

## Appendix A

Identification from the data of three outcome pathways analyzing all 12 symptoms studied in the research program.

Three steps were involved in identifying symptom pathways. Step 1 was an inspection of individual patient encounters over time for 2 selected symptoms of the 12 in the research program. This revealed a logic tree (see below) of questions to query the database using the Reason-for-Encounter (RFE) and the End-of-Visit codes: Step 2 was the application of the logic tree questions on the database, resulting in 8 categories: Step 3 was inspecting the frequency distributions of patients in each category.

Based on all steps 1-3, the 8 categories were as follows:

- A. no diagnosis (symptom remains EOV);
- B. symptom only but may include an unrelated symptom or an unrelated pre-existing diagnosis at EOV.
- C. New diagnosis, but the symptom continues to be RFE on subsequent visits.
- D. New diagnosis is made and on subsequent visits it evolves to a different diagnosis.
- E. New diagnosis made at last visit; no further visits with symptom as RFE.
- F. Pre-existing diagnosis is applied but symptom continues to be a RFE
- G. Pre-existing diagnosis is applied and symptom no longer a RFE.
- H. Pre-existing diagnosis is applied and evolves to a different diagnosis.

Using all 12 symptoms being studied in the research program, the number of individual patients were found for each of these categories. There were no patients for G and H and these were dropped from further consideration. The course taken by each individual patient was followed until there were no further visits with the symptom as a RFE. The number of patients in B, D, and F were small and there being no clinically useful difference between these groups and A, C, E respectively, they were combined resulting in three possible pathways as follows:

A + B ☐ designated Pathway 1: Symptom remains as EOV, no diagnosis made.

C + D ☐ designated Pathway 2: Diagnosis is made, but symptom continues to be a RFE

E + F ☐ designated Pathway 3: Diagnosis is made, no further visits are made in which the symptom is an RFE.

This study was one of the natural history of symptoms in family practice, as distinct from the natural history of a diagnosis or disease so distinguishing Pathways 2 and 3 for purposes of analysis was important.

Figure for Appendix A – The Logic Tree of Queries

