Evaluating the Completion Rates of Imaging (CT Scan/US Scan) for Patients Scheduled for Follow-Up at the Urology Stone Clinic: An Institutional Audit

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Abstract

Background: Imaging follow-up is essential for monitoring patients with kidney and ureteric stones. Failure to complete scheduled imaging (CT or ultrasound) before follow-up appointments can lead to ineffective consultations, delays in clinical decision-making, and unnecessary use of healthcare resources. This audit assesses imaging completion rates among patients attending the Urology Stone Clinic and identifies areas for improvement to optimize resource utilization.

Aim: To evaluate the completion rates of scheduled imaging (CT scan/US scan) for follow up patients at the Urology Stone Clinic and to minimize unnecessary appointment time wastage.

Methods:

- Study Design: Retrospective institutional audit
- Setting: Urology Stone Clinic
- Sampling:
  - Population: Patients attending follow-up (both face-to-face and telephone consultations)
  - Time Frame: July 2024 – August 2024
  - Sample Size: N = 70
  - Data Sources: Clinical health records, radiology reports, and imaging databases
  - Parameters Collected: Patient age, sex, stone location, and imaging completion status

Results:

- Stone Location Distribution:
  - 77% (n=54) had unilateral kidney/ureteric stones.
  - 23% (n=16) had bilateral kidney/ureteric stones.
- Patient Age Distribution:
  - The most affected age group was 41–60 years, with a higher proportion of males.
- **Imaging Completion Rates:**
  - 68% (n=54) had updated imaging available for review.
  - 26% (n=21) did not have updated imaging.
  - 6% (n=5) had non-stone-related imaging performed.

Conclusions and Recommendations: A significant proportion (32%) of patients did not have the required imaging available at follow-up, affecting the efficiency of consultations. Strategies such as automated reminders, improved scheduling coordination, and pre-visit imaging verification could enhance compliance. Future audits should assess the impact of these interventions on imaging completion rates and clinical workflow optimization.