



Case Report of Clinical Audit

Mr. Varun Thusoo^{1*}, Dr. Manjeet Singh², Dr Chetan Chauhan³

¹ Registrar MBBS, MS, MRCS(England), Dept. of Orthopedic Surgery, Adesh Medical College and Hospitals

² MBBS, MS, HOD Dept. of Orthopedic Surgery, Adesh Medical College and Hospitals

³ MBBS, MS, Assistant Professor, Dept. Of Orthopedic Surgery, Adesh Medical College and Hospitals

ABSTRACT

Background: The Royal College of Surgeons in England established guidelines in 2008 to standardize the documentation of surgical procedures. Adesh Medical College and Hospital, in line with these guidelines, employs a uniform operation sheet for all surgical procedures. This clinical audit aimed to retrospectively evaluate the quality of handwritten orthopaedic operative notes to assess compliance with established documentation standards. **Objective:** To retrospectively audit the hand written orthopaedic operative notes according to established guidelines **Methods:** A retrospective review of 50 orthopaedic operative notes was conducted. Data from these notes were extracted and analyzed to assess the presence or absence of critical documentation elements, including surgery date and time, surgeon identification, procedure details, operative diagnosis, incision specifics, signature, closure techniques, tourniquet time, postoperative instructions, complications, prosthesis details, and serial numbers. **Results:** Findings revealed that 75% of the procedures were performed by consultants, with registrars responsible for 85% of operative note documentation. Key elements such as date and time of surgery, surgeon's name, procedure name, and signature were consistently documented in all cases. However, operative diagnosis and postoperative instructions were frequently omitted from their designated sections. Incision details were recorded in 80% of cases, prosthesis details in only 30%, and tourniquet times were absent in all cases. **Conclusions:** This clinical audit highlights both strengths and areas in need of improvement in orthopaedic operative note documentation. While certain aspects met high standards, there is a clear need for enhanced documentation practices, particularly concerning tourniquet times, prosthesis and incision details, and the consistent placement of operative diagnoses and postoperative instructions.

Key Words: clinical audit, operative notes, documentation standards, orthopaedic surgery, compliance.



*Corresponding Author

Mr. Varun Thusoo

Registrar MBBS, MS, MRCS(England), Dept. of Orthopedic Surgery, Adesh Medical College and Hospitals

INTRODUCTION

Accurate and comprehensive documentation within the domain of surgical practice constitutes an inextricable linchpin of high-quality healthcare delivery. Indeed, the significance of meticulous surgical documentation cannot be overstated, as it fulfills multifarious roles within the healthcare ecosystem, transcending the mere archival of clinical events. In 2008, a seminal milestone in the realm of standardized surgical documentation was reached with the promulgation of guidelines by the Royal College of Surgeons in England. These guidelines proffered a meticulous blueprint delineating the essential minutiae to be documented in surgical procedures, thereby creating a systematic framework that underpins surgical record-keeping [1]. Adesh Medical College and Hospital, a bastion of medical excellence, has conscientiously embraced the imperative of aligning its documentation protocols with these sacrosanct guidelines. Nevertheless, the efficacy and adherence to these tenets necessitate unceasing scrutiny and refinement to engender steadfast compliance and bolster the edifice of patient care.

The orthopaedic surgical department at Adesh Medical College and Hospital, as a crucible of diverse surgical interventions, is quintessentially emblematic of the multifaceted demands imposed on documentation. Each surgical procedure, whether elective or emergent, engenders a unique tapestry of clinical nuances, thus necessitating an exhaustive and meticulous chronicle. Accordingly, the efficacy and completeness of documentation in orