Reviewer's report

Title: Vascular complications in young adults with type 1 diabetes: prevalence and predictive factors

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Reviewer: Mark McLean

Reviewer's report:

1. This paper reports the completeness of screening for diabetes complications in the patients attending a busy Australian Type 1 Diabetes service. It documents a low rate of compliance with screening guidelines, and a high rate of some complications or associated morbidities (e.g. hypertension).

2. The data collection is retrospective and opportunistic - relying on what has been recorded in occasions of service or other presentations to the hospital service (such as Emergency visits). This could be problematic. It is possible that more screening has been performed, but has not been documented. Patients who have not had contact with the service will be missing from these data. Although data is provided to compare the sample size with the expected number of people with T1DM, there may be differences between those included and not.

3. I am concerned that this data collection seems entirely focused on activity within the hospital-based service. In the Australian health care system many patients receive the majority of their care in private practice settings from General Practitioners or specialists. It is possible that excellent care (including appropriate screening) has been provided but is invisible to this hospital-based audit process. The manuscript makes no mention of GP or private specialist care and whether this activity is captured in the audit.

4. Cases of hypertension are defined in the basis of a single recorded elevated blood pressure reading. This could be inappropriate if, for example, this single reading was obtained during a presentation to the Emergency Department.

5. Was data collected about significant co-morbidities which might affect compliance with screening guidelines? For example psychiatric co-morbidity, or related chronic illness such as cystic fibrosis.

Points 2-4 should be addressed by the authors as compulsory major revisions to this manuscript.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests