



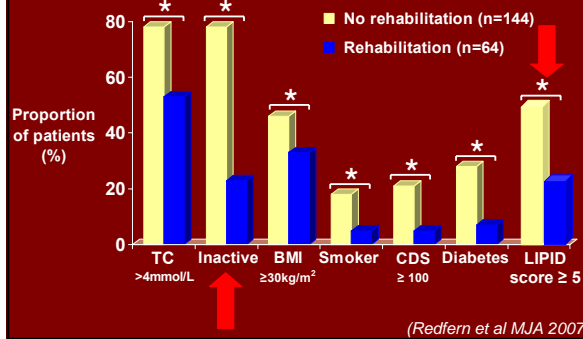
# Patient-centred secondary prevention of heart disease: a randomised controlled trial

Julie Redfern, Tom Briffa, Elizabeth Ellis, Ben Freedman

## Background

- ACS is highly prevalent and is a major health burden *(AIHW 07)*
- 70% of patients do not access cardiac rehabilitation *(Scott et al MJA 03)*
- Patients not accessing rehabilitation have higher level of risk *(Redfern et al MJA 07)*

## Proportion with high risk factors



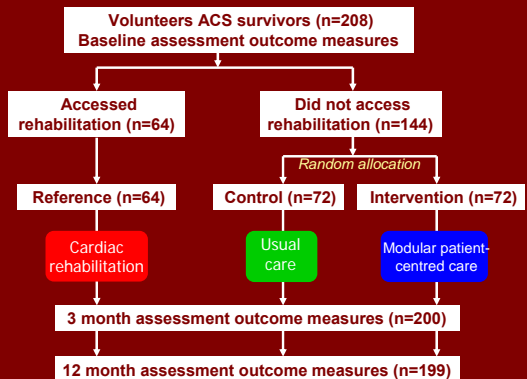
## Aims

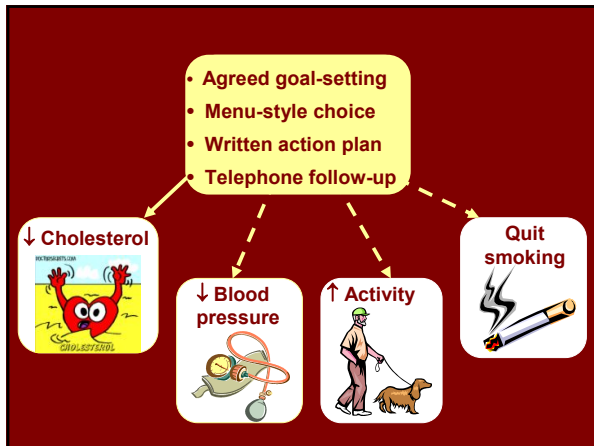
1. RCT to test effectiveness of patient-centred care on
  - Modifiable risk factors
  - Global risk
  - Patient's knowledge of their risk factors
2. Compare changes in risk factors following patient-centred care with cardiac rehabilitation

## Development of modular intervention

- Patient-centred
  - Choice
  - Flexibility
- Therapeutic alliance *(Horvath JCLP 00)*
- Self management *(Lorig Med Care 00)*

## Methods



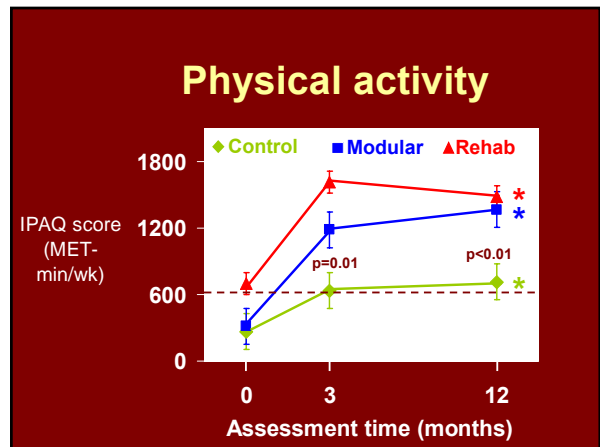
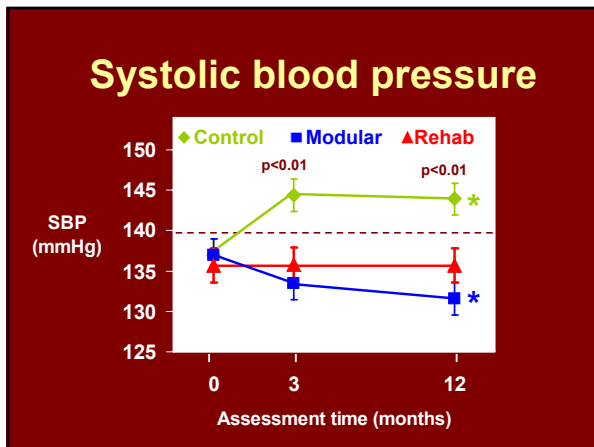
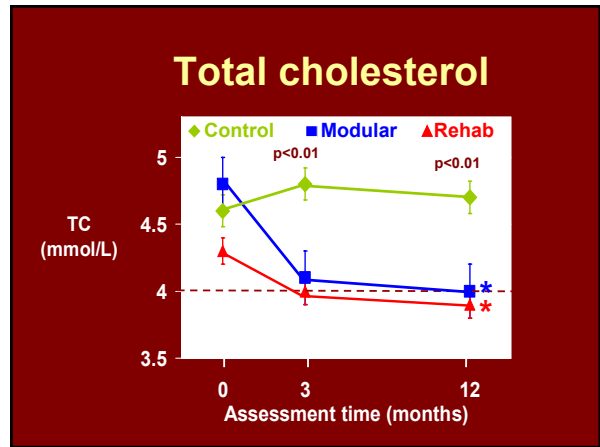


