

First Survey of Prostate Specific Antigen Services in England

Summary of Findings

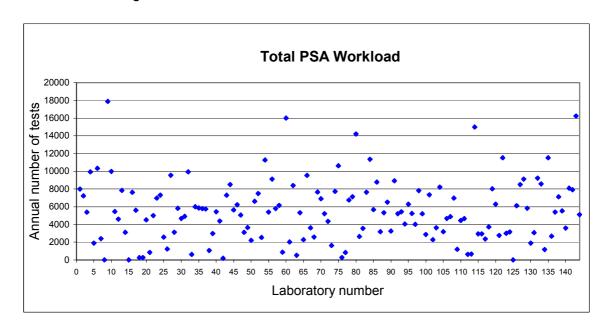
The purpose of the first survey of PSA services was to set a baseline of the number and types of PSA testing that were being performed in the period 1st April 2000 to 31st March 2001. This would enable any effects arising from the change in policy on PSA testing in asymptomatic men (July 2001) and the introduction of the Prostate Cancer Risk Management Programme to be monitored through subsequent surveys. The baseline survey was sent to 220 English laboratories that participate in the UK NEQAS PSA scheme. Initially 112 laboratories returned the questionnaire and following a reminder a further 32, thus giving a response rate of 65%.

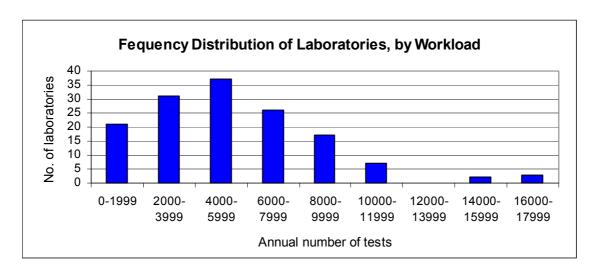
Workload

| | Number of Laboratories Providing Test | Mean Number of Tests per Laboratory | Range [*] | Total Number of Tests |
|---------------|---|---|--------------------|-----------------------|
| Total PSA | 142/144 | 5544 | 3* to 17884 | 787301 |
| Free PSA | 20/144 | 1170 | 42 to 8588 | 23406 |
| Complexed PSA | 1/144 | 6970 | - | 6970 |

laboratories providing test service began 21.03.01 excludes referred work

During the survey year 787301 total PSA tests were performed by 65% of the laboratories in England.





Origin of Samples for PSA tests

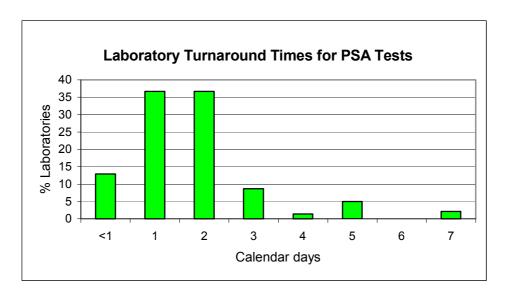
| | %GP | %Urologist | %Other Consultants |
|-------|---------|------------|--------------------|
| Mean | 48 | 32 | 19 |
| Range | 0 to 79 | 0 to 100 | 0 to 60 |

Further information as to the origin of samples labelled as 'other consultants' was available from 38 laboratories. There was no particular pattern as to the origin of these requests, however, the most common were:

General Medicine/General Surgery Radiologists/Oncologists Geriatric/Elderly Accident & Emergency Nephrology/Renal

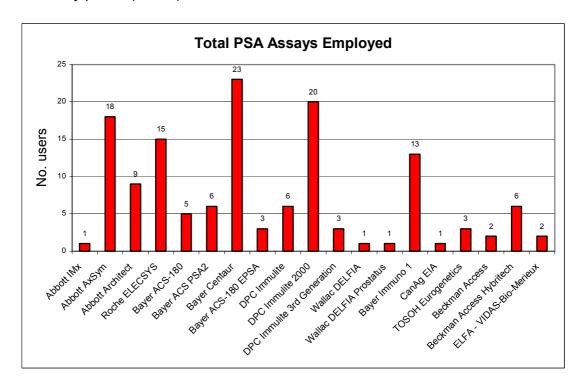
Turnaround Times

The average turnaround time for samples requiring PSA tests was in the majority of cases less than or equal to two calendar days (from receipt of the sample to the availability of the result). Turnaround times reported as decimals were rounded to the nearest whole day.



Types of PSA Assays Employed

Information relating to the type of total PSA assay employed was provided by 131 of the 142 laboratories performing the test. Seven laboratories changed assays during the survey period (n=138).



Free PSA assay types were reported by 19 of the 20 laboratories performing the test. One laboratory changed assays during the survey period (n=20).

| Free PSA Assay | Number of Users |
|-----------------------------|--------------------|
| Abbott methods | 5 |
| Beckman Access Hybritech | 3 |
| DPC Immulite | 2 |
| DPC Immulite 2000 | 3 |
| DPC Immulite 3rd generation | 1 |
| Bayer ACS-180 | 1 |
| Roche Elecsys | 3 |
| Wallac DELFIA Prostatus | 2 |

Reference Ranges

The total PSA reference ranges used in the survey period were provided by 137 laboratories. Age related reference ranges were employed by 74 (54%) laboratories; a single reference range by 60 (44%) laboratories and 3 (2%) laboratories used another method e.g. the probability of prostate cancer in specific PSA ranges.

Age related reference ranges varied both within the age bands specified and the stated reference range for each age band, however, 41(30%) laboratories used the following or something very similar.

| Age (Years) | Reference Range (ng/ml) |
|-------------|-------------------------|
| 40-49 | 0-2.5 |
| 50-59 | 0-3.5 |
| 60-69 | 0-4.5 |
| 70-79 | 0-6.5 |

One laboratory used an additional set of age related reference ranges for men of Afro-Caribbean origin.

Of the 60 laboratories using a single reference range 55 (40%) used the interval 0-4ng/ml.

Source of Reference Ranges

The origin of the reference range used was supplied by 135 laboratories. One resource was used by 71% of laboratories, whilst 29% used two or more resources to define their reference ranges.

| Source | Percentage of Laboratories using Source | |
|------------|---|--|
| Literature | 57 | |
| Kit Insert | 44 | |
| Local Data | 15 | |
| Other | 8 | |

With Thanks to the Following Participants:

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