

**Supplementary Table 1:** Troubleshooting measures implemented, proposed, and outcome.

1. Monthly case-based discussion involving all the histopathologist and residents.
2. Reduction in second opinion rates since 2017 (1% of cases reported in 2024 needed second
3. opinion).
4. Quarterly quality control assessment of routine Hematoxylin and Eosin, and Special stains slides.
5. Significant improvement in quality of staining
6. Radiologist was telephonically contacted about the small biopsies, biopsies from non-representative areas.
7. Length of the cores, number of glomeruli, Biopsy from representative areas increased significantly, but was significantly influenced by the radiologists experience and use of a 16G needle.
8. Clinicians were contacted as and when possible and informed about missing clinical and laboratory details in the request forms.
9. Clinico-biochemical details, if missing, were readily provided by the treating clinician. Difficulty was encountered when clinicians details were missing (2% of cases had no clinicians contact details).

**Challenges**

1. Multi-disciplinary team (MDT) meetings involving Pediatrics, General Medicine, Radiology, Pathology, and the concerned department, if any.  
In spite of the best efforts from all stakeholders involved MDT meeting has not been possible primarily due to time constraints, administrative, and policy gaps.
2. Organizing regular CME, training programs focusing on nephropathology.  
CME focusing entirely on nephropathology has not been possible primarily due to geographical and accessibility challenges, financial constraints, and a limited academic and collaborative network
3. Development of a standardized request form and reporting format  
A specialized request form for all renal biopsy forms is formulated by the Department of Pathology after careful review of all possible online available request form formats, and awaits circulation post-print.
4. Procurement and standardization of ancillary techniques to facilitate diagnosis in routine cases.
  - a. Proposed, and awaiting approval.
  - b. Awaiting standardization of ancillary techniques like electron microscopy.
5. Creation and maintenance of a registry focused exclusively on renal disease.  
Proposed, awaiting implementation. However, human resources and financial constraints are the primary concern.