

SAND abstract No. 43 from the BEACH program 2002–03

Subject: Initiation and purpose of pathology orders

Organisation supporting this study: Department of Health and Ageing (DoHA)

Issues: There is scant evidence in assessing the effectiveness and appropriateness of pathology ordering by GPs. This study investigated pathology orders at general practice encounters, specifically to determine the initiation of tests (i.e. the proportion of tests suggested by the GP compared to the proportion requested by the patient); the purpose of the tests (i.e. considered investigative, monitoring or preventive by a GP); and whether or not the test was considered 'opportunistic' by the GP (e.g. the GP had decided on a full blood count for the patient, and took the 'opportunity' to have the patient's cholesterol or blood sugar checked).

Sample: 3,001 encounters from 100 GPs; data collection period: 11/6/2002 – 15/7/2002.

Method: Detailed in the paper entitled 'SAND Method: 2002-03' on the FMRC website (http://www.fmrc.org.au/publications/SAND_abstracts.htm).

Summary of results

The age-sex distribution of respondents was similar to total BEACH sample of general practice encounters, with the majority (56.9%) of encounters with female patients.

There were 491 (16.4%) encounters at which 1,101 pathology test orders were placed, at a rate of 36.7 (95%CI: 31.4–41.9) per 100 encounters and 224.2 (95%CI: 209.0–239.5) per 100 encounters involving pathology.

Of the 1,036 pathology tests for which the GP responded to the initiation question, 84.9% were initiated by the GP and the remainder (15.1%) were requested by the patient. Among the 213 haematology test orders, 199 tests (93.4%) were initiated by the GP. Of the 575 chemistry test orders, 85.9% were initiated by the GP. Within the microbiology group, 80.8% of the 151 microbiology test orders were initiated by the GP. Only 35.6% of the 45 cytopathology tests (mainly pap smear) were initiated by the GP, compared with 100% of the 20 histopathology (mainly skin histology) and 14 immunology tests.

Of the 1,047 pathology test orders for which the GP indicated the purpose of a test, approximately a half (50.8%) were for investigative purposes, one third (34.8%) for monitoring purposes, and one sixth (14.4%) for preventive purposes.

Among the 577 chemistry test orders, 258 (44.7%) tests were for monitoring purposes, 232 (40.2%) were investigative and 87 (15.1%) were for preventive purposes. All orders for immunology, histopathology, pregnancy and simple test were considered investigative. The 46 cytopathology tests were mainly ordered for preventive purposes (63.0%) and were less likely to be used for investigative (19.6%) or monitoring purposes (17.4%).

Of the 920 pathology test orders for which the GP responded to the 'opportunistic' question, 18.0% were regarded as opportunistic. Approximately a quarter (24.7%) of the 518 chemistry test orders were opportunistic. In contrast, among the 139 microbiology test orders, 10 (7.2%) tests were regarded as opportunistic.

Correspondence to: Ying Pan, GPSCU