

## **TAG Audit meeting Add on tests 28<sup>th</sup> January 2011**

### **Presentation of Audit questionnaire** **Miss Samantha King, Bart's and London NHS Trust**

The aim of the audit was to look at demand management and any rules labs had for add on tests.

There are no guidelines available and to produce standards we need to compare and identify common practice. Demand management is important.

### **Summary**

1. Most repeat testing is done in accordance with guidelines but there is wide variation and lack of standardisation.
2. Reflexing policies varies widely and there are individual cases taken into account.
3. There are variable demand management strategies in use including on-line, paper and limiting requesting locations.

### **Conclusions**

1. There is a lack of standardisation of added on tests, repeats and reflex protocols between labs.
2. There needs to be Pathology guidelines on reflexing.
3. The audit has highlighted new ways of demand management of add on tests.

### **Questions following presentation**

1. Was it the same labs that had rules for the same things? Yes
2. Where does <2 come from for calcium and potassium to reflex a magnesium? This is an average value from all the participants.

### **Discussion**

#### **Guidelines**

1. Guidelines are a lot of work to produce.

#### **Requesting Rules**

1. Rules are required in order comms in advance of bleeding the patient.
2. The thyroid guidelines are difficult to put into rules and there will always be exceptions.
3. If requests are restricted due to location the patient may be an outlier who needs the test.
4. In some systems rejecting tests by time interval compromises the speed of the computer system and make it unworkable.

## **Lab protocols**

1. Individual labs have different time intervals for repeat testing
2. Some patients require a CRP within 24 hours if are monitoring the effects of therapy.

## **Tony Everitt Basildon University Hospital** **On-line add on system**

The old system was to telephone and/or sometimes send another request form. The on-line system has been in use for two and a half years.

The requests peak after morning ward round and after afternoon results review.

Add-on workload has taken off from 20-30 per day to 60 per day but has plateaued at that level. The most common tests are TnT and CRP but most are a mixture.

## **Conclusions**

1. Popular with users
2. Popular with lab staff especially out of hours
3. Standardised, documented and with an audit trail.
4. Good quality of information in
5. Not interactive
6. No feedback to users so reduces confidence.
7. Too convenient

## **Discussion after the presentation**

### **Why was it set up?**

1. It was a Eureka moment when setting up the lab handbook.

### **Requesting**

1. There are no restrictions as to who can add on tests.  
There was concern about nurses, physios etc adding on tests but this is already done in ITU and a lot of request forms are filled out by nurses.
2. The system is being rolled out to GPs.
3. The lab always checks what is already requested before adding on the retrospectives so can find out if more than 1 requestor is adding the same test.
4. If a patient has had several samples taken in a day the requestor can specify which sample they require by writing it in the clinical details or by speaking to the lab staff.
5. If telephone requests are received they are referred to the on-line requesting unless urgent.
6. Turnaround time is not guaranteed for non-urgent tests but the lab tries to turn around all requests quickly so there is no huge variability. 95 %

of urgent samples are done within 60 minutes and routine are turned round in 2-3 hours. All results should be available by 5pm if ordered in the afternoon. Out of hours or over lunch it may take a bit longer but if really urgent can phone the lab.

### **Who can authorise requests?**

1. In the daytime the vetting is done by a Band 7 who supervises the separating area. This is part of the rotation of the separating section so is always covered. On call it is Band 6, 7 and 8a.

### **Does it save resources?**

1. There are about 60 retrospective requests per day so no drop in routine workload which is 2000 samples per day would be noticed.
2. It has helped save MLA time. If preanalytics or order comms are in place it is quicker to make repeat request than to order an add on. If there are no preanalytics add-on is quicker than booking in and processing a new sample.
3. Do you have a feel for how often the sample is not suitable or no sample is available as this would mean time was spent contacting requestors? This is not often a problem but add ons are not added for Haematology and Microbiology. If no clinical information is given a comment is put on the system saying the test is not being done. If there is a problem e.g. insufficient, taken at wrong time then the lab will contact the users.
4. At Basildon there is blanket profiling of 20 tests in all A&E patients. Nurses order the blood tests and if they did not order the correct tests initially adding extra tests after an hour would breach in A&E. Add-ons make better clinical practice and economic sense.
5. This is perceived as an improvement as requests can be batched up and treated in more efficient way.

