

# Improving the Assessment & Management of Alcohol Disorders in hospital by Junior Medical Officers



The University of Sydney &  
Sydney South West Area Health  
Service



Funded by the Alcohol Education &  
Rehabilitation Foundation

# Sydney Harbour



# Research Team

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# Background

- The rate of detection and intervention for alcohol use disorders amongst hospital inpatients remains low
- In November 2001, 13% of 231 inpatients at a Sydney teaching hospital scored >8 on AUDIT questionnaire (i.e. drinking at risk levels)
- Alcohol histories were present in only 50% of patient notes; 80% of these were not quantified
- No interventions (advice or treatment) for alcohol were recorded.

*Shourie et al, in press*

# Primary Aim

- To determine whether 2 strategies (individual or group feedback) improve assessment and management of alcohol use disorders amongst hospital in-patients by Junior Medical Officers (JMOs)
- JMOs - interns & 1<sup>st</sup> year resident medical officers

# Secondary Aims

- To improve
  - (i) documentation of **quantitative** alcohol consumption histories
  - (ii) rates of **detection** of risky alcohol consumption
  - (iii) recording of **interventions** for risky alcohol consumption, and
  - (iv) to compare the **effectiveness** of the 2 types of feedback

# Method

- A crossover trial at two metropolitan teaching hospitals
- All medical records obtainable for each JMO were examined on the general wards at baseline and following intervention
- Data collected on handheld computers by medical students

# Method

- Data collection took place over specified 10- week periods, starting at the beginning of each JMO rotation
- A gap was left after feedback sessions before data collection recommenced in the same hospital

# Data collection

- Data collection was done in stages over the 2 hospitals
- Hospital 1 was commenced first in 2004, then Hospital 2, and so on
- In 2005, we were able to overlap data collection periods

# Outcome measures

- (i) any alcohol information
- (ii) quantified alcohol history
- (iii) record of tobacco use
- (iv) prescription of nicotine patches (NRT),  
and
- (v) record of intervention for patients with  
excessive alcohol consumption

# Interventions

- Each hospital received one form of intervention each year: either
  - (1) Printed, personalised, individual feedback on performance in comparison to the group, & education on desired performance
  - (2) A group presentation to junior and senior medical staff providing overall feedback and education on desired performance

# Overview

## **Royal Prince Alfred Hospital**

- individual feedback 2004
- group feedback 2005
- approx 65 JMOs each year

## **Concord Hospital**

- group feedback 2004
- individual feedback 2005
- approx 65 JMOs each year



## *Royal Prince Alfred Hospital*



705 beds

# RPA

Royal Prince Alfred Hospital was named after Queen Victoria's second son, His Royal Highness Prince Alfred, later Duke of Edinburgh. In 1868 he was the victim of an assassination attempt while on a visit to Sydney. Australians opened a subscription fund to build a hospital as a memorial to his safe recovery. Built in the 1880's; another new wing added 2005-6.



# RPA results

2004 records	731
2005 records	1307
Total	2038 records



## *Concord Repatriation General Hospital*



409 beds

# Concord Repatriation General Hospital

After the outbreak of the Second World War, the Commonwealth Government purchased part of a large estate (Yaralla) and built the 113th Australian General Hospital, an army hospital caring for 1000's of sick and wounded defence personnel

Renovated and new block built in 2004



# Concord results

2004 records	478
2005 records	509
Total	987 records

## *All results by year*

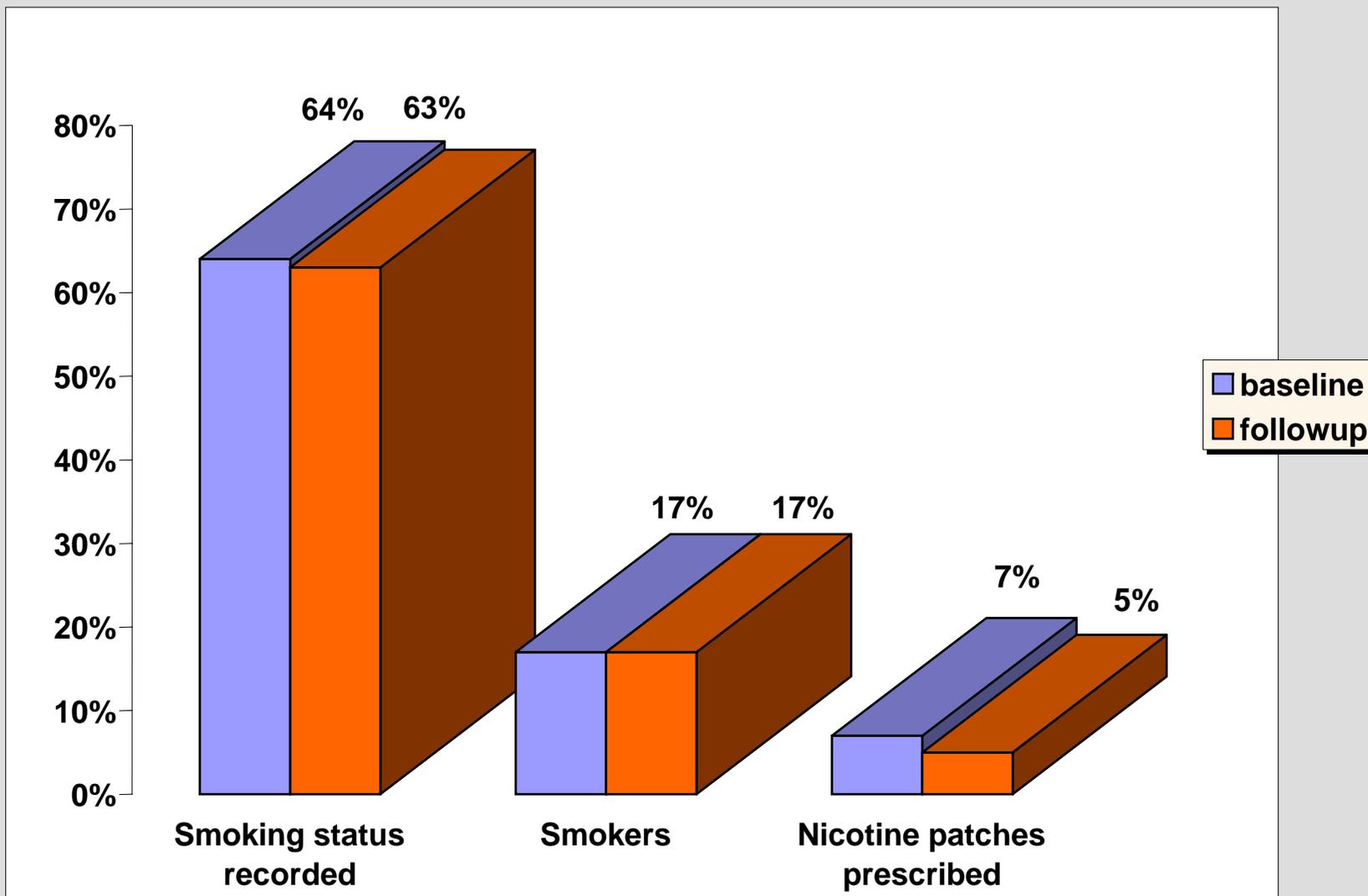
2004 records	1209
2005 records	1816
Total	3025 records

# All results by group

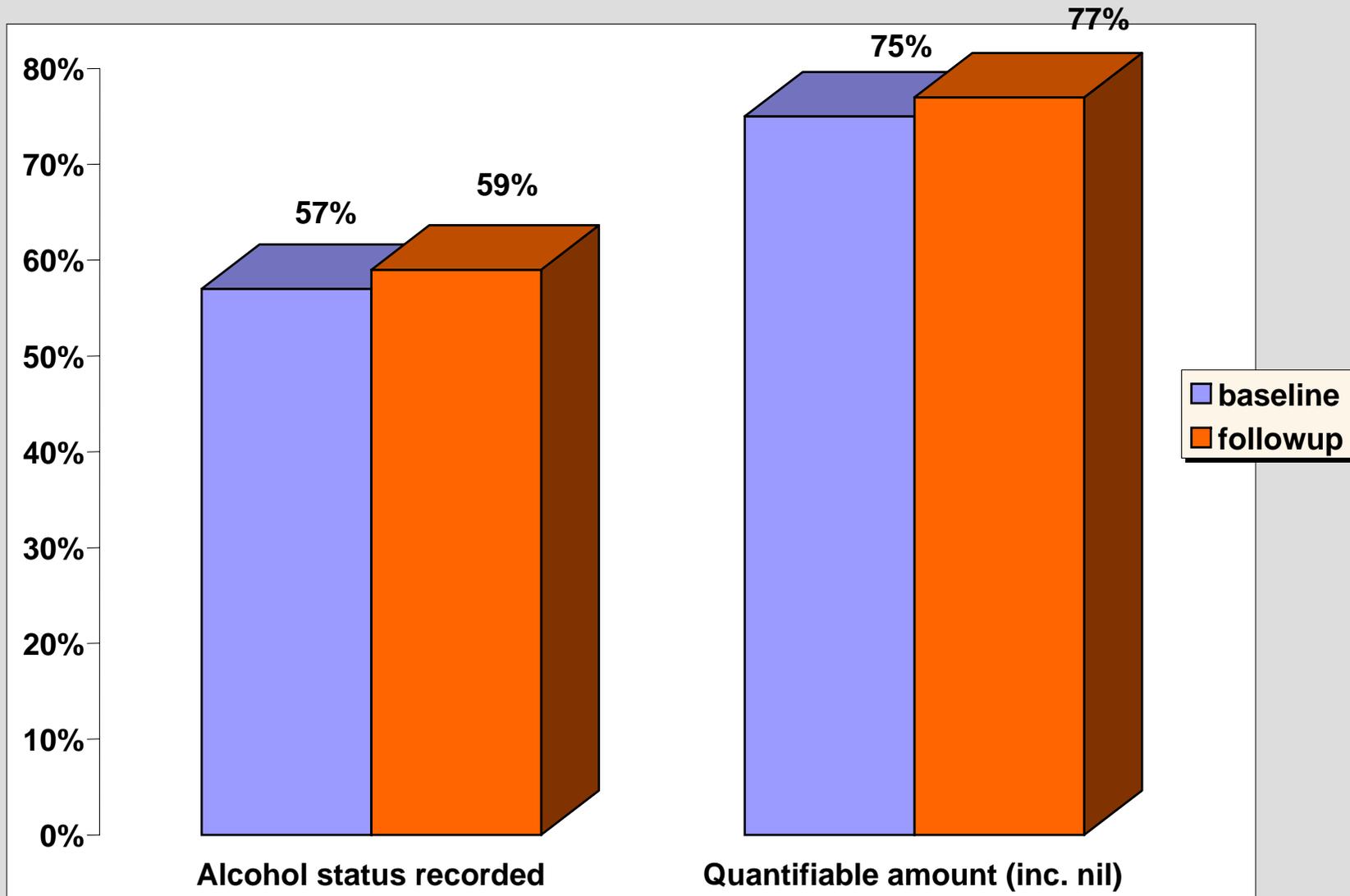
Group feedback	1785
Individual feedback	1240
Total	3025 records

***After group feedback***

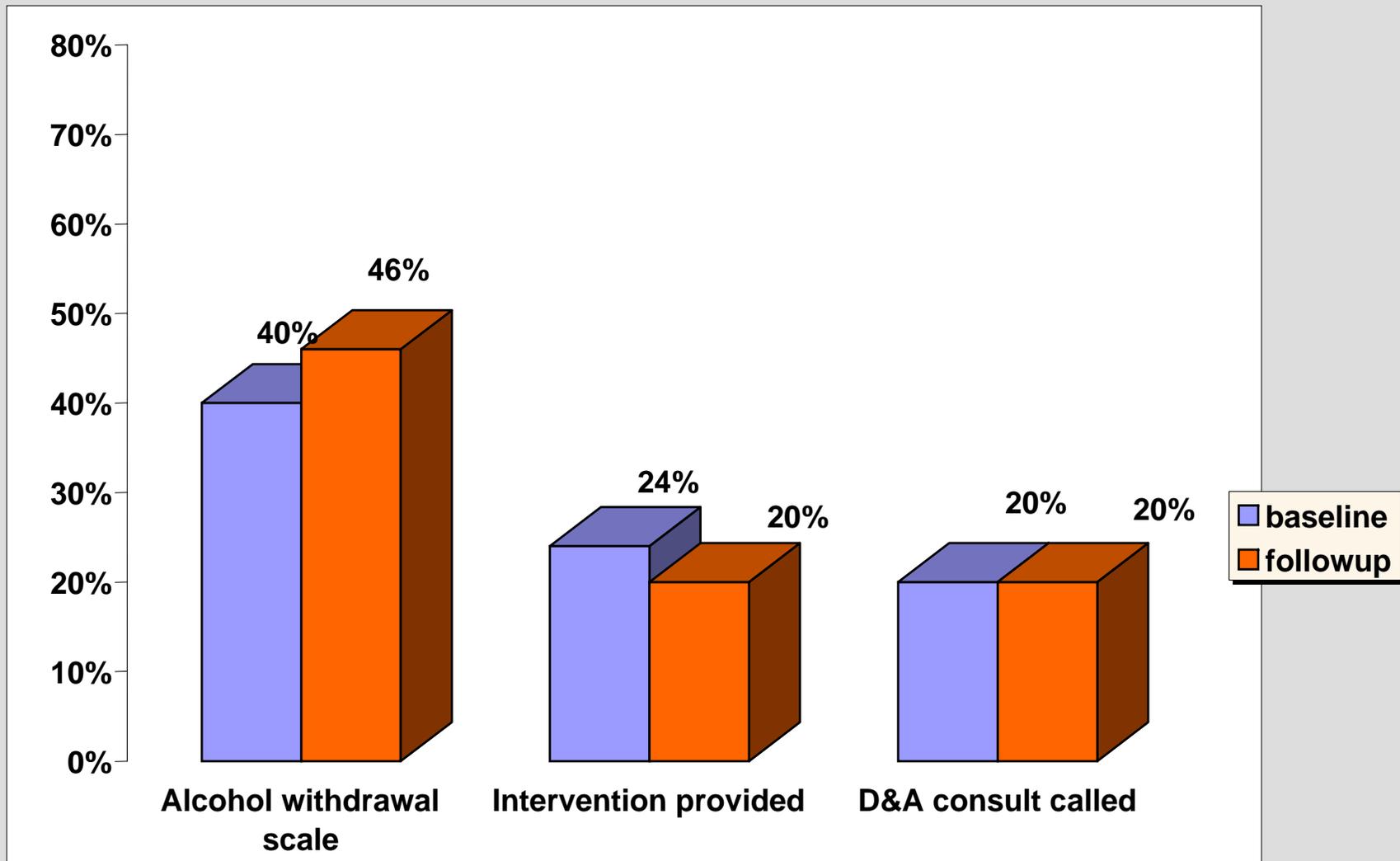
group feedback all results (n=1785)



group feedback all results (n=1785)

