

General Practice Divisions Victoria (GPDV)

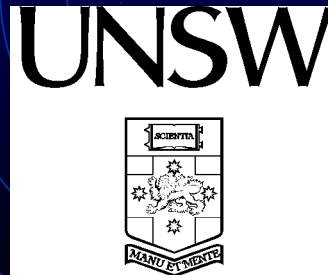
*GP Service Coordination: Linkages in  
Chronic Disease Care*

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# Today's presentation

- How DGP programs can contribute to more organised general practice care with better health outcomes...
- How can state funded organisations and DGPs work together to achieve better population health monitoring and health promotion...

# Summary of Outcomes from data

- Data comes from DGP registers – a part of structured care (Harris MF, Priddin D, Ruscoe W, Infante FA, O'Toole BI. Quality of care provided by general practitioners using or not using Division-based diabetes registers. *Medical Journal of Australia*. 177(5):250-2, 2002 Sep 2)
- *quality of care* rendered by GPs has improved over the 3 yr period
- *health outcomes* of patients managed by GPs have improved over the 3 yr period



# DIVISIONS DIABETES & CVD QUALITY IMPROVEMENT PROJECT

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**The DDCQIP Team would like to acknowledge and thank all of the Divisions who took part for their contribution to this work**

# The DDCQIP Project

- commenced June 2002
  - several components
  - series of studies
- all DGPs with diabetes and/or CVD program invited to participate
- 101 Divisions identified from ASD
- 79 diabetes program (78%), 39 CVD program with both
- open ended questionnaire to CDM PO (probably under reporting, but reflects noteworthy information)

# Division Profiles

- extracted DGP demographic data from *HealthWiz*
- calculated DGP population from ABS 2001 Census data Basic Community Profiles for postal areas (place of enumeration)
- calculated diabetes and CVD prevalence from *AusDiab* study
- calculated risk factor prevalence using *AIHW* analysis of *AusDiab* study, 2001 *National Drug Strategy Household Survey* and 2000 *Physical Activity Survey*

# CARDIAB Data aggregation

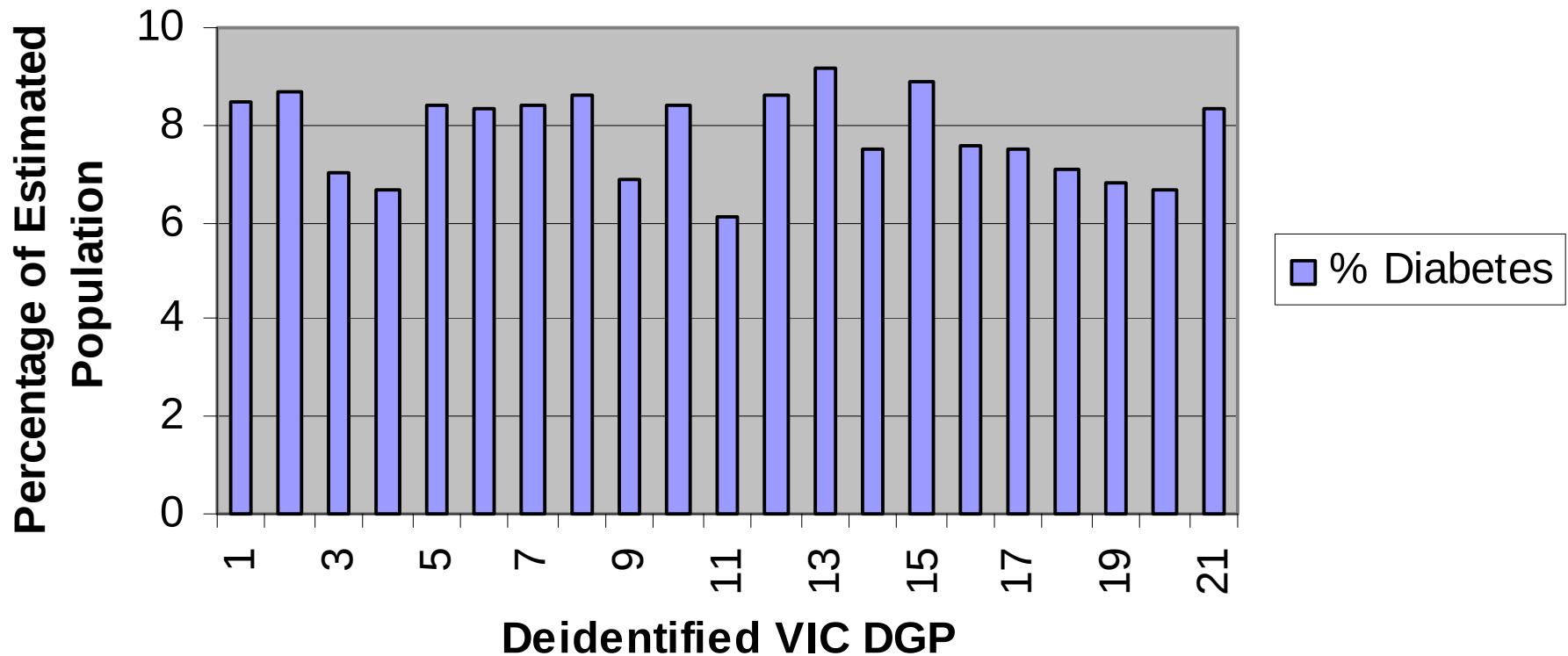
- 22 Divisions using CARDIAB for at least 3 years invited
- 19 had data for all 3 years
- 16 had ongoing and active registers
- deidentified unit record data
- cross-sectional data
- cohort currently being analysed

# Sample size

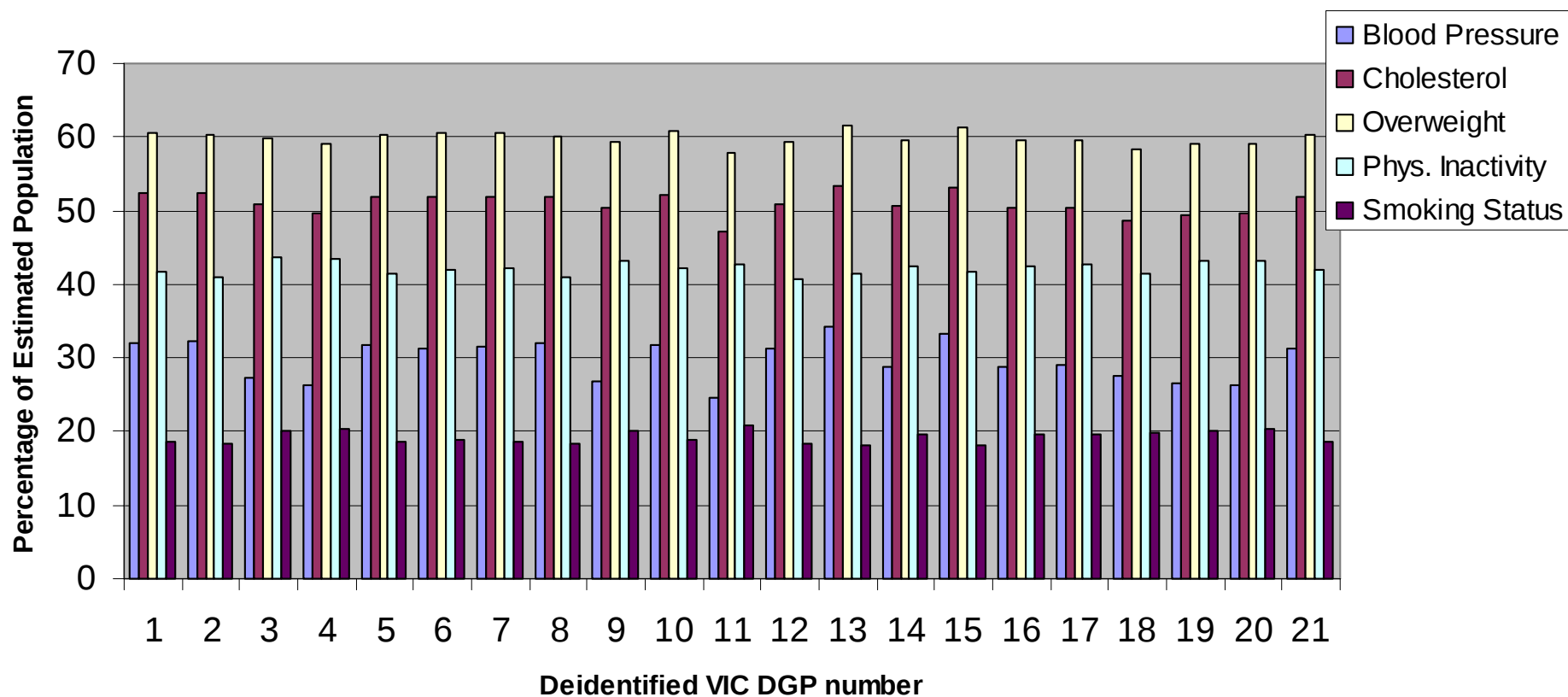
- 2000: > 7 000 records
- 2001: almost 10 000 records
- 2002: > 13 000 records
- Cohort: > 3 000 records

The estimated prevalence of diabetes varied between the VDGP's...

## Estimated Prevalence of Diabetes



# Estimated Prevalence of Risk Factors in VDGP's



# Quality of Care

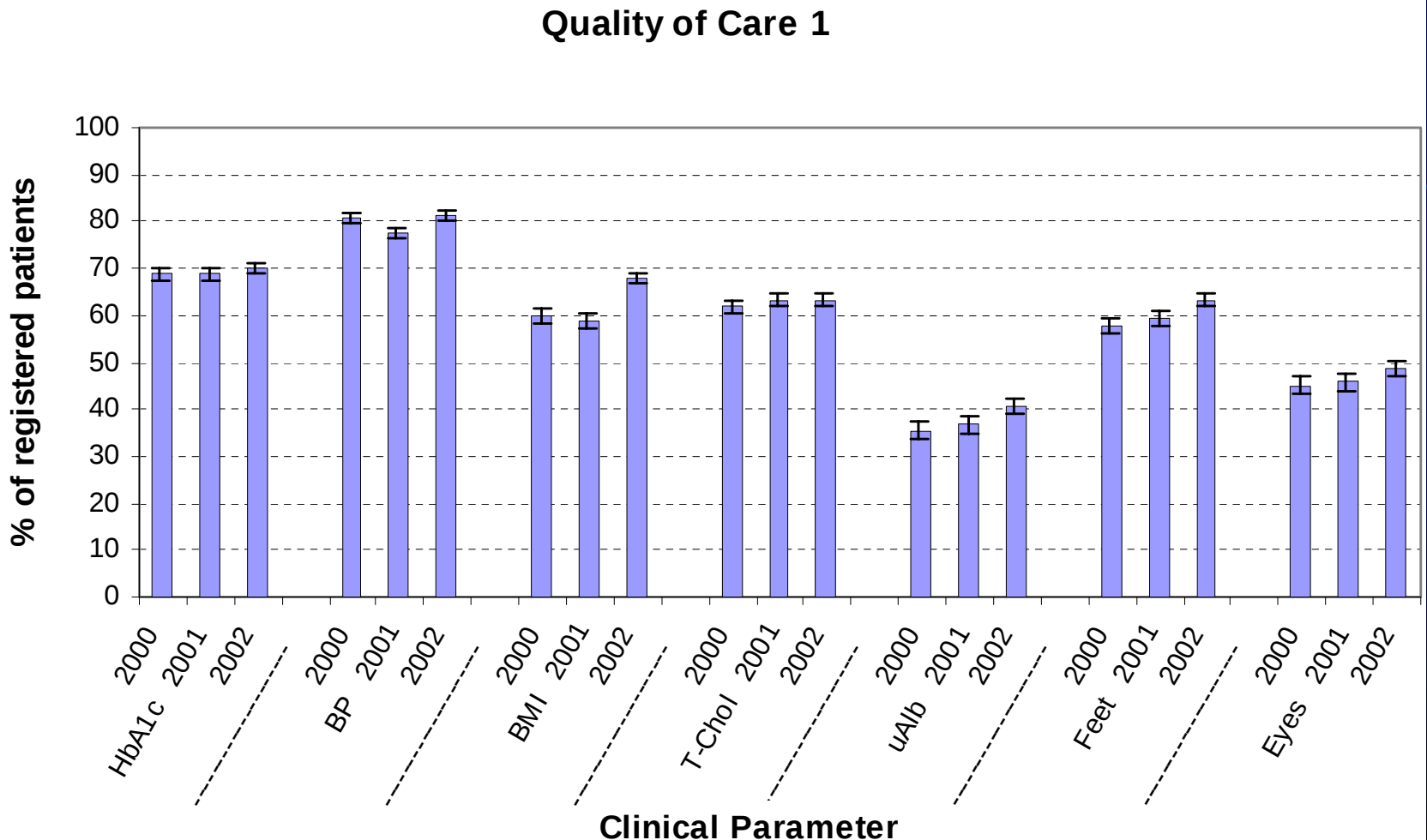
- first time series data
- *increase* in both numbers of patients having assessments and total number of patients on registers
- rate of change of numbers of patients having assessment and number of patients joining register differed
- rate at which patients joined register outstripped rate at which patients were being assessed (workforce issues)
- Extensive statistical testing proves significance

# Quality of care indicators

1. % increase in number of patients on registers having assessment where the GP was seen at least once in that year
2. % of registered patients having all assessments conducted in the given year
3. % increase in number of patients having assessments 2000-2001 & 2001-2002
4. Change in number of patients and % change in number of patients having assessments and on registers