## Outcome measures

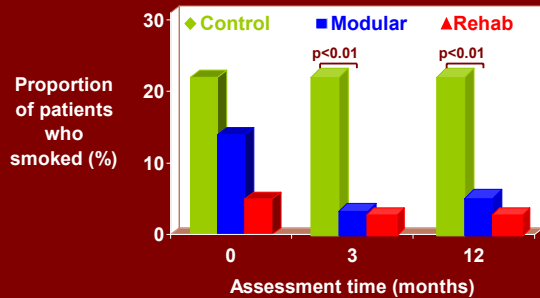
- 1. Modifiable risk factors**
  - Total plasma cholesterol (mmol/L)
  - Blood pressure (mmHg)
  - Body mass index (kg/m<sup>2</sup>)
  - Smoking (CO meter + self report)
  - Physical activity (7 day IPAQ MET-min/week)
  - Depression (cardiac depression scale)
- 2. Global risk**
  - Number of modifiable risk factors
  - LIPID risk score (Marschner et al JACC 01)
- 3. Knowledge of risk factors**

## Demographics

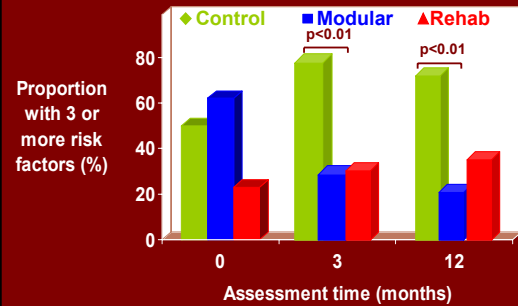
	Control (n=72)	Modular (n=72)	Rehab (n=64)
Male (%)	75	74	80
Age (years)	67	62	64
History of CVD (%)	47	49	34*
ACS - STEMI (%)	17	19	16
- NSTEMI (%)	41	39	33
- UA (%)	42	42	52
Revascularisation- PCI (%)	35	31	45
- CABG (%)	22	17	34*



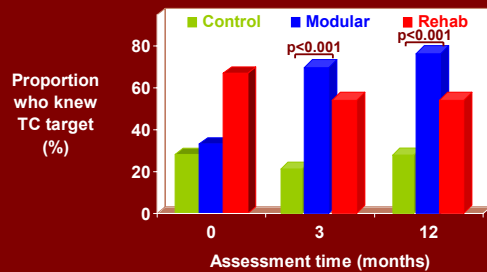
## Smoking



## 3 or more risk factors



## Knowledge of target total cholesterol



## Limitations

- No specific modules for overweight, diabetes and depression
- Single-centre study
- Reference rehabilitation group were not randomised

## Summary

- After ACS patients not accessing cardiac rehabilitation were at higher baseline risk
- Patient-centred modular care improved risk factors, global risk and knowledge

## Conclusions

- Brief patient-centred intervention assists the large group not accessing rehabilitation to make positive changes to their risk factors that persist for 12 months
- Cardiac rehabilitation practitioners are ideally positioned to lead programs across many chronic disease



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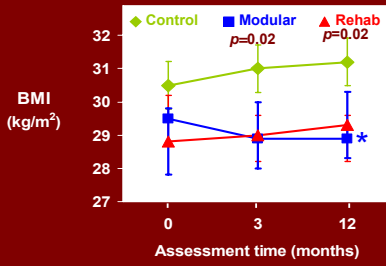
## Acknowledgements

National Heart Foundation of Australia  
Cardiac Society of Australia and New Zealand  
University of Sydney

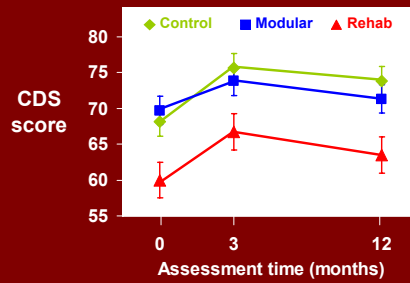
## Reasons for not attending cardiac rehabilitation



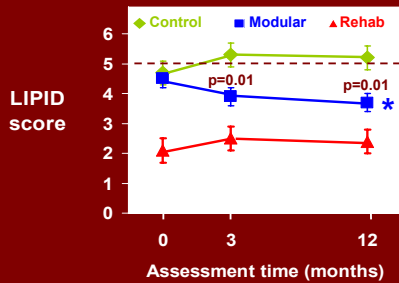
## Overweight



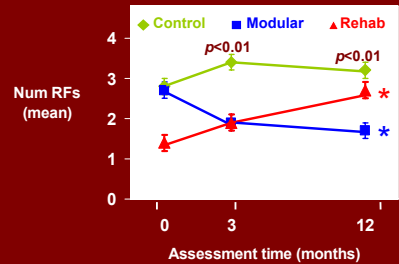
## Depression



## Global risk score



## Number modifiable risk factors



## Participation in choice modules

- **BP lowering (81% of eligible)**
  - 70% GP/specialist-directed
  - 20% individual lifestyle program
  - 10% self-help
- **Physical activity (85% of eligible)**
  - 72% individual activity program
  - 15% community-based program
  - 6% self-help
- **Smoking cessation (70% of eligible)**
  - 50% individual clinic-based program
  - 30% self-help
  - 20% GP/specialist-directed