

# The Singapore Disease Management Conference

## The On Track Diabetes Program

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# The Australian Private Health Care System

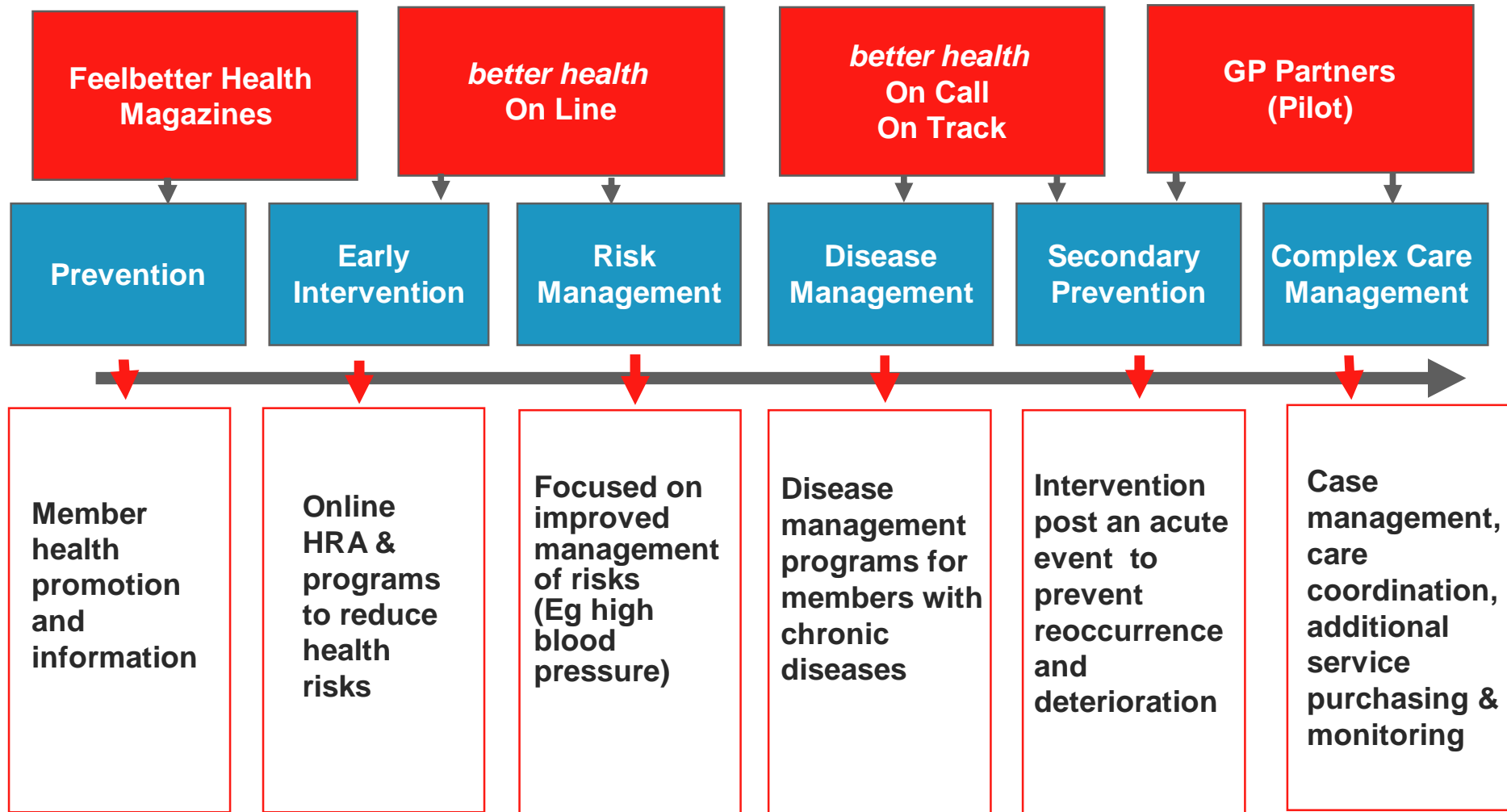
- Universal Health Care System-Medicare
- Complementary private health system:
  - 33% of hospital beds; 39% of all admissions: 56% of surgery
- Private health insurance:
  - Value proposition: choice and access
  - Hospital and Ancillary covers
  - Community rating
  - Portability
  - Over 10 million people insured (highest in 20 years)
- Medibank:
  - Largest and only national PHI fund (approx 29% of market)
  - Almost 3 million people covered
  - AU\$3 billion pa revenue and AU\$2.6 billion health purchasing (approx)



