboration and cooperation to improve health outcomes
2. **Coordination and integration of diabetes care across services, settings, technology and sectors**
3. Facilitation of person-centred care and self-management throughout life
4. Reduction of health inequalities
5. Measurement of health behaviours and outcomes

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Australian National Diabetes Strategy 2016–2020

- These five principles underpin 7 goals:
  1. Prevent people developing type 2 diabetes
  2. Promote awareness and earlier detection of type 1 and type 2 diabetes
  3. Reduce the occurrence of diabetes related complications and improve quality of life among people with diabetes
  4. Reduce the impact of pre-existing and gestational diabetes in pregnancy
  5. Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples
  6. Reduce the impact of diabetes among other priority groups
  7. Strengthen prevention and care through research, evidence and data

- Goal 3: Reduce the occurrence of diabetes related complications and improve quality of life among people with diabetes

3.4	Continue to implement coordinated, multidisciplinary and streamlined care for people with diabetes, particularly for those with chronic and complex conditions.	Australian Government, states and territories	Short
3.5	Encourage and promote the use of shared care plans to enhance coordinated care within Primary Health Networks.	Australian Government, states and territories	Medium
3.6	Encourage and promote regional planning and patient health care pathways for diabetes management to integrate primary health care, acute care and specialist and allied health services.	Australian Government, states and territories	Medium
3.7	Strengthen and continue to develop partnerships between health professionals and major specialist diabetes centres.	States and territories	Short

Australian National Diabetes Strategy 2016–2020

- Goal 3: Reduce the occurrence of diabetes related complications and improve quality of life among people with diabetes

3.11	Build on current experience to implement agreed best-practice transition services from paediatric/adolescent to adult services to improve quality of life, including mental health.	States and territories	Medium
3.13	Ensure access to high-risk foot clinics based on need.	States and territories	Long

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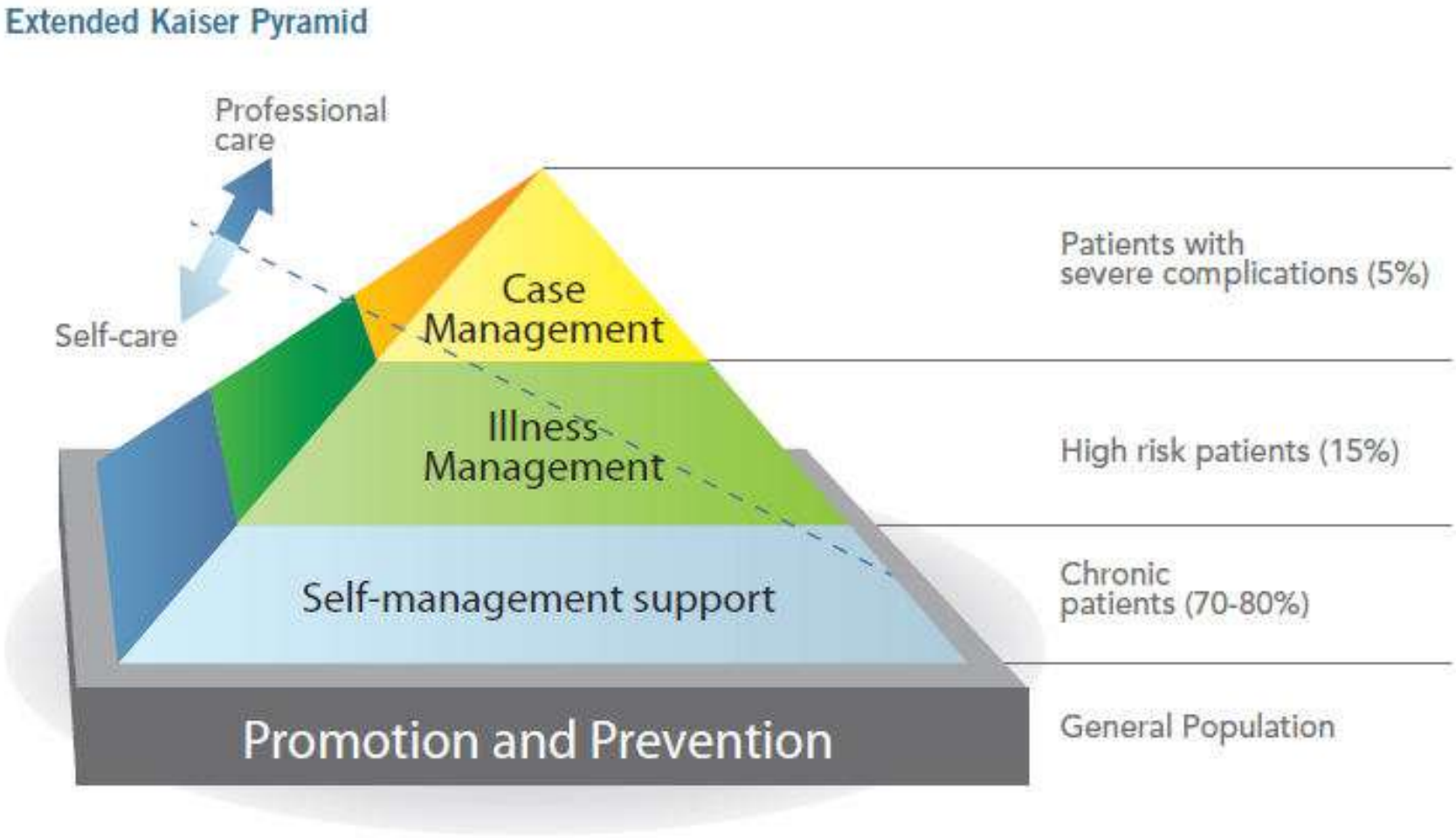
Integrate the care of a patient through their journey of chronic disease



