

Coronary Heart Disease

This document is a final specification of the PRIMIS Comparative Analysis Service (CAS) MIQUEST query set to enable analyses in support of the NSF for CHD. The specification has been compiled after discussion by the PRIMIS Clinical Advisory Group.

The document also sets out general principles on which the specifications are based.

1) Underlying principles:

a) Purpose of queries

i) For practices

- (1) Monitoring of performance against NSF recommendations
 - (a) Clinical standards
 - (b) Data recording standards
- (2) Comparison with peers
- (3) To identify quality improvement opportunities
 - (a) Clinical practice
 - (b) Data recording

ii) For schemes [PCG/Ts]

- (1) Monitoring of performance against NSF recommendations
 - (a) Clinical standards
 - (b) Data recording standards
 - (c) Time trends
- (2) Clinical governance
- (3) Monitoring of performance against HIMP
- (4) Needs assessment

b) Assumptions

- i) Data quality. Query specifications assume that data quality criteria are met by practices in which queries are to be used. No attempt will be made to compensate for poor data quality through the query specification.
- ii) Graded approach. Schemes are assumed to have information requirements at various levels of sophistication through which they will ascend with time. To accommodate this query sets are graded into three levels of complexity: Basic, Intermediate and Advanced. This approach has been on an ad-hoc basis and may require revision (e.g. a two-level approach may be thought to be more appropriate).
- iii) Prioritisation. The recommendations of the NSF are very wide-ranging and it is assumed that schemes will initially wish to concentrate their efforts on monitoring the management of patients with established ischaemic heart disease. Further development of the query sets will be undertaken to address the issues of primary prevention and comorbidity. Baseline data which might be expected to be present in preparation for primary prevention is included in the Intermediate and Advanced query sets.

- iv) Information needs. Schemes are assumed to require aggregate rather than patient-specific information. For this reason all queries are analyse type, returning data in 5yr agesex groupings.
 - v) Current prescription. The concept of a current prescription is defined as a record of issue of the prescription item during the previous 6 month period. This is an ad-hoc definition, but accords with the opinion of other expert groups working in the field of prescribing and quality indicators.
 - vi) Age groups. The NSF specifies the age group 35 - 74 years for many of its recommendations. It is assumed that PRIMIS analysis software will include the facility to age bracket analyses, and that such age grouping will be able to be accommodated at the time of analysis. Data will be extracted across all age bands, thus allowing benchmark data to be available in the event that national recommendations are revised.
- c) Scope.
- i) Data recording. The scope of the queries is restricted to those items of data which it is feasible to record using current clinical terminologies and codes in a typical GP computer system.
 - ii) Clinical practice. Queries have been restricted to those items of data which comprise concepts which are normally recorded by clinicians as part of the process of clinical care.

Query set specifications

Basic level query set

- i) Base population. Agesex breakdown of practice population.
- ii) Subset to support subsequent analyses
 - 1) Patients with a record of ischaemic heart disease
- iii) Epidemiology. *Denominator population = practice*
 - 1) Prevalence
 - 2) Incidence in last year
- iv) Prescribing / treatment. *Denominator population = subset*
 - 1) Current prescription for aspirin.
 - 2) Record of salicylate prophylaxis in last 1 year
 - 3) Either (1) or (2)
 - 4) Current prescription for a statin
 - 5) No record of treatment with aspirin or statin [Neither (3) or (4)]
 - 6) Treatment with both aspirin and statin [(3) and (4)]
- v) Monitoring. *Denominator population = subset*
 - 1) Record of smoking habit within last year
 - 2) Most recent record of smoking habit = Never smoked
 - 3) Either (1) or (2)
 - 4) Most recent record of smoking habit = Current smoker
 - 5) Record of blood pressure within last year
 - 6) Record of BMI within last year

- 7) Record of serum cholesterol within last year
- vi) Supplementary epidemiology. *Denominator population = practice*
 - 1) Heart failure, prevalence and 1yr incidence
 - 2) TIA and Stroke disease, prevalence and 1yr incidence
- 3) Atrial fibrillation, prevalence and 1yr incidence
- 4) Peripheral vascular disease, prevalence and 1yr incidence
- vii) Co-morbidity
 - 1) Diabetes mellitus
 - 2) Hypertension

Intermediate level query set

- i) Base population. Agesex breakdown of practice population
- ii) Subsets to support subsequent analyses
 - 1) Myocardial infarction
 - 2) Angina pectoris
- iii) Epidemiology. *Denominator population = subset*
 - 1) Prevalence
 - 2) Incidence in last year
- iv) Prescribing / treatment. *Denominator population = subset*
 - 1) For MI subset
 - a) Current prescription for aspirin.
 - b) Record of salicylate prophylaxis in last 1 year
 - c) Either (a) or (b)
 - d) Current prescription for a statin
 - e) Current prescription for a beta blocker
 - f) Current prescription for an ACE inhibitor
 - g) No record of treatment with aspirin, statin, beta blocker or ACE inhibitor
[(c), (d) (e) or (f)]
 - h) Treatment with aspirin, statin, beta blocker and ACE inhibitor
[(c), (d) and (e) and (f)]
 - 2) For Angina subset
 - a) Current prescription for aspirin.
 - b) Record of salicylate prophylaxis in last 1 year
 - c) Either (a) or (b)
 - d) Current prescription for a statin

- e) Current prescription for a beta blocker
 - f) No record of treatment with aspirin, statin or beta blocker
[None of (c), (d) or (e)]
 - g) Treatment with aspirin, statin and beta blocker
[(c), (d) and (e)]
- v) Monitoring. *Denominator population = subset*
- For both subsets
- 1) Record of smoking habit within last year
 - 2) Most recent record of smoking habit = Never smoked
 - 3) Either (1) or (2)
 - 4) Most recent record of smoking habit = Current smoker
 - 5) Record of blood pressure within last year
 - 6) Record of BMI within last year
 - 7) Record of serum cholesterol within last year
- vi) Baseline data in preparation for primary prevention *Denominator population = practice excluding all patients in MI or Angina subsets*
- 1) Record of smoking habit in last 5 years
 - 2) Most recent record of smoking habit = Never smoked
 - 3) Either (1) or (2)
 - 4) Most recent record of smoking habit = Current smoker
 - 5) Record of BP in last 5 years
 - 6) Record of BMI in last 5 years
 - 7) Record of positive family history of IHD or MI
 - 8) Record of negative family history of IHD or MI

Advanced level query set

- i) Content of intermediate level query set
- ii) Subsets to support further analyses
 - 1) Atrial Fibrillation
 - 2) TIA or CVA
 - 3) Ischaemic stroke
- 4) Heart failure
- 5) Peripheral vascular disease
- iii) Epidemiology. *Denominator population = practice*
 - 1) Prevalence

- 2) Incidence in last year
- vi) Treatment. *Denominator population = subset*
 - 1) Atrial fibrillation
 - a) Current prescription for aspirin.
 - b) Record of salicylate prophylaxis in last 1 year
 - c) Current prescription for warfarin
 - d) (a), (b) or (c)
 - 2) TIA or CVA
 - a) Current prescription for aspirin.
 - b) Record of salicylate prophylaxis in last 1 year
 - c) Either (a) or (b)
 - d) Current prescription for a statin
 - e) No record of treatment with aspirin or statin
[Neither (c) or (d)]
 - f) Treatment with both aspirin and statin
[Both (c) and (d)]
 - 3) Heart Failure
 - a) Current prescription for ACE inhibitor
- v) Monitoring. *Denominator population = subset*

For all subsets

 - 1) Record of smoking habit within last year
 - 2) Most recent record of smoking habit = Never smoked
 - 3) Either (1) or (2)
 - 4) Most recent record of smoking habit = Current smoker
 - 5) Record of blood pressure within last year
 - 6) Record of BMI within last year
 - 7) Record of serum cholesterol within last year
- vi) Intermediate outcomes *Denominator population = subset*

For all 7 subsets

 - 1) Most recent systolic BP < 150
 - 2) Most recent systolic BP < 140
 - 3) Most recent diastolic BP < 90
 - 4) Most recent diastolic BP < 85
 - 5) Most recent serum cholesterol < 5.0