# Diabetes in the Australian Population

- One in 12 Australian adults have diabetes
- Diabetes responsible for 1.6% of annual health expenditure
- Diabetes related complications responsible for 26% of avoidable hospital admissions- 130,000 admissions
- Diabetes as a co-morbidity doubles the cost of inpatient care
- Adherence to guidelines for complications screening is sub- optimal
- 50% do not meet treatment targets

# Medibank Private 'betterhealth' programs



# Medibank Private '*betterhealth*' programs

## Program Principles:

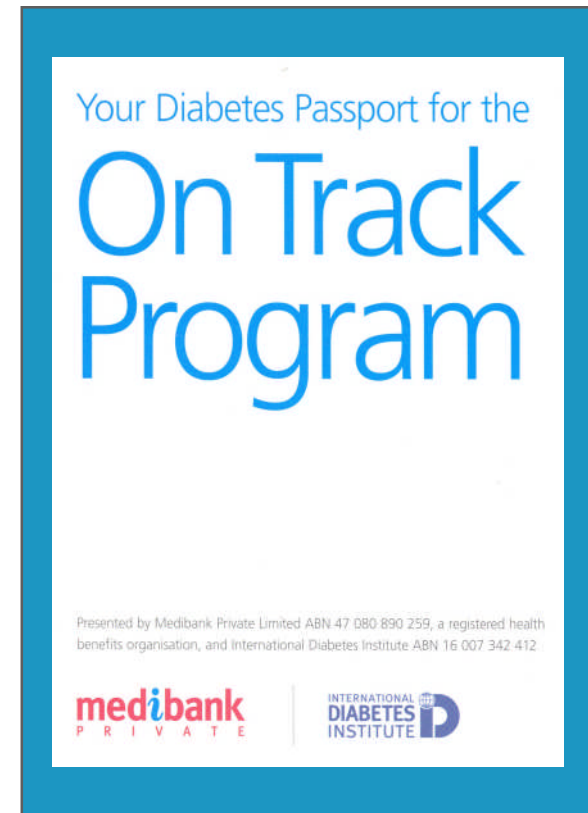
- Recognize role of General Practitioner and is supportive of GP and specialist care
- Prompt improved awareness and self management of risk and disease
- Based on Australian Guidelines, best practice and data
- Expert medical review prior to implementation: General Practitioner, Disease Management Specialist; Epidemiologist
- Independent 3<sup>rd</sup> party evaluation

# *better*health 'On Track' Diabetes Program

- Diabetes Self Management Program
- Target population: Medibank members with Type 2 diabetes
- 12 month duration
- Objectives:
  - To improve participant's knowledge of diabetes management
  - To increase rates of adherence to diabetes self management requirements
  - To improve self reported risk factors associated with diabetes complications and health status
- Delivered by International Diabetes Institute