# Quality of Care 1

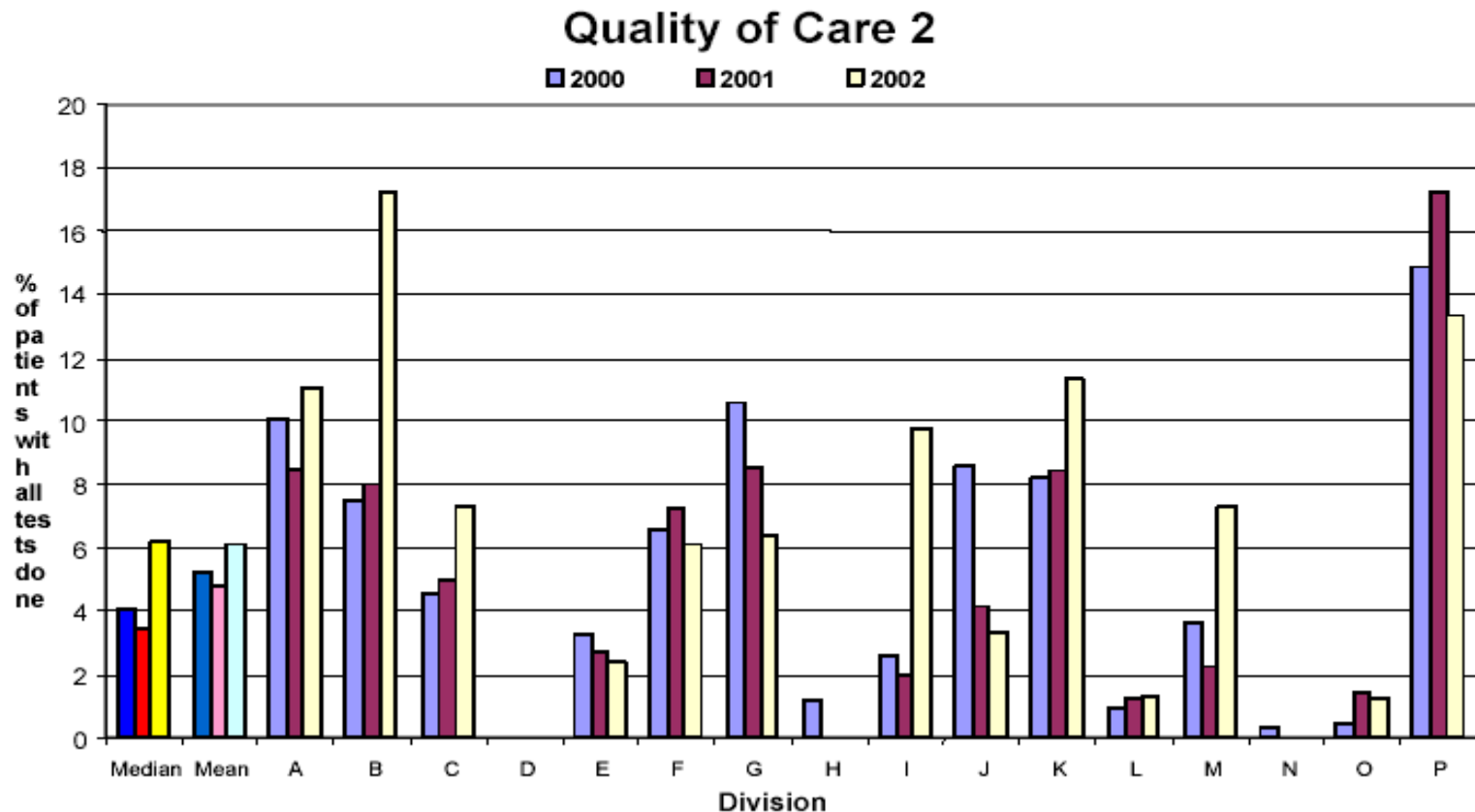
Percentage of registered patients with assessment conducted  
in year indicated where GP seen at least once in that year  
2000-2002, all Divisions (n=16)



# Quality of care 2

**Figure 4: Diabetes Quality of Care 2**

Percentage of registered patients having all assessments conducted in year indicated  
2000 – 2002, all Divisions (n=16)

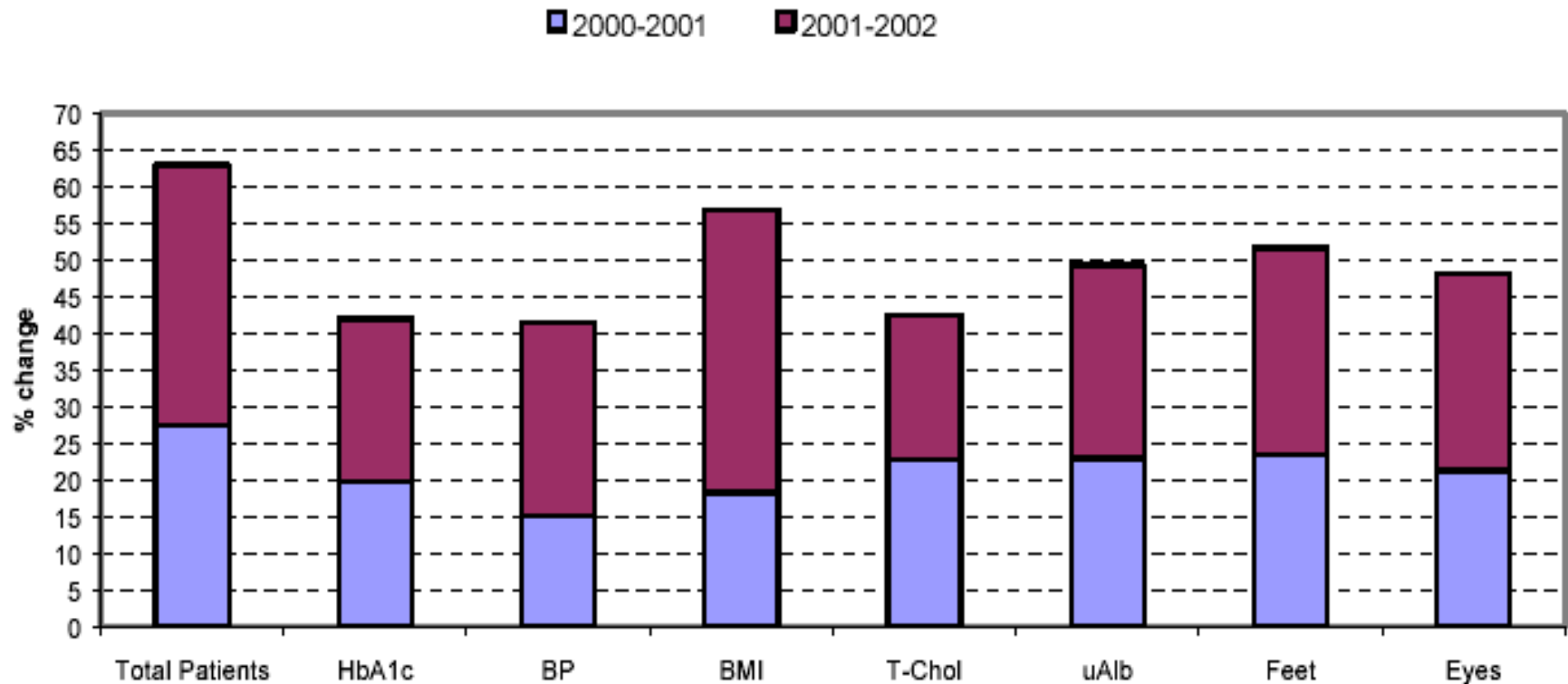


# Quality of care 3

**Figure 5: Diabetes Quality of Care 3**

All Divisions (n = 16)

