

## Chapter 12: Co-morbidity of new patients

### Summary

The most pressing need for the Registry is to improve the returns of co-morbidity data from patients starting renal replacement therapy. Without good co-morbidity data the value of survival analysis and comparative audit of groups of apparently similar patients will be greatly reduced.

Only 3 units sent significant amounts of data, and even from these completeness was inadequate for analysis.

### Co-morbidity returns

As can be seen from table 12.1 return of co-morbidity data of new patients in 1999 was very poor. Only 3 units sent significant amounts of data, and even from these completeness was adequate for analysis only from centre G.

Treatment Centre	% of patients with complete data
G	78.13
H	23.81
N	64.96
O	12.35

No other centre returned significant amounts of data.

**Table 12.1 Data returns from centres of co-morbidity at start of renal replacement therapy**

**In the 1999 Registry Report, collection of co-morbidity was introduced for patients starting renal replacement therapy in 1998. Four of the Registry centres managed to send some data and the report presented some comment on this. Feedback to the user group meeting in January 2000 was too late to affect the completeness of co-morbidity data for this years report on patients starting RRT in 1999. It is hoped the returns for the year 2000 are improved.**

In view of the incomplete data return no analysis is made of co- morbidity of new patients in 1999.

### Co-morbidity definitions

#### Angina

History of chest pain on exercise with or without ECG changes, ETT, radionucleotide imaging or angiography.

#### Previous MI within last 3 months

MI diagnosed by ST segment elevation, Q waves in relevant leads, enzyme rise > x2 upper limit of normal (or rise in CKMB above local reference range).

**Previous MI > 3 months ago**

From time of start of renal replacement therapy.

**Previous CABG or coronary angioplasty****Cerebrovascular disease**

Any history of strokes (whatever cause) and including TIA caused by carotid disease.

**Diabetes (not causing ESRF)**

This includes diet controlled diabetics.

**Chronic Obstructive Pulmonary Disease**

This is defined as a slowly progressive airways disorder characterised by obstruction of the expiratory airflow which does not change markedly over several months, may be accompanied by airways hyper-reactivity and may be partially reversible.

N.B. chronic bronchitis and emphysema may occur in the absence of airflow obstruction. Asthma patients may rarely develop airflow obstruction that does not improve with steroids.

**Liver Disease**

Persistent enzyme evidence of hepatic dysfunction OR Biospy evidence OR HbeAg or hepatitis C antigen (polymerase chain reaction) positive serology

**Malignancy**

Defined as any history of malignancy (even if curative) e.g. removal of melanoma, excludes basal cell carcinoma.

**Claudication**

Current claudication based on a history, with or without Doppler or angiographic evidence.

**Ischaemic / Neuropathic ulcers**

Current presence of these ulcers.

**Angioplasty (non coronary)****Amputation for Peripheral Vascular Disease****Smoking**

Current smoker or history within the last year.

A screen as shown in figure 12.1 is provided for participants to place on their data systems to facilitate easy entry.

## Co-morbidity Screen

<input type="checkbox"/> Angina	<input type="checkbox"/> Claudication
<input type="checkbox"/> Previous MI within last 3 months	<input type="checkbox"/> Ischaemic / Neuropathic ulcers
<input type="checkbox"/> Previous MI > 3 months ago	<input type="checkbox"/> Angioplasty (non coronary)
<input type="checkbox"/> Previous CABG or coronary angioplasty	<input type="checkbox"/> Amputation for Periph Vasc Dis
<input type="checkbox"/> Cerebrovascular disease	<input type="checkbox"/> Smoking
<input type="checkbox"/> Diabetes (not causing ESRF)	

Figure 12.1 A typical co-morbidity entry screen

### Comment

Collection of co-morbidity data is essential for the Registry to carry out survival analysis, to assess national outcomes, and for comparative audit between centres. Co-morbidity data is sought from all new patients currently starting renal replacement therapy. It has not been requested from existing patients when renal units first join the Registry.

As has been shown in this year's report in Chapter 5, there is a differential in survival of prevalent patients between Scotland and England & Wales. The probable explanation for this is the higher cardiovascular mortality rate in Scotland. This may also be part of the reason for the differential survival between centres within England & Wales. Without good co-morbidity data to enable comparisons of groups of similar patients, the value of these analyses will be greatly reduced.

The USRDS has increased accuracy of co-morbidity returns by classifying patients without any co-morbidity return as having zero co-morbidity. This when included as adjustment factor in survival for that centre shows the centre to have poorer survival compared to another centre with high co-morbidity completeness, as many of these patients will have some co-morbidity. The UK Registry will consider this proposal when more centres start to return co-morbidity.