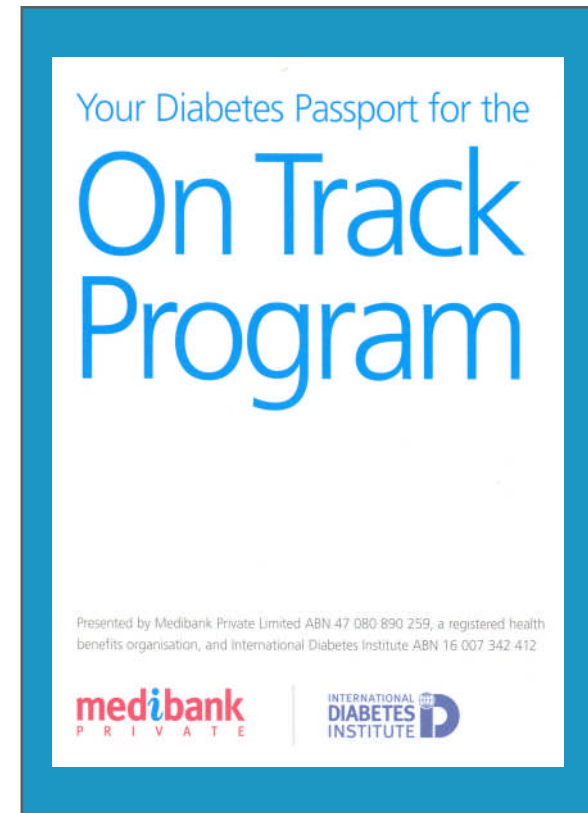
# *better*health 'On Track' Diabetes Program

- Mail- based intervention
- 'On Track' Diabetes Passport
  - Information on diabetes management
  - Data collection capacity
  - Self reported health status & physical activity level
  - Current diabetes treatment
  - Biochemistry
  - Frequency of diabetes checks
- Guidelines based on 'Annual Cycle of Care'



# *better*health 'On Track' Diabetes Program

- Data collected at:
  - Baseline,
  - 6 months,
  - 12 months
- Responses assessed by clinicians at International Diabetes Institute
- Mailed personalized feedback and management suggestions
- Information Tips provided
- Evaluation survey on completion



# *betterhealth* 'On Track' Diabetes Program

15,000 members identified through diabetes related claims



Written offer with 'On Track' Passport



485 completed initial results  
Mean duration diabetes 8.4 years  
Mean age 64 years  
50% male 50% female

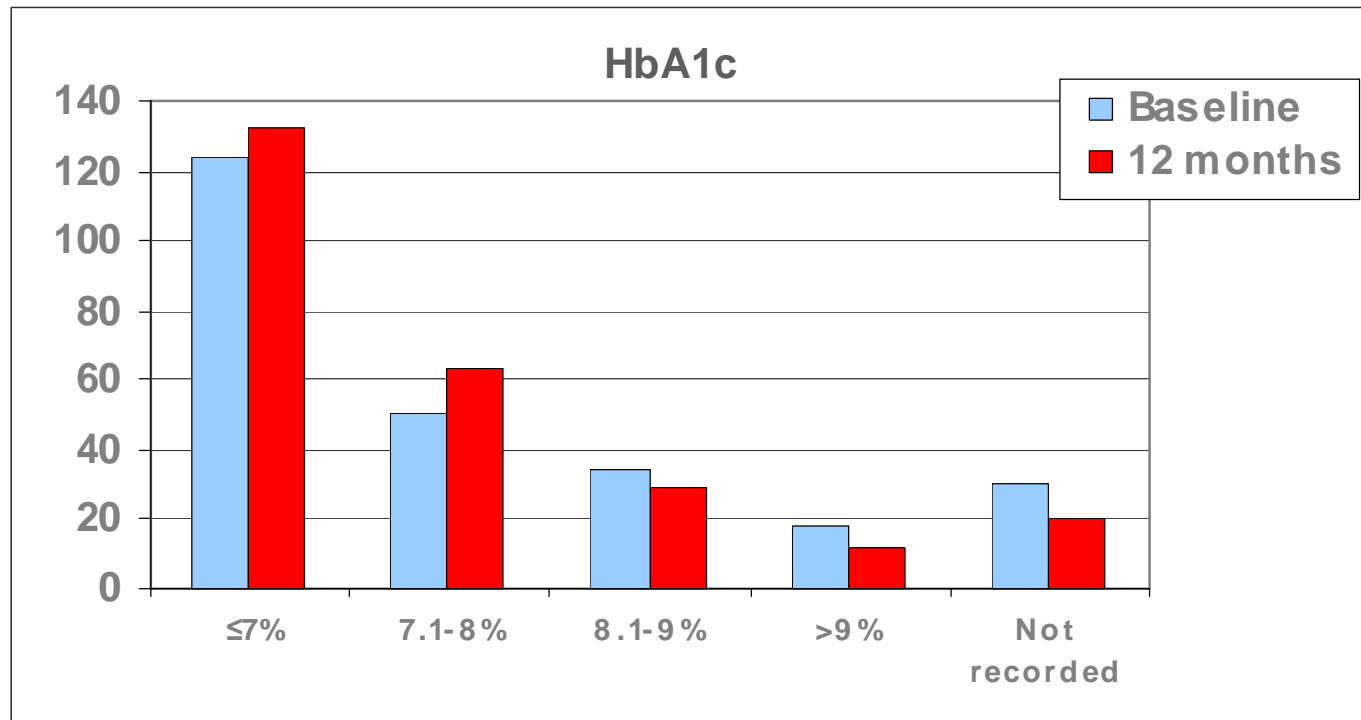


295 people completed the final survey

# Results: Change in Risk Factors

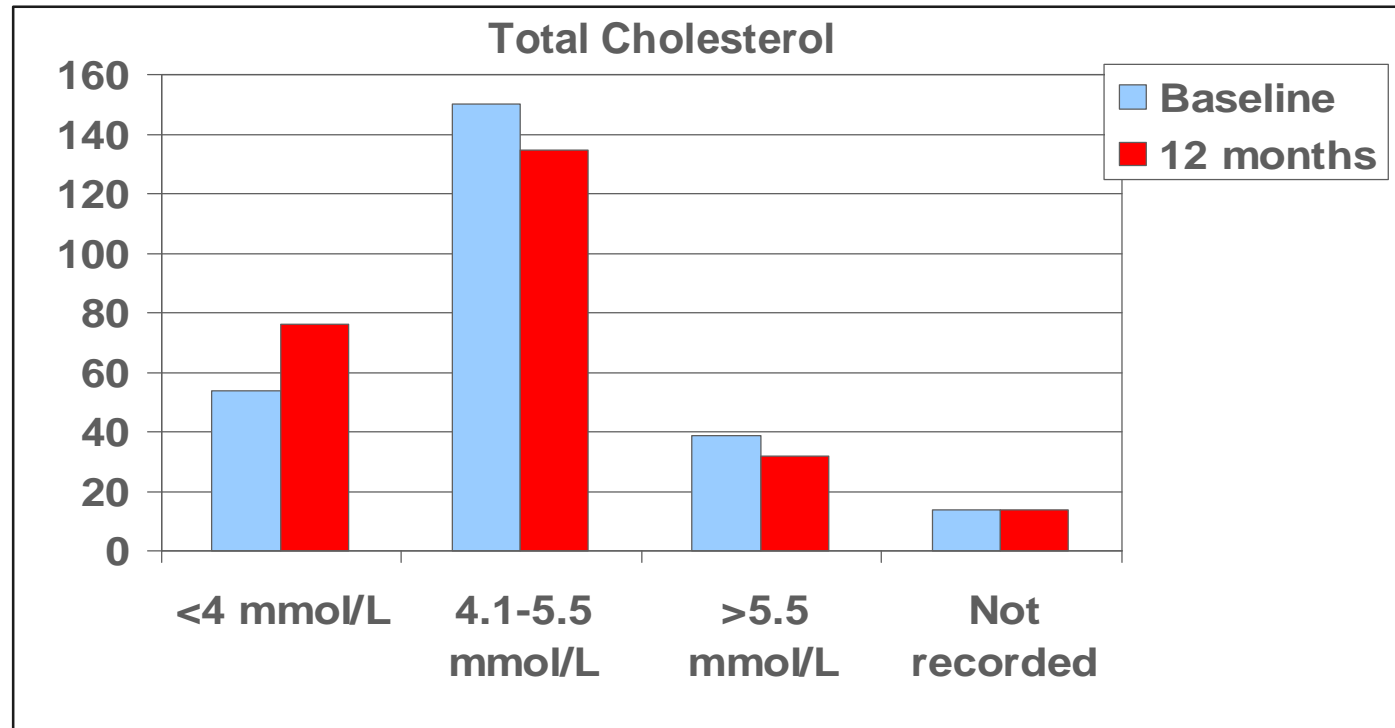
N = 295 Outcome variable	Baseline Mean	1 year Mean	Mean change	% difference over 12 months
HbA1c %	7.2	7.0	↓0.2	↓3%
BMI kg/m2	29.7	29.3	↓0.4	↓1.5%
Systolic BP mm Hg	131	133	↑2	↑1.5%
Diastolic BP mm Hg	77	77	0	0
Total cholesterol mmol/L	4.7	4.5	↓0.2	↓4%
LDL cholesterol mmol/L	2.6	2.4	↓0.2	↓8%
HDL cholesterol mmol/L	1.3	1.4	↑0.1	↑8%
Triglycerides mmol/L	1.8	1.65	↓0.15	↓8%