% Increase in number of patients having assessments



# Quality of care 4 - HbA1c

**Figure 6 – 25: Change in number of patients and percentage change in number of patients having assessment indicated and on registers**  
2000 – 2002, all Divisions (n = 16)

Figure 6: HbA1c

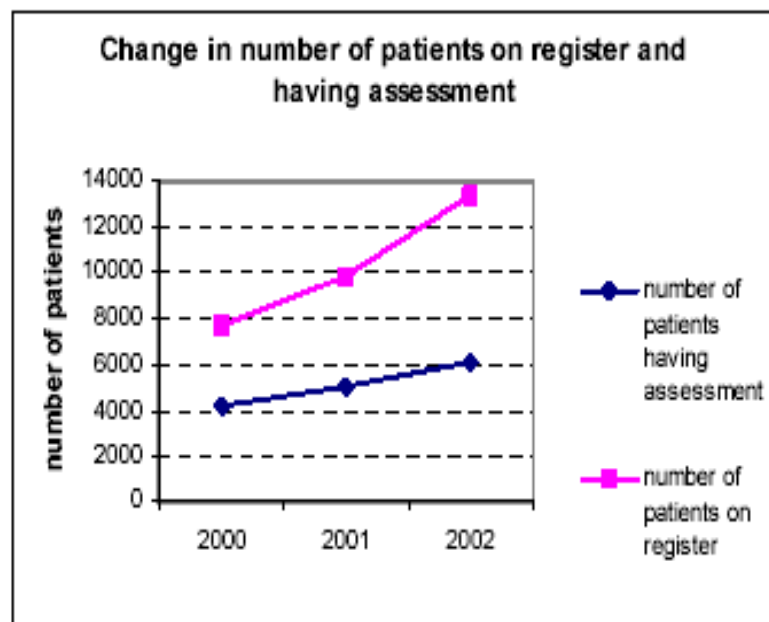
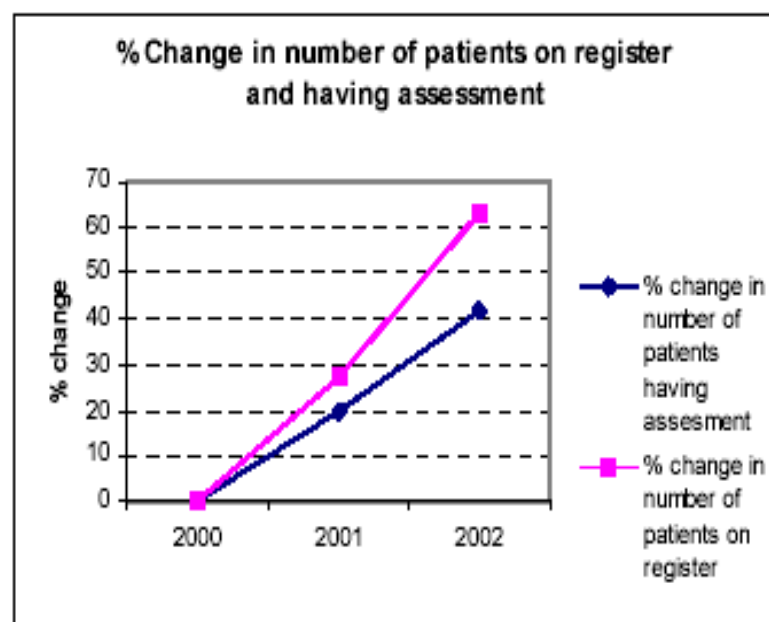
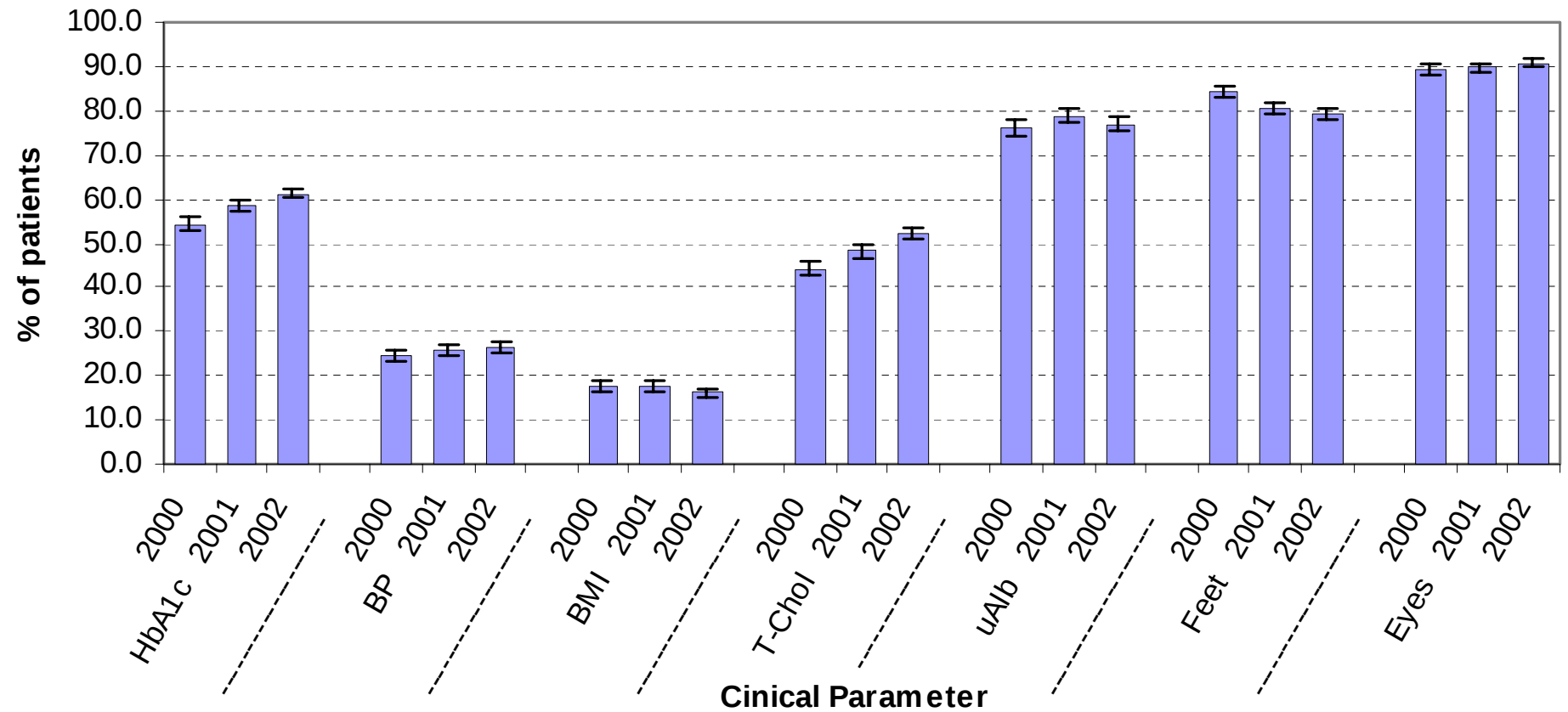