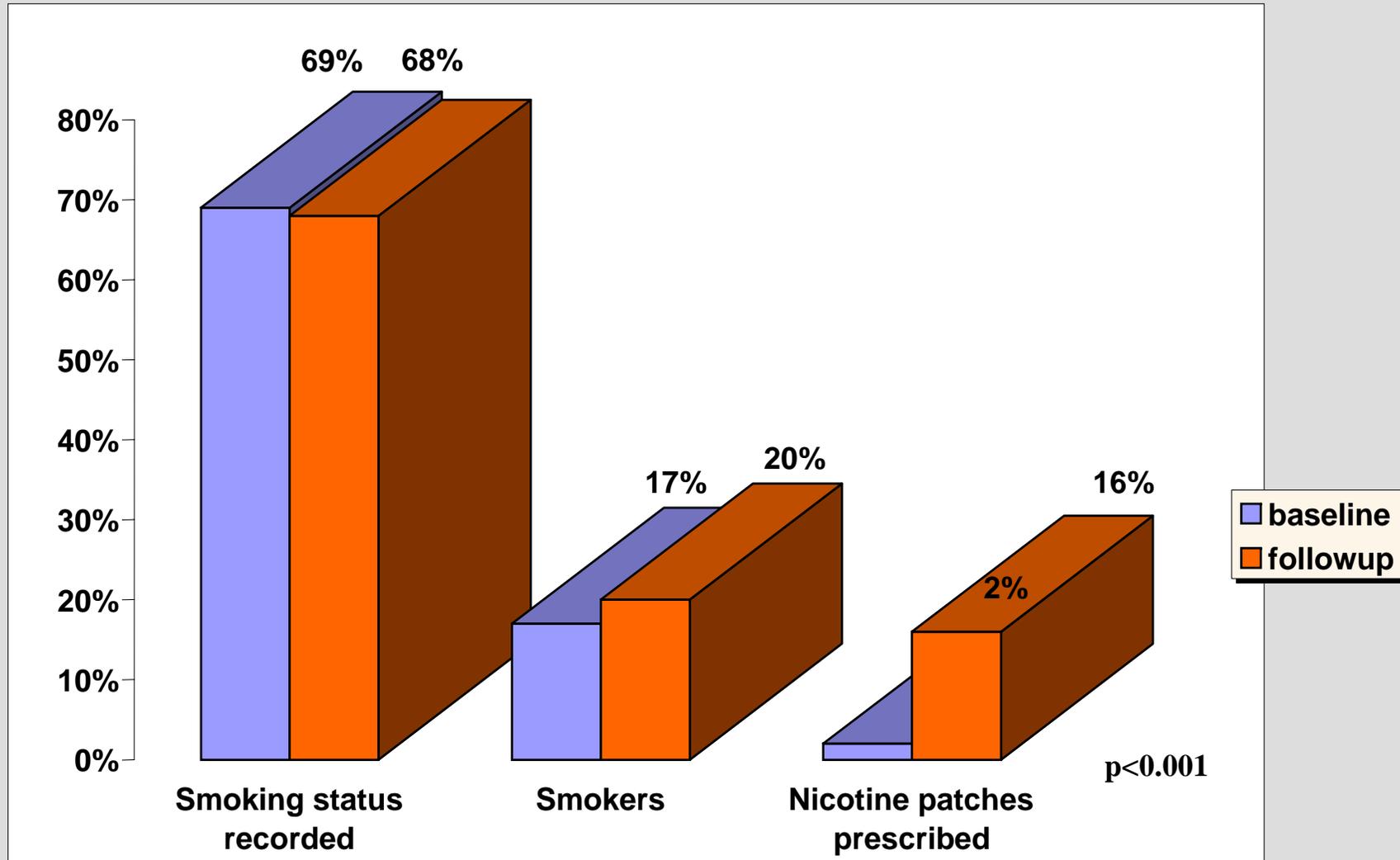


group feedback all results (n=1785)

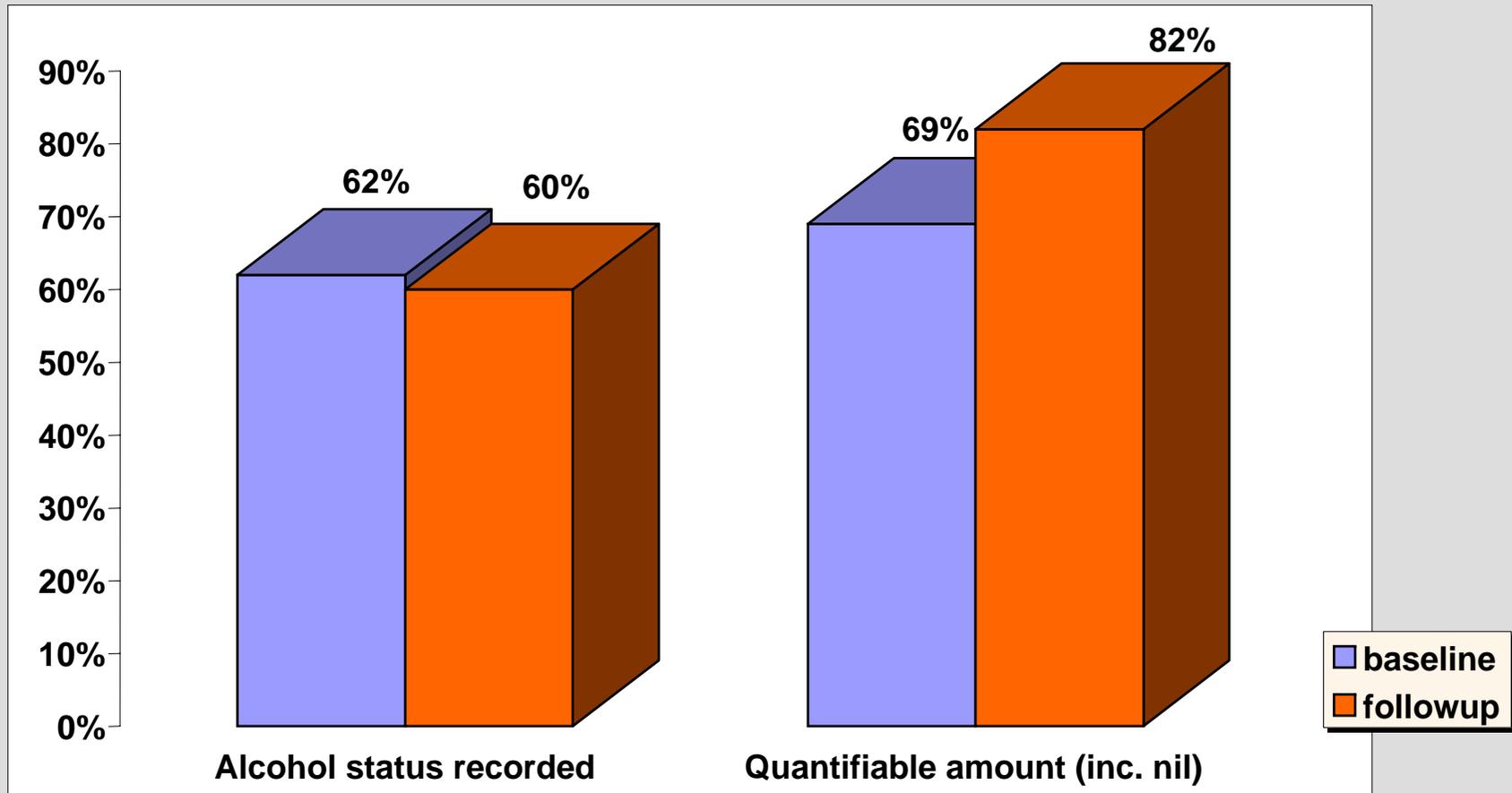


**After individual feedback**

### individual feedback all results (n=1240)

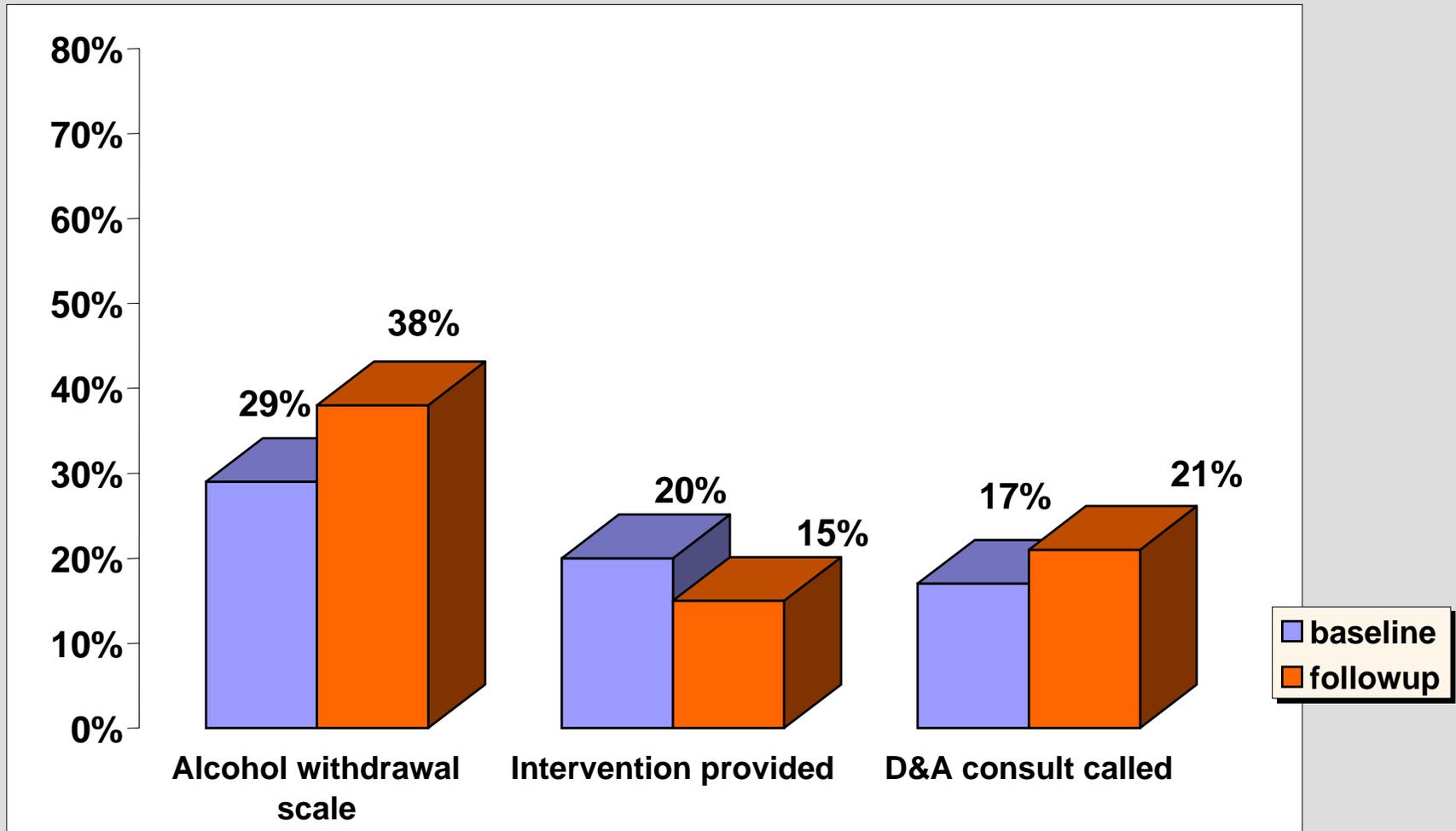


### individual feedback all results (n=1240)

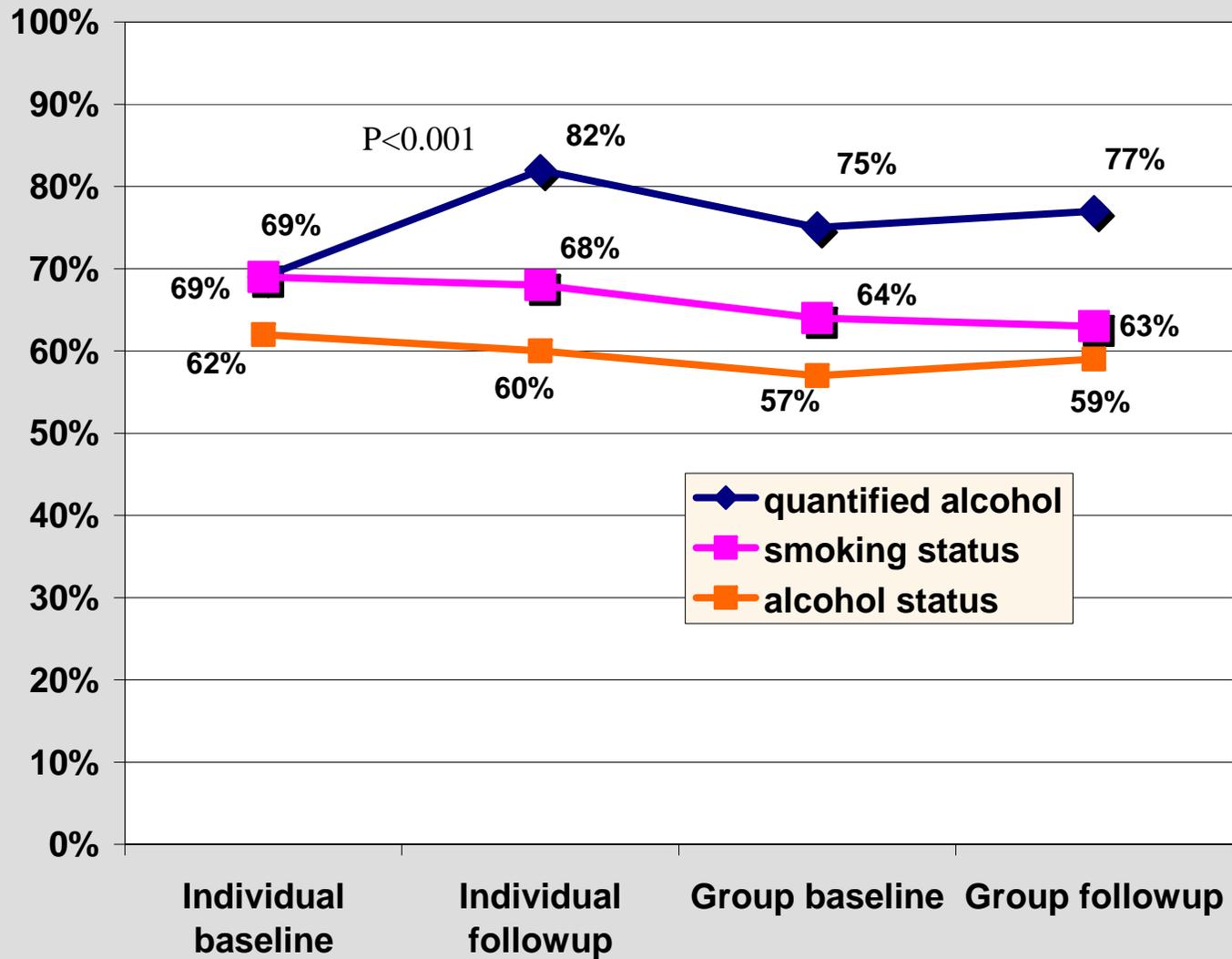


p<0.001

individual feedback all results (n=1240)



## combined results



# Combined results - logistic regression

- Predictors of quantified alcohol history being recorded:
  - Concord Hospital (Odds Ratio 1.24)
  - Business hours admission (O.R 1.11)
  - Patient was male (O.R 1.13)
  - Followup i.e. after either intervention (O.R 1.57)

# Combined results - logistic regression

- Predictors of any alcohol history being recorded:
  - Concord Hospital (O.R 1.79)
  - Business hours admission (O.R 1.53)
  - Intern took history (O.R 1.3)
  - Patient was male (O.R 1.28)
  - Patient was aged under 70 years (O.R 1.23)

# Combined results - logistic regression

- Predictors of tobacco history being recorded:
  - Concord Hospital (O.R 1.54)
  - Business hours admission (O.R 1.13)
  - Patient was male (O.R 1.41)

## Some drawbacks

- This study was labour-intensive both in data collection and data analysis (3025 admissions). Not feasible as a routine educational method.
- Some JMOs had no admissions in the data collection period.
- Not all JMOs attended group sessions, due to rotation and workload, or ?read their feedback.

## Other factors

- Many more records were examined at Hospital 1- why?
- More students were available at the Hospital 1 site than at Hospital 2
- However, Hospital 2 is smaller and has fewer admissions; it also has a high number of geriatric (long-term) patients

# Acceptability

- No complaints from JMOs, nurses or ward staff about study procedures
- No JMO declined to participate
- At least 1 JMO mentioned the usefulness of the individual report to the Head of Department on ward rounds (i.e. in passing)

# Conclusions

- At baseline, detection and intervention rates were inadequate
- Individual feedback significantly improved quantified histories and prescribing of nicotine patches at Hospital 1, and slightly improved quantified histories at Hospital 2
- Group feedback had minimal effects

# High-risk drinkers

Prevalence of high-risk drinkers low

=119/3025 (4%)

- 76% were males
- 54% of male high-risk drinkers were aged between 55 and 74 years
- Highest proportion of female high-risk drinkers (31%) were aged between 35 and 54 years

# High-risk drinkers

- D&A consultations were sought in 20% of high-risk cases
- Alcohol withdrawal scales were completed in 38% of high-risk cases
- Very low rates of intervention were recorded in patients' notes

# Future Directions

- Electronic records (eMR) are currently being implemented
- eMRs have potential to be used as an educational tool
- Monitor actual performance and provide individual feedback

**From this...**



To this?

