

uncommon, with head and neck involvement in 19% of cases.² It is important differential diagnosis for oropharyngeal masses as the management and prognosis varies significantly from malignant disease.

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FOUNDATION DOCTORS' AUDITS: EFFECTIVE OR NOT?

Editor,

The UK Foundation Programme (FP) curriculum recommends that Foundation doctors (FD) develop experience in 'managing, analysing and presenting at least one quality improvement project and using the results to improve patient care'¹. While the Maltese FP follows the UKFP recommendations, little emphasis is placed on completion of the audit cycle. The authors devised a questionnaire to assess the proportion of audits performed by FDs at Mater Dei Hospital (MDH) that completed the audit cycle, implementing changes in clinical practice.

METHODS

All audits registered on the Maltese FP audit register between January 2012 and August 2015 were included in the study: a total of 110 projects. The questionnaire was forwarded to the main author of each registered project by electronic mail, and responses collected over 6 months.

RESULTS

57 questionnaires were completed (52%). Most FD embarked on an audit so as to influence practice (79%) or improve the curriculum vitae (72%). 66.6% of respondents felt satisfied with the outcome of their project, while 71% felt supported in performing the audit. 77% of respondents felt encouraged to present their findings. Only 5.2% of audits reached the final, re-audit stage of the audit cycle. The most common reasons for failing to complete the audit loop were time limitations (46.9%), administrative difficulties (25%) and a move to a different department (50%). Of the 94.8% of responders who failed to complete the audit cycle, only 8.9% handed over their work to a colleague to complete.

DISCUSSION

Audits done by FD in Malta were rarely completed, with only 5.2% of the registered audits reaching the re-audit stage. This compares with 24% in a similar study in London². 21% of junior doctors from Leeds perceived their audit projects

to have a negative effect on the department³ the degree of support from audit staff, and the perceived value of the resulting audits. This contrasts with our data showing a relatively high rate of satisfaction with the outcome of the audits performed, regardless of the stage of the audit cycle that was reached. This could indicate a poor appreciation of the potential for audit to influence practice. Also sobering is the fact that of those failing to complete the audit cycle, 91% did not plan to handover their results to a colleague to complete the cycle, and almost 50% had no plans to complete the audit. In these cases, it appears that potentially influential data has gone to waste.

The authors propose a handover system for FD to pass on their collected data for a colleague to act upon. This could avoid useful and hard-earned data from going to waste, and lead to improvements in practice. Encouraging multiple FD to work as a team on a single project can also help them overcome time limitations⁴. FD need to be made aware of the value of a completed audit: part of the responsibility for this falls on Educational Supervisors within the FP. Helping junior doctors to contribute by implementing change will motivate them and encourage them to undertake further audit projects in the future.

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CENTRIFUGATION IN GP PRACTICES - CAN IT IMPROVE DIAGNOSTIC EFFICIENCY?

Editor

Potassium (K) is one of the most frequently tested analytes in the biochemistry laboratory. Because of its critical role in both cellular and electrical function it is vital that hypo and hyperkalaemia are promptly communicated to clinicians. A delay in sample centrifugation is a common cause of pseudohyperkalaemia. The follow up of pseudohyperkalaemia consumes valuable health care resources and can result in patient care delays.

The purpose of this trial of sample centrifugation at source was to verify the positive impact on the quality of potassium results (ie the number of samples requiring follow-up) reported within the literature¹ and measure user satisfaction



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TABLE 1:
Proportion of results per concentration category

| | Pre implementation | | Post implementation | |
|--------------|--------------------|--------------------------|---------------------|--------------------------|
| | Number of samples | % of total sample number | Number of samples | % of total sample number |
| Dashed out | 434 | 10.68 | 32 | 0.77 |
| <3.5 | 38 | 0.93 | 39 | 0.94 |
| Normal range | 3365 | 82.78 | 3912 | 94.54 |
| >5.3-6 | 210 | 5.17 | 140 | 3.38 |
| >6 | 18 | 0.44 | 15 | 0.36 |
| TOTAL | 4065 | | 4138 | |

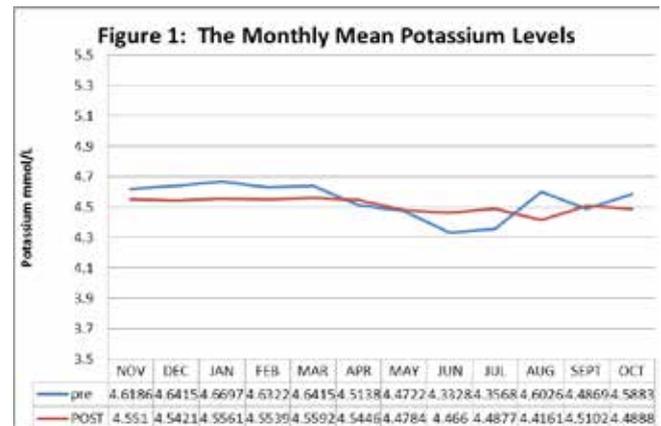
A Heraeus Labofuge 300 centrifuge fitted with an 8 swing bucket rotor was installed in the Dromore GP surgery treatment room and safety checked by the supplier. To ensure the safety of patients and staff a comprehensive training program was delivered by the laboratory Biomedical scientist.

The pilot officially started in November 2014. To minimise the chances of erroneous potassium results due to samples being mistakenly re-centrifuged², the practice placed all centrifuged samples in a special labelled bag. Potassium results for the Dromore practice during the pilot period and retrospective data from November 2013 to October 2014 were extracted from the Laboratory information system and analysed by Microsoft EXCEL. User satisfaction was accessed by a post pilot questionnaire.

The total numbers of potassium requests during the pre-implementation and implementation periods, presented in Table 1, were similar. There was a 2% increase in requests. This increase in activity is consistent with the long term activity trend for biochemistry analysis.

Centrifugation at source improves the quality of Potassium result in 2 ways. Firstly, as evident in figure 1 and previously reported by Turner et al (2012) it reduces seasonal variation. Secondly as we see in table 1 it increases the proportion of results within the normal range thus reducing the need to follow up abnormal results. The proportion of results in the <3.5 mmol/L category was unaltered therefore the improvement is primarily due to a reduction in the elevated and dashed out categories. It is noteworthy that only in the post implementation period were values exceeding 7 reported.

In these 2 patients previous results had been dashed out due to delayed separation.



Feedback from Dromore treatment room staff was extremely positive. The additional time spent centrifuging samples was offset by the flexibility of collecting samples at any time of the day rather than organising collections to coincide with the delivery vans. The footprint of the centrifuge did not significantly impact on the space within the treatment room and the noise level was not intrusive. General practitioners indicated a reduction in the time taken to review lab results and a reduction in the risk posed by alert fatigue. The Practice would encourage other practices to consider installing a centrifuge.

Centrifugation at source or an alternative such as phlebotomy centres must be an integrated component of the Pathology modernisation strategy⁴.

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