Figure 7: HbA1c



## Health Outcomes



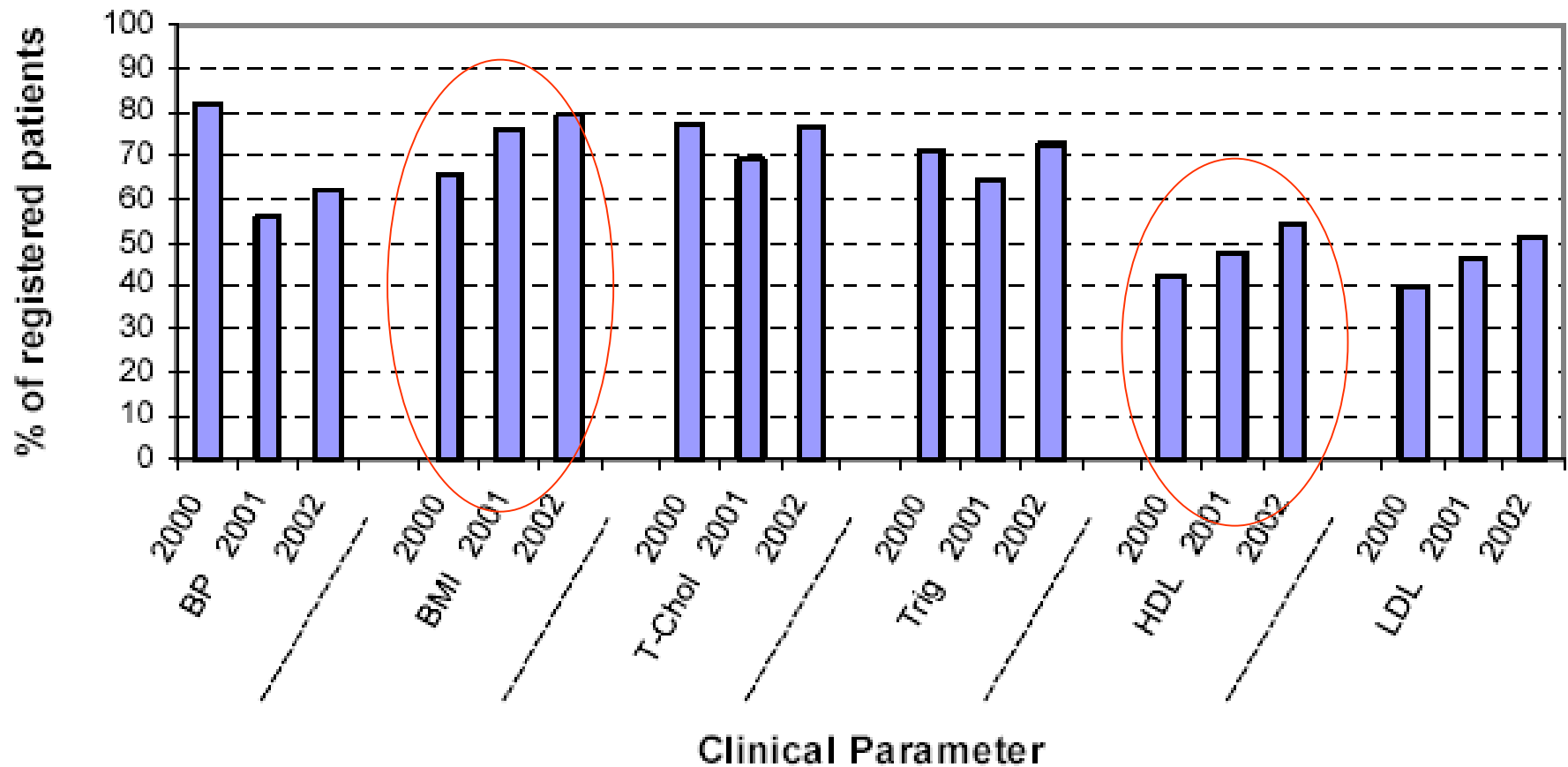
# CVD Program types

- Cardiac rehab the most popular CVD program, followed by CVD primary prevention, CVD secondary prevention, stroke/TIA, heart failure and then Unstable Angina Pectoris (UAP)
- Less CVD registers than diabetes registers (could record both on CARDIAB)
- Most needed guidelines – exist in CVD, but may be confusing for comorbidities (when to know BP and lipids for diab and CVD)

# QOC and HO in CVD

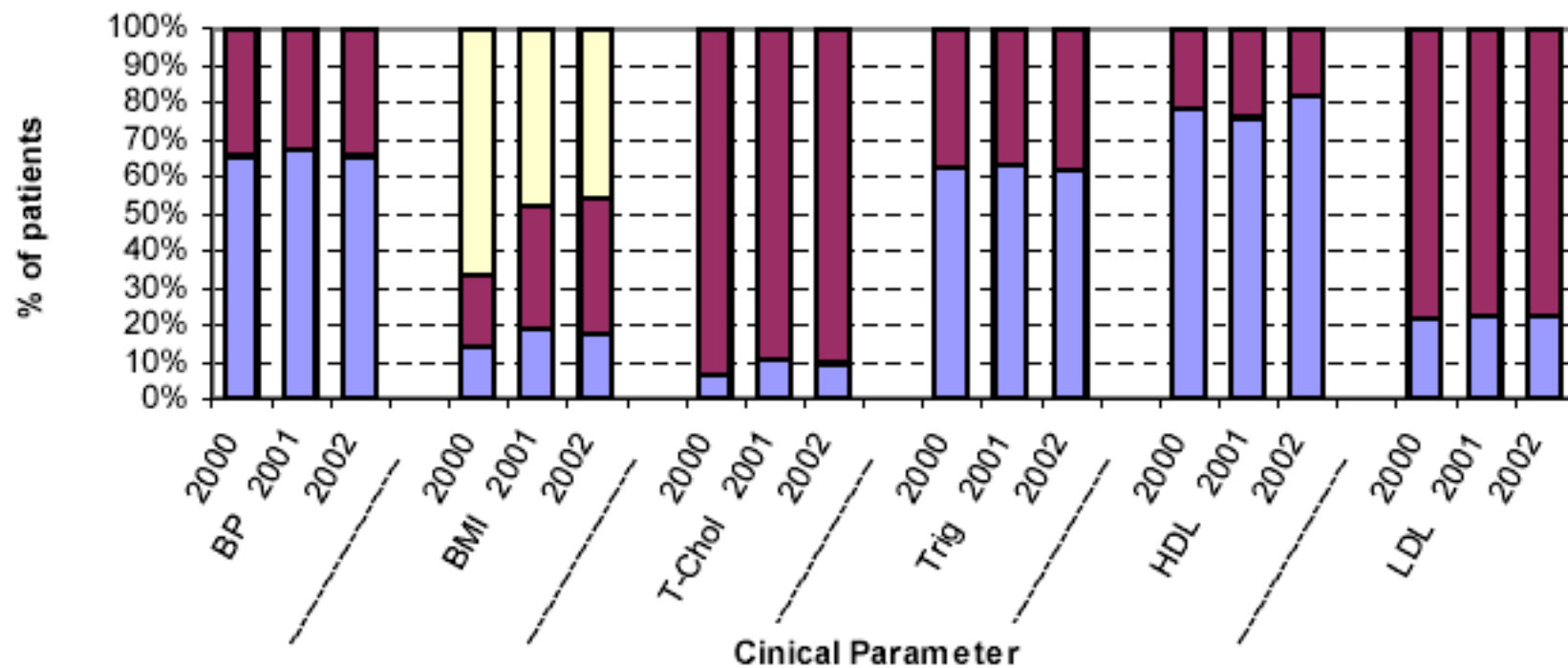
- QOC improved over the 3 years
  - CVD only (except total chol and BP)
  - Diab and CVD (except HbA1c and microalb)
- A big increase from 2000 to 2001 in CVD and Diabetes programs might be explained by introduction of integrated programs