Source: Kaiser Permanent. Adapted

UK: Improving Diabetes Care Through Integration

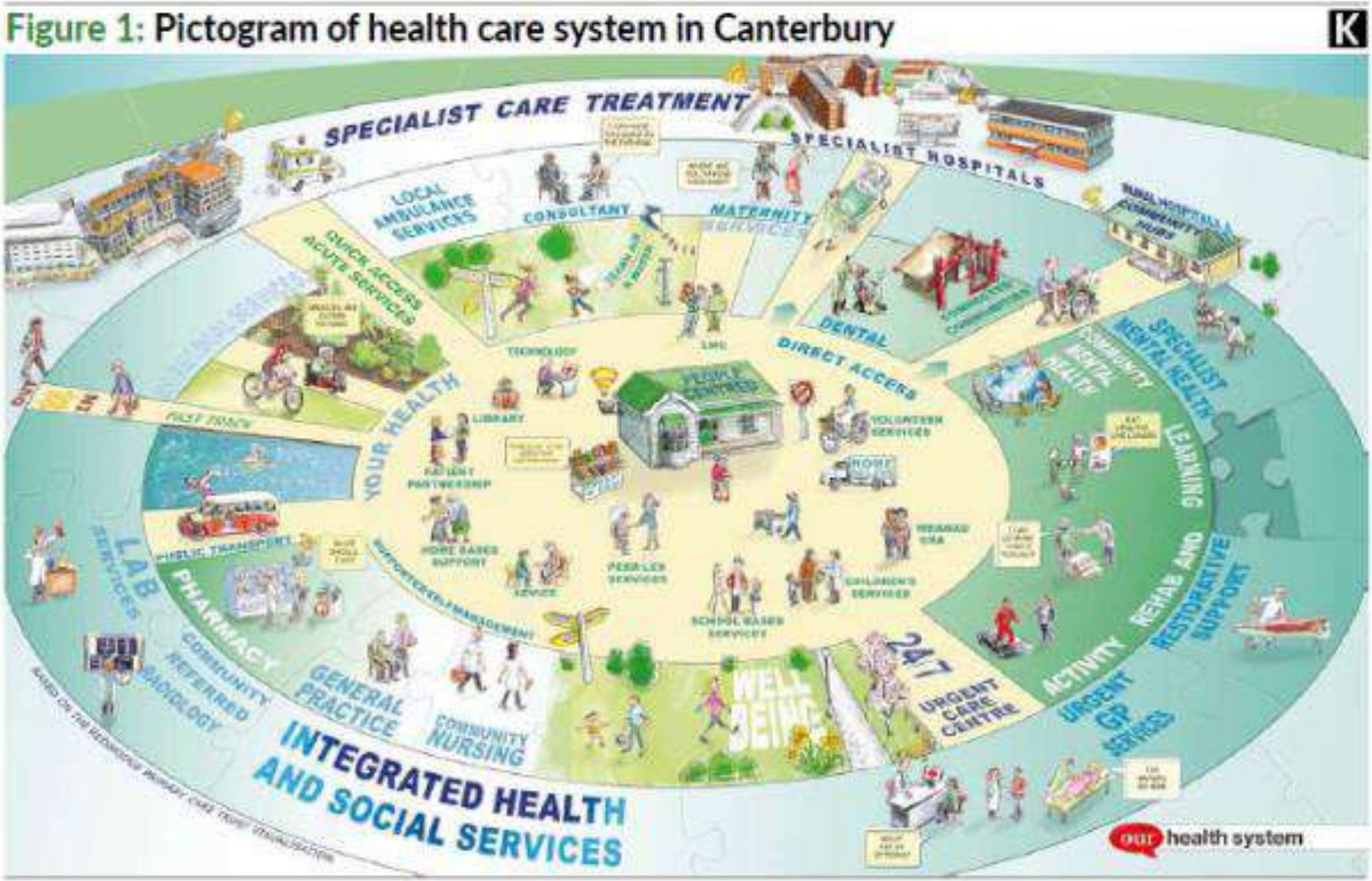
Figure 3: example service configuration

Super Six Model (Portsmouth, UK)

- Resources reallocated to community-based services
- 90% of Type 2 diabetes discharged back to primary care with local enhanced services, appropriate specialist support and education programmes
- Hospital kept the Super 6
  - Inpatient diabetes, antenatal, diabetic foot, nephropathy, insulin pumps and Type 1 diabetes
  - GP practice visits
  - Rapid support to GP with phone and email access
  - Virtual clinics with case based discussion
  - GP and practice nurse education
  - Regional Hubs – local physician, interested GP, and practice nurse to see long term difficult Type 2
  - Hypo hotline – local ambulance
- Results
  - At 5 years - 25% decrease in DKA, 42% decrease hypoglycaemia presentations, 30% decrease HHS, 22% reduction in MI, 22% reduction in CVA and 39% reduction in amputation with an annual cost saving of 1.9 million pounds.
  - Allowed to set up diabetes clinics at renal dialysis sites, increase number inpatients seen, improve wait time to be seen in the MDT foot clinic,

Nicholson E et al. Diabetes and Primary Care 2016; 18:221-226

Whole of system - integrated care in Canterbury, NZ



Canterbury, NZ

- Overarching strategic vision to keep people well and healthy in their homes and communities where complex care is delivered in a timely and appropriate manner

- Integrated care across organisational boundaries, investment in the community-based services and strengthened primary care
  - HealthPathways -12% less on pathology testing, 18% less radiology testing and 1% less on pharmacy
  - Acute demand management system – urgent care delivered in community from GPs supported by community nurses with specialist advice and access to rapid diagnostic tests
  - Electronic shared health record
  - Alliance contracting
  - Increase spend on community based services (9%)

- Results
  - Lower acute medical admission rates, lower readmission rates, shorter LOS, lower ED attendances,
  - Hospitals – increased capacity for elective work, fewer peaks in bed occupancy, increased elective surgery and fewer cancelled elective admissions and wait times.
  - 18% less spent on emergency hospital care (ED attendances and acute medical admissions). Reverse growth.

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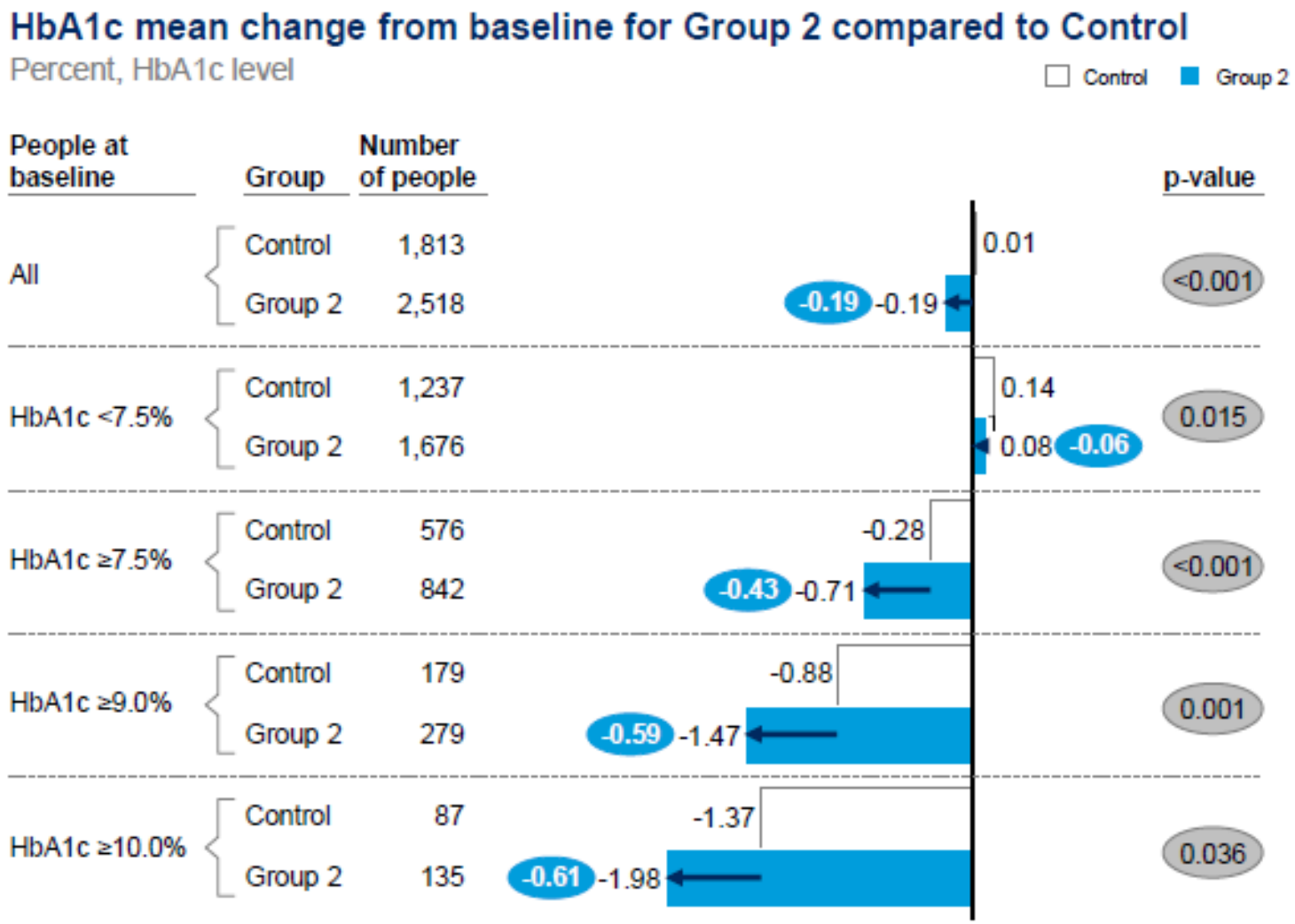
Diabetes Care Project

Group 1	Group 2
Integrated information platform 	Integrated information platform 
Continuous quality improvement processes 	Continuous quality improvement processes 
	Flexible funding based on risk stratification 
	Quality improvement support payments (QISP) 
	Funding for care facilitation 

Diabetes Care Project: Outcomes



Diabetes Care Project: Outcomes

- Also improvements in:
  - systolic BP, lipids, waist circumference
  - incidence of depression and diabetes-related stress
  - Completion of clinical processes eg. annual cycles of care

- Cost
  - Additional $203 per patient per year

Health Care Homes

phn WESTERN SYDNEY

pwc

diabetes nsw & act

NSW Health Western Sydney Local Health District

NSW

Case-conference style consultations in GP practices with Specialist and Primary care teams: an efficient way to improve diabetes outcomes for our population

Shamasunder Acharya[1], Annalise Philcox[2], Margaret Lynch[3], Tracy Tay[1], Martha Parsons[1], Melissa Cromarty[3], Belinda Suthers[1,4], John Attia[1,4]

[1] Hunter New England Health, New Lambton, NSW, Australia, [2] Calvary Mater, Newcastle, NSW, [3] Primary Health Network, Newcastle, [4] Hunter Medical Research Institute, New Lambton, NSW, Australia

Table 1. Comparison of existing diabetes model of care to the new integrated Hunter Alliance model.

Current model	Alliance model
Consultations at hospitals	Consultations close to patients at their GP practices
Recommendations made to GPs, may not be implemented by GPs (various factors)	During case-conference, GP takes ownership of recommendations and implements it
Little upskilling for primary care team (letters only)	Intense upskilling including practice nurses, 'live demonstrations'
Limited information for specialists, consultations slowed down for data collections (across multiple labs)	Full comprehensive information available with GP data base, saves time
Requires multiple follow-ups and develops dependency on specialist teams 'I have been coming for years' **More referrals to outpatients**	No routine follow-up from specialists, all follow-ups at GP practice from primary care team, liaise with specialist if any concerns **Less referrals to outpatients**
Limited partnership value	Excellent partnership, integration and communication
Limited follow-on effects	Potential to improve entire practice cohort

Diabetologia
https://doi.org/10.1007/s00125-018-4740-x

ARTICLE

Clinical outcomes of an integrated primary–secondary model of care for individuals with complex type 2 diabetes: a non-inferiority randomised controlled trial

Anthony W. Russell [1,2] · Maria Donald [1] · Samantha J. Borg [1] · Jianzhen Zhang [1] · Letitia H. Burridge [1] · Robert S. Ware [3] · Nelufa Begum [1] · H. David McIntyre [1] · Claire L. Jackson [1]

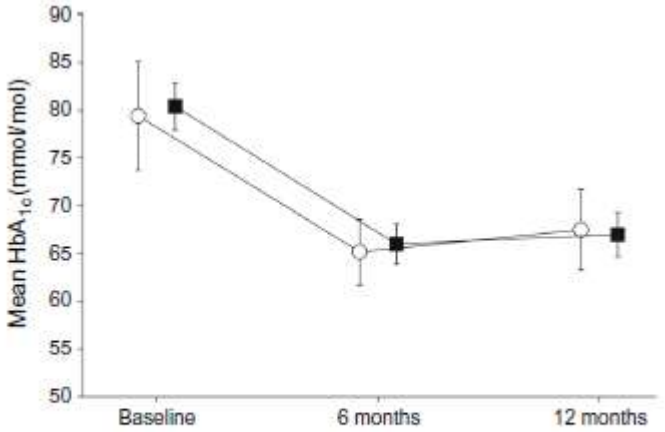
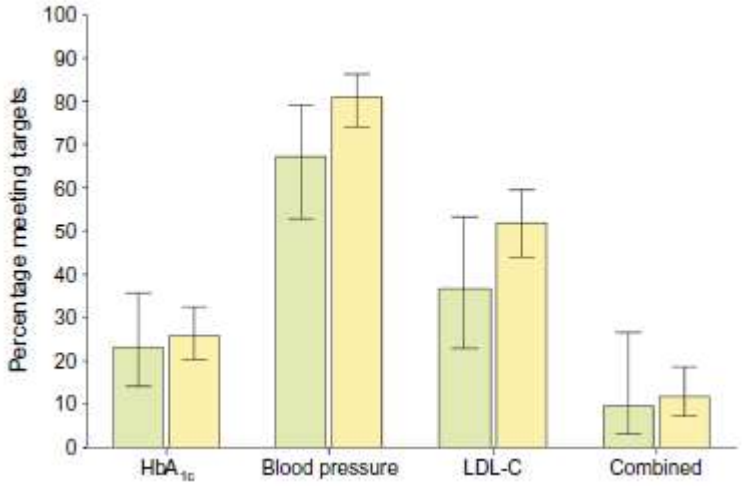


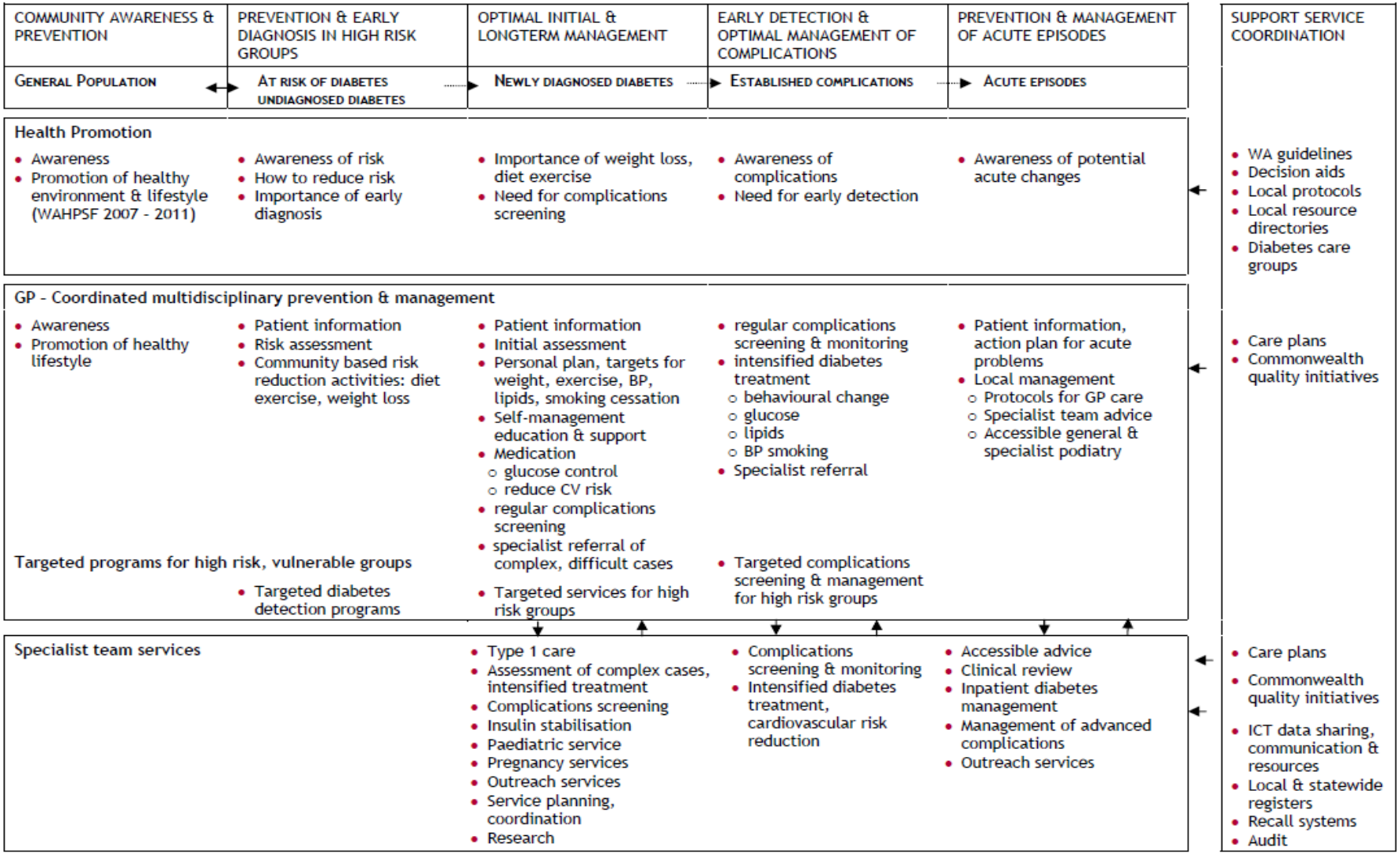
Fig. 3 Change in mean HbA_{1c} across time. Intention-to-treat sample with imputation. Error bars indicate 95% CIs. White circles, usual care; black squares, Beacon model



- Improved patient satisfaction
- 50% reduction in diabetes related potentially preventable hospitalisation*

Russell AW et al. Diabetologia Sept 2018 Epub ahead of print,
*Zhang J et al. Diabetic Medicine 2015

Western Australia Models of Care for Diabetes



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What is the NADC doing?

- Models of care workshop
  - Key stakeholders to discuss models of care

- Models of Care document
  - Creation of a working group
  - Produce a document with brief summary of evidence around models of care for management of diabetes
  - National demonstrators
  - Practical learning tips for implementation
  - Scope?