SCBN Audit of eGFR Reporting Thresholds

Innovation and Best Practice Subgroup 2020

Background

SCBN was approached by Gilead Sciences to consider changing the reporting threshold of eGFR from <60ml/min to <90ml/min, *in a subgroup of patients who are on anti-retroviral therapy*. In these patients it would be beneficial to know whether or not their eGFR is declining within the 60-90 ml/min range, in order to best guide therapy. A short audit of Scottish laboratories was performed to assess current practice, scope support for this proposal and assess possible mechanisms by which this could be achieved

Results

Responses were received from 7 of the 14 NHS Scotland boards. Note no audit questionnaire not sent out to Fife, Forth Valley of Highlands, therefore will continue target several specified individuals in those boards, (plus non responders) with the survey, in order to obtain a full response rate.

Only one of the boards (Lothian) is already using a higher threshold, reporting eGFR between 60-90 ml/min (as opposed to just > 60ml/min), whilst all other responders use a reporting threshold <60ml/min. This is provided selectively for certain patient subgroups and implemented by reporting for certain named locations only (including sexual health and antenatal) via location codes in local LIMs.

One board (Ayrshire and Arran) had consulted with clinical colleagues and established there was no demand for this service at the present time from clinicians and consequently no support for a change to current practice.

Another board (Borders) did not state if there was any demand or support for this proposal, but noted it would be difficult to selectively apply such a change, due to the restrictions in the LIMS and the challenges of keeping up to date with changes to locations/consultant codes. Limitations with LIMs was a factor for another board (Lanarkshire), in terms of the ability to apply the change selectively and for whom the change would also not be supported by local Renal physicians. One more board (Tayside) stated that this would be unwieldy to implement and would not consider selectively raising the threshold.

Another board (D&G) had already been approached by Sexual Health services for this change to be made and would consider progressing this, although at present a lack of IT resource remained a barrier to implementation.

Two boards (Grampian and Tayside) had already engaged with local renal services, with Grampian having already been approached by sexual health services to request raising the threshold. Both also gave mention to implementation of the CKI EPI equation.

Grampian's position was that in order to report to a higher threshold (eGFR >59 ml/min) they would ideally like to implement the set of CKD-EPI equations to improve the accuracy of the estimated result, but that this is not currently possible with their LIMs system. They are awaiting installation of a new middleware which may assist in implementation of these equations. Local renal physicians were supportive of raising the threshold and also of implementation of the CKD-EPI equations. If it became technically possible to report >59 ml/min by way of implementation of the CKD-EPI equations they would need to consider whether to selectively report these results or apply the change to their whole population (the latter being the favoured option).

Tayside have likewise had discussions with renal team around changing the equation used to calculate EGFR from MDRD to the CKD-EPI equation and also changing the reporting threshold for all patients. Renal services were supportive of the equation change, being aware that this may result in more elderly patients being identified as potential CKD but stated a preference for reporting to a higher GFR threshold and better performance in younger patients.

Conclusions

Challenges to implanting the change selectively to specific patient groups lay in the restrictions of LIMs and also limited IT resources were mentioned as a factor. In one board there was no demand for this change and in another, renal physicians would not support it. Two boards noted that they would consider changes to eGFR reporting with respect to both the raised threshold, and also in the use of the CKD –EPI equations as opposed to MDRD. A suggestion was made that given recommendations for change in all patient groups, was there a consensus view that maintaining MDRD in Scotland is beneficial? This question can be taken forward to further discussion within SCBN. Survey results will also be updated with further responses.

Appendix:

Audit Questions

1. Do you currently report eGFR >59ml/min?
2. If so for what group of patients-all/selected (please comment further)?
3. How does your LIMS identify this selective group of patients? by location or consultant code or other -by requesting under a special test code etc?)
4. If you do not currently report to this threshold, would you consider doing so, for this selected subgroup of patients?
5. Would your clinicians (e.g. renal and sexual health consultants) be supportive of this?
6. If so, by which mechanism would you propose to selectively report this threshold?