## Quality of Care for CVD only program

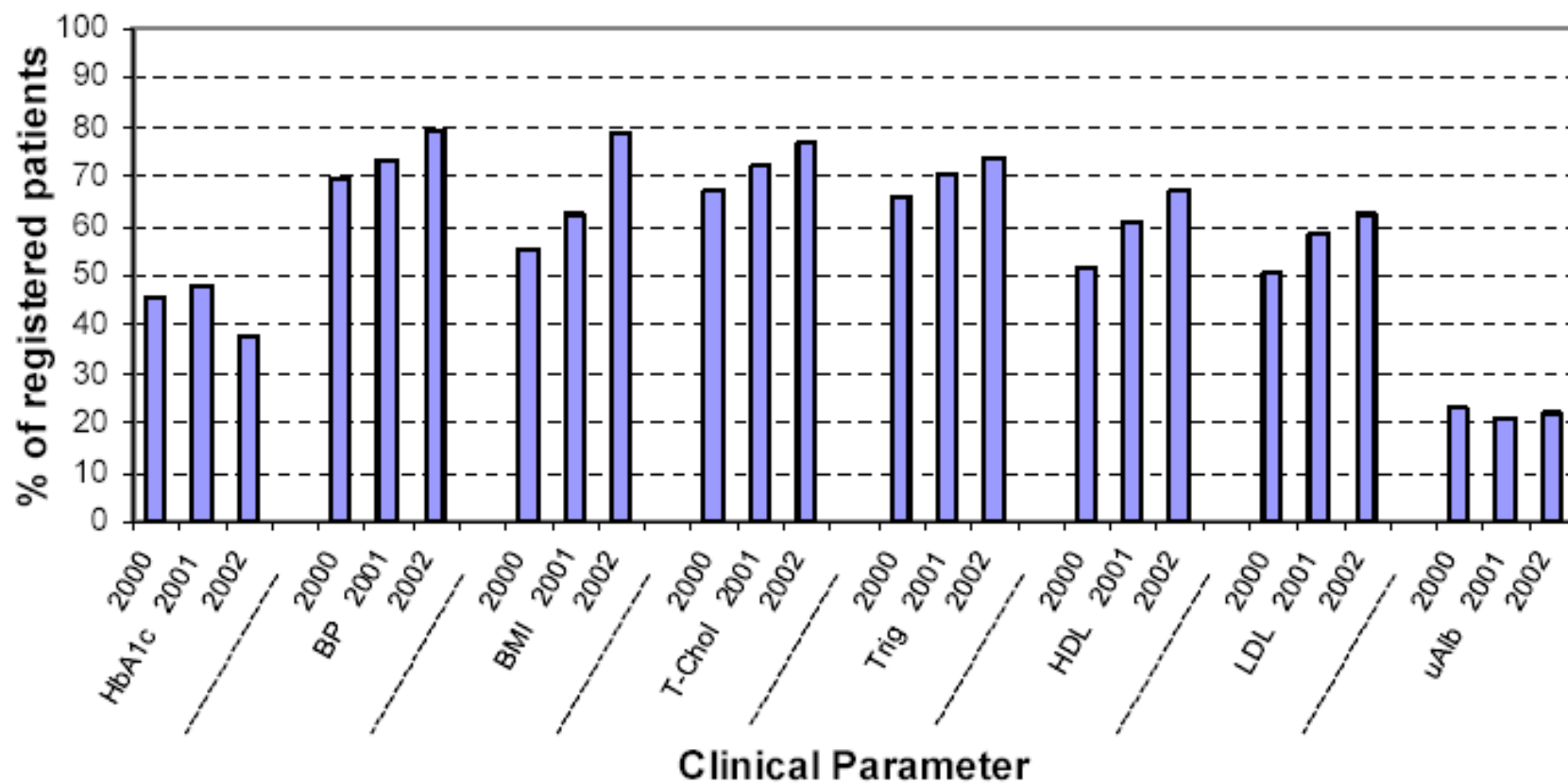


## Health Outcomes for CVD only program

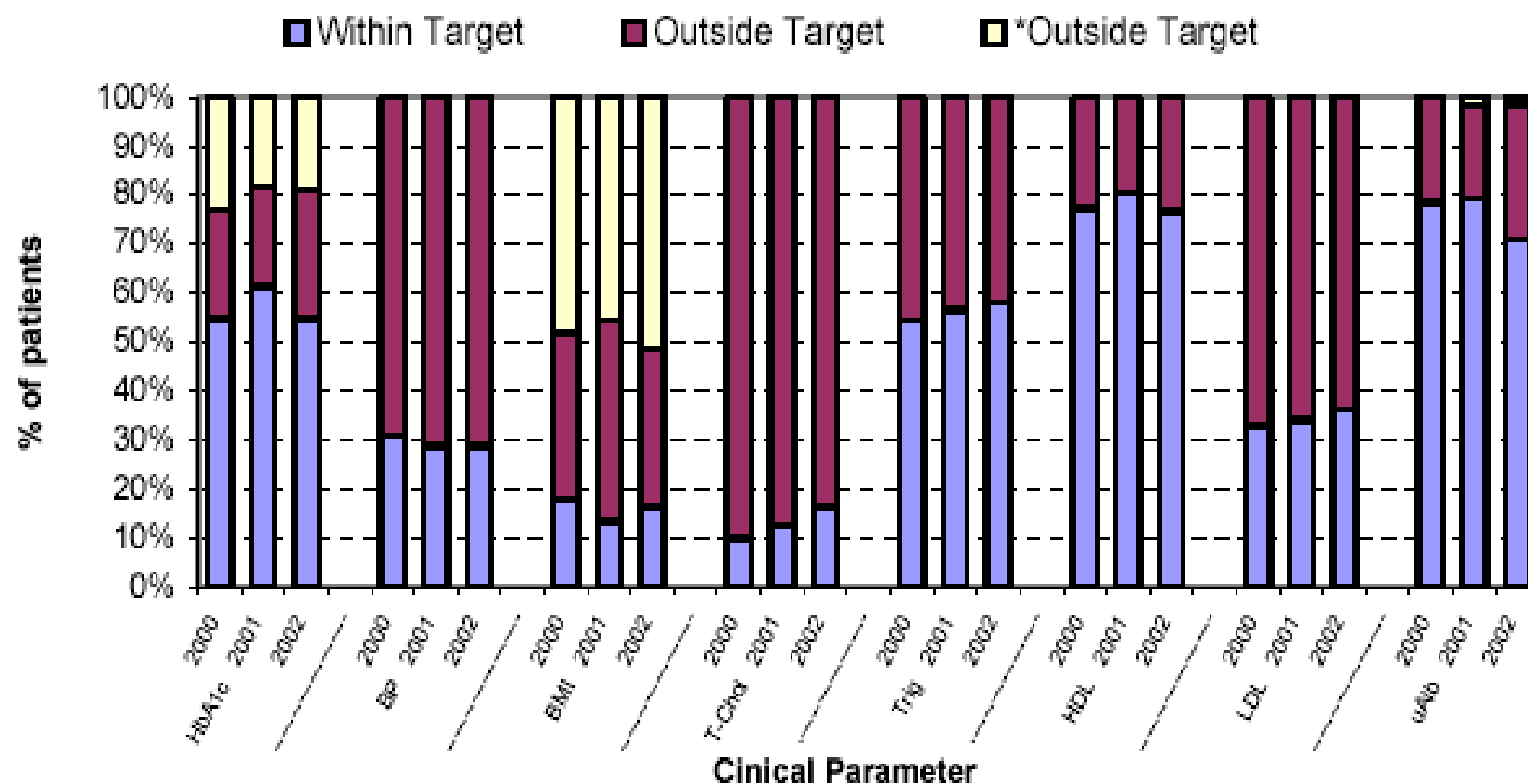
■ Within Target
 ■ Outside Target
 ■ \*Outside Target