### **Training requirement**

1. Training time is minimal as 95% of clinicians are used to filling in on-line forms.

### **Stability**

1. Stability is mentioned on the requesting screen and haematinics are only added to samples less than 2 hours old.

## **Add on tests: a national audit of current practice**

**John Monaghan**

Add-ons help to

1. establish a diagnosis and
2. assist management
3. Reduce time to diagnosis
4. reduce cost in repeating samples

Clinical judgement comes into play as does ethics.

### **Summary**

1. Medics add more tests than scientists
2. Hormones and general chemistry tests are added if useful to answer the question
3. PSA is not added but suggested and myeloma screen is added on
4. Genetic tests not generally added. HFE is not added but AAT is
5. If cross disciplinary are not added
6. Choice is affected by cost to requestor. If block contact is not an additional cost. Genetics tests are limited.

### **What next?**

1. Publish the findings of the audit.
2. Raise awareness.
3. Ask GPs what they want.
4. Stop reflexing?
5. NEQAS guidance.

### **Discussion on presentation**

1. Clinicians view is that endocrine tests are reflexed more than others.
2. It is interesting labs will not add PSA but will add SEP for detecting myeloma. Part of our role is to detect things early.
3. Cannot get consent from all patients.
4. Protocols vary from lab to lab and from practice to practice.

## **Discussion and standard setting**

### **Guidelines**

1. There are guidelines on reflex testing from the Royal College of Pathologists. They cover magnesium, electrophoresis and thyroid function tests.

### **Legalities**

1. The profession should take advice on this from the medical defence union. The direct approach of adding on reflex tests is outside the medico legal point of view.
2. If it is unethical should be prohibited and if clinically useful should reflex tests. If the wrong test is added on this will have legal implications.

### **Permission**

1. When GP requests a test does he ask the patients permission? It does imply consent if the patient went to be investigated and had the blood test taken.
2. If you added a PSA which was high and was not acted on could the clinician say he did not ask for it? PSA is not a routine test with uncertain use for diagnosis and should be left to the GP.
3. For other things it makes perfect sense to add on but these results need acting on. If a significant result is found on a reflexed test there is a need to contact the clinician to say it needs following up

### **Good clinical practice**

1. Adding on tests is the persons own judgement, part of professional conduct and varies from person to person
2. Good clinical practice avoids unnecessary testing but need to do correct tests when required or obviously necessary.
3. If patients benefit from an early diagnosis it is not difficult to add tests on.

### **What do users want?**

1. Pete Timms has asked his users what they want and they would like alk phos isoenzymes and SEPs reflexed automatically. If a lab suggests these tests may be useful they may have discarded the sample before the GP gets back to them.
2. When GP commissioning starts labs will need agreement about what they are willing to pay for. If they are not willing to pay they will not get the test. They may not want to have added value.
3. If there is an agreement will not be implicit and cover every eventuality. There will still be a need to add on if appropriate or not in each case.

## **Process**

1. Tests can be added on automatically by computer rules or manually after looking into the clinical situation first.

## **Difficulties**

1. Patients can complain if something is added on without consent or something is missed which could have been detected by an add-on.
2. High protein or globulin has a myeloma screen which may pick up an MGUS. This will mean a lot more investigations.
3. It is difficult if there are no clinical details or the details are vague.
4. If the clinical details say amenorrhoea? cause we are justified to add on HCG. If clinical details are blank and LH and FSH are low are you justified to add on a pregnancy test?