Reviewer's report

Title: Implementation of Automated Reporting of Estimated Glomerular Filtration Rate among Veterans Affairs Laboratories: a retrospective study

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Reviewer: Amit Garg

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Hall et al. Implementation of Automated Reporting of eGFR among Veterans Affairs Laboratories: A retrospective study In this study the authors considered eGFR reporting in 104 VA facilities in the US. In July 2004, the VA adopted automated eGFR reporting through a system-wide mandate. The authors considered the timing of adopting eGFR reporting across the 104 VA facilities from July 2004 to Sept 2009.

They also considered facility and organizational characteristics associated with the implementation of eGFR reporting. They found uptake in 88% of facilities by Sept 2009. Facilities with an on-site dialysis unit were more likely to implement eGFR reporting.

Overall this is a very useful report looking at system factors resulting in process change for the main universal measure of kidney function used clinically worldwide (serum creatinine, eGFR). The conceptual model described in Table 1 for facility level factors that may have influenced eGFR reporting uptake was interesting. The data are informative.

Some comment for the authors to consider.

Major comments

1. In the abstract the statistic of 52% for the uptake of automated eGFR reporting wasn’t initial clear to me on first reading, given 88% of VA sites implemented eGFR reporting. When look at Table 3, it is a little confusing and I thought the presentation could be improved. For example, take dialysis facility characteristic, what we want to know is what proportion of VA centres with a dialysis facility have implemented eGFR reporting (in this case 100% have implemented), and what is the proportion of VA centres without a dialysis facility that implemented eGFR reporting. An associative measure could also be provided

* i.e. unadjusted relative risk of implementing (and could also present an adjusted measure as well)

2. For statistical analysis, why not consider as survival analysis, time to event (vs. current approach)? Why not treat Figure 1 as a Kaplan Meier curve (starting at 0 with curves rising over time), with x-axis as time, and y axis the proportion of facilities that implemented intervention (and below x-axis can list number of facilities that have come on board at fixed points
Other thoughts (minor or discretionary revisions)

1. 3. Introduction: “Unlike serum creatinine, eGFR is a measure of kidney function that is estimated using the Modification of Diet in Renal Disease (MDRD) equation and provides a more reliable assessment of true kidney function by accounting for differences in serum creatinine according to one’s age, race, and gender.” There are other equations to estimate GFR beyond MDRD equation.

2. 4. Introduction: “Absence of automated eGFR reporting presents potential missed opportunities for early detection of CKD which could result in late nephrology referrals and adverse outcomes”. How strong is the evidence base supporting this statement?

3. 5. Introduction: “For clinicians within the Veterans Health Administration (VHA), detection of CKD is important because the prevalence of chronic kidney disease (CKD) among veterans is approximately 30% greater than among adults in the general population”.

Can this statement be clarified * is this in relative or absolute terms; is this a comparison of elderly patients (VA) to individuals 20 years + in general population?

4. 6. Methods, measurement: Why was initial and full implementation date defined by the ‘median’ creatinine tests per month? Why not just creatinine tests per month?

5. 7. Figure 2, is this really adding much to paper?

**Level of interest**: An article of importance in its field

**Quality of written English**: Acceptable

**Statistical review**: No, the manuscript does not need to be seen by a statistician.