## Quality of Care for CVD and Diabetes program



## Health Outcomes for CVD and Diabetes program



# Profiles questionnaire

- Open-ended questions to the Diabetes Program Officer
  - program description including how long & changes over time
  - services available and services needed
  - highlights & achievements
  - barriers
  - future plans
  - strategic alliances (at request of SBOs)
  - factors contributing to uptake of NIDP
  - resources
- Information available on CD (future plans, barriers etc in greater detail)

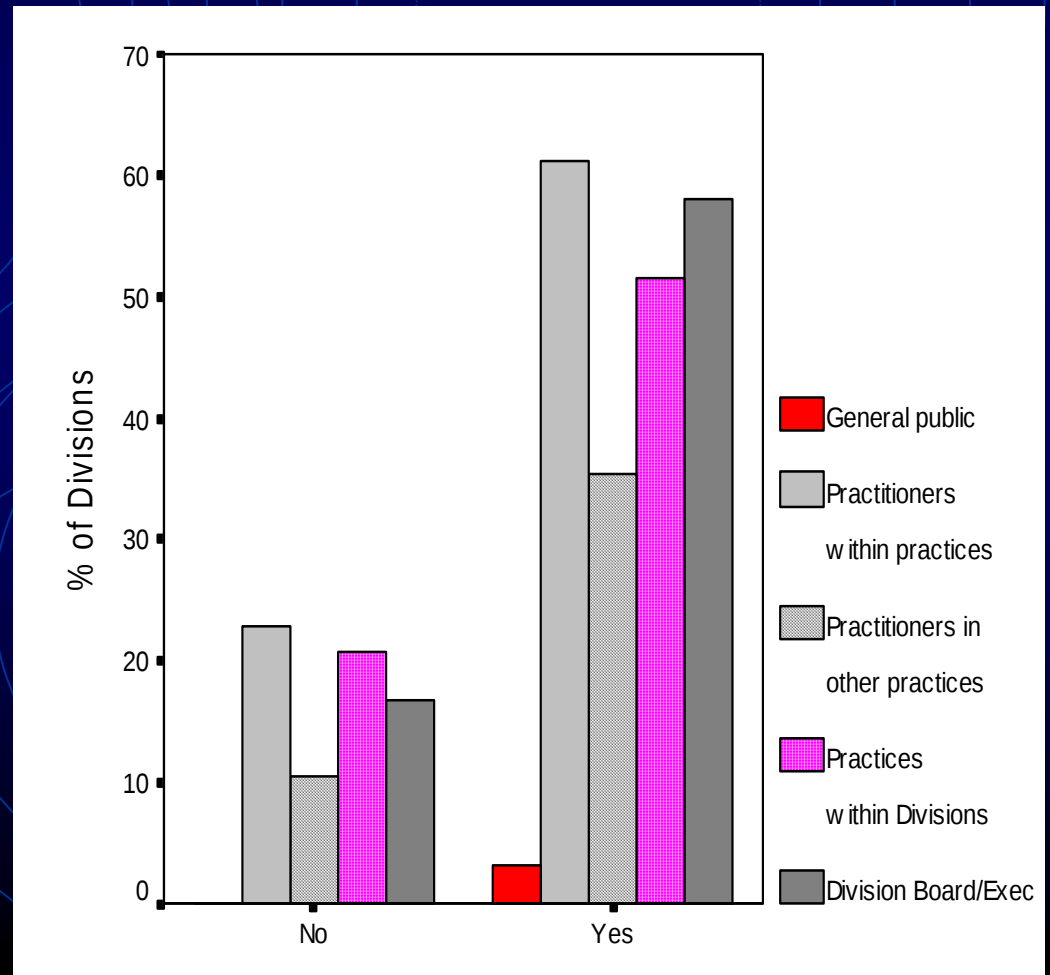
# DGP Diabetes program components

- most common component was a register and recall system (44%)

# Register recall systems

Figure 5: Who do Divisions (diabetes program) make clinical audit data available to compared by whether or not Division has a register

- 31 Divisions with diabetes registers, 9 with CVD
- Large increase in the GP/active registered patient ratio across Divisions
- Registers as population health tools



# DGP Diabetes program components (cont.)

- most common component was a register and recall system (44%)
- GP education (42%)
- Diabetes educator (32%)
- Assistance with NIDP incentives (28%)
- Patient education (23%)
- EPC care planning/case conferencing (22%)
- Practice nurse (20%)
- Clinical audit (19%)

# Highlights and achievements

- GP participation (37%)
- *Integration/links/collaboration (30%)*
- Recall/registration (24%)
- Patient reach (24%)
- GP education (22%)
- Patient outcomes (18%)

# Barriers

- Lack of funding/space/infrastructure (49%)
- Lack of commitment/time/interest (43%)
- IM/IT (23%)

# Factors contributing to practice uptake of NIDP incentives

- *systems approach* (32%) - esp in some states (Vic, Qld, SA)
- Division support (28%)
- GP/staff motivation, interest (27%)
- Practice nurse/manager (24%)
- Understanding of NIDP incentives (23%)
- NIDP payments (14%)

# Diabetes Program Strategic Alliances (all DGPs)

- consumer organisations :DA, NHF (42%)
- hospitals, AreaHS (38%)
- special interest groups/networks (35%)
  - eg. Diabetes Alliance Group Vic
- community service organisations (24%)
- Diabetes Educator (23%)
- Diabetes Centres/clinics (15%)