# Results: Change in Risk Factors



- 67% of participants with baseline HbA1c over 7% reduced their level
- 9% achieved a 1% point decrease in HbA1c: reduces risk of kidney and eye complications by 37% and myocardial infarct risk by 14%
- 40% reported commencing tablets or insulin or a change in dose

# Results: Change in Risk Factors



- 20% Cholesterol level <4 at baseline- 35% achieved target at 12 months
- 50% of people above 5.5 mmol/L were not on lipid lowering medication at baseline
- 25% of participants reported starting medication during the program

# Results: Change in Risk Factors

## Blood Pressure

- 39% lowered their systolic blood pressures
- 26% achieved a reduction in systolic blood pressure of 10mmHg reduction or greater:
  - reduces risk of developing kidney and eye complications by 13%,
  - reduces the risk of myocardial infarct by 11%.
- At baseline 19% of participants with BP above the target of 130/80 were not taking antihypertensive medication
- 23% reported of respondents reported commencing blood pressure medication.

## BMI:

- 46% had reduced weight
- 56% of overweight to obese lost weight, and 35% increased weight.

# Results: Change in Behavior

- 53% tested HbA1c more frequently
- Foot checks increased from 78%-92%
  - >50% occurring immediately after the mail-out
- Eye Checks: no change
- Flu vaccination: no change
- 61% improved diet
- 50% increased physical activity

# Results: Change in Knowledge

## Improvements in knowledge:

- 80% reported improved knowledge of their diabetes
- Increase from 40%-48% of members achieving 100% score on test of preventive activities

## Increased confidence:

- 33% reported changes in their interaction with their GP- more confident to ask questions and discuss management:

*“I have something to back up my demand for an effort to lower blood glucose”*

- 81% thought the ‘On Track’ program helped them better manage their health

# Results: Change in Health Utilization

- Hospital admissions reduced by 16%
  - Includes 8% decrease in overnight admissions
- Medibank Private expenditure decreased 8%
  - Largely driven by 9% decrease in hospital benefits
- Regression to the mean?

Prevention works like a charm in cutting costs

Health funds are exploring ways to keep members fitter, and attract them younger, writes **Clara Pirani**

**Health trial boosts fund's fortunes**

Program improves members' wellbeing, lowers hospital use

# Findings and Lessons Learnt:

- Format (mail) appealing to males, rural areas and the older population
- Credibility through expert body and industry guidelines
- Personalised responses and advice highly valued
- Statistically significant improvements in diabetes control and CVD risk factors
- Highest risk categories showed greatest improvement
- Reports indirectly influenced provider management
- Patients empowered with increased knowledge and capability
- Members were responsive to and appreciative of Medibank's assistance

# The ongoing challenges:

- Proactive identification of newly diagnosed or pre-diabetes
  - Early identification challenging in Australian system.
- Finding scalable, cost effective solutions to suit members needs and circumstances
  - Balance between prescriptive and personalized advice
  - Diversity of needs, access to services and channel preferences
  - Is the disease specific model the correct one?
- Effective interventions
- Correlation between the risk factors and complications
- Delivering Return on Investment (ROI)
  - Long term- leap of faith

# Acknowledgements:

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