(CVD - majority nominated community and consumer strategic alliances most frequently, followed by major state and national organisations, local service providers and programs)

# Diabetes Program

## Strategic Alliances VIC DGPs

- Primary Care Partnerships
- Hospitals
- Community Health Centres
- DAG
- Community Health Services
- Diabetes Australia

# Why look at program integration?

- shift in DGP programs from *single disease* focus (silo approach) to an *integrated chronic disease* focus
  - ? Generalising from evidence of effectiveness of more structured approach and reflection of how general practice actually works
  - ? Financial and resource constraints (and large number of DoHA programs)
- What we did...
  - Describe the spread of integrated programs across different chronic disease areas
  - Describe advantages/disadvantages by DPOs

# Key Findings

- 58% DGPs recorded their diabetes and/or CVD program as part of an integrated chronic disease program
- 91% agreed to complete questionnaire
  - ↑ rural than urban
  - 66% from NSW and VIC

| <b>Mean Annual Resource Use per respondent (SD)</b> | <b>VIC</b>                |
|-----------------------------------------------------|---------------------------|
| <b>Ambulatory care</b>                              | <b>Mean (SD)</b>          |
| GP visits (home)                                    | 0.4 (3.0)                 |
| GP visits (surgery)                                 | 10.3 (11.2)               |
| Outpatient visits                                   | 1.0 (3.6)                 |
| Emergency Ambulance                                 | 0.1 (0.7)                 |
| Emergency Admission                                 | 0.2 (1.3)                 |
| <b>In hospital setting</b>                          | <b>Mean (SD)</b>          |
| Inpatient nights (public and private)               | 2.2 (13.6)                |
| Inpatient nights in patients admitted to hospital   | 34.2 (42.6)               |
| Respondents admitted                                | n = 201 (8.1%)            |
| <b>Drug Use – antidiabetic therapies</b>            | <b>% Patients</b>         |
| Metformin                                           | 41.1                      |
| Sulphonylurea                                       | 37.6                      |
| Insulin with/out OHAs                               | 5.7                       |
| <i>(Table 3.7 p20)</i>                              | <i>DiabCost Australia</i> |

# National level

- We are achieving improvements in QoC and HO - these need to continue.
- Chronic disease requires a sustained integrated approach and funding in both urban and rural areas (NIDP, practice nurse initiatives, NPS etc).
- Need CVD and Prevention (SNAP) program
- Consistency in IM developments and standards (NHDD/Health Connect)

# State level

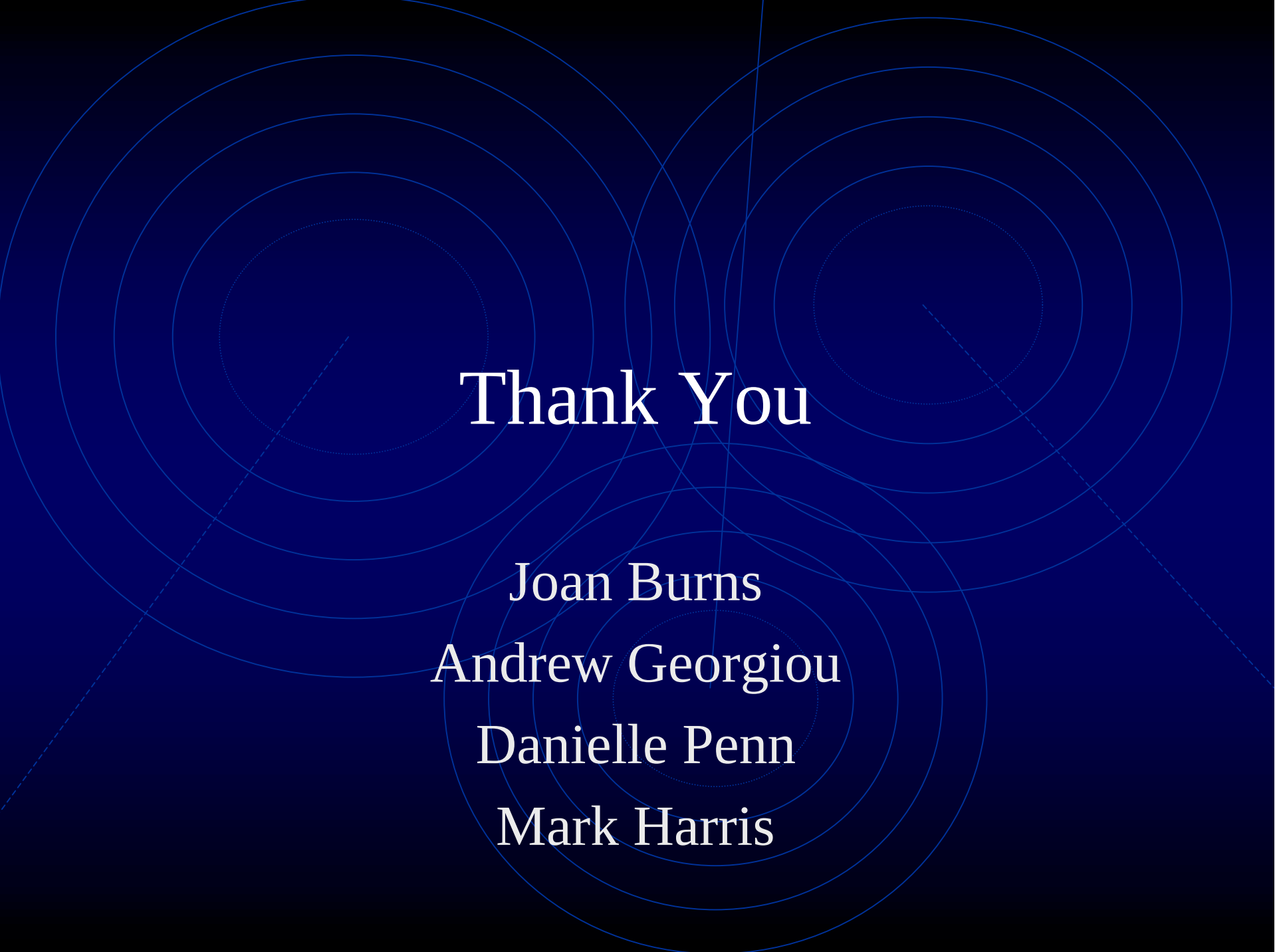
- Commitment to integration of provision of multidisciplinary care between divisions and state health services
- Sustained SBO support to divisions in chronic disease management
- PCP potential

# Division

- Achievements but much variability between divisions and practices in QoC and HO.
- Clear direction on the role of divisions and practices in service development
- A means of developing and sustaining capacity (data, IT, staff, collaborations with Universities)
- Collaborations between stakeholders

# Research and evaluation

- Understand the interaction between division programs, practice capacity and activities and quality of care
- Further analysis of interaction between prescribing and health outcomes, health inequalities.
- Understand interaction between quality of care and access to general practice
- Understand the costs and benefits of various models of integrated chronic disease management in general practice

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# Thank You

Joan Burns  
Andrew Georgiou  
Danielle Penn  
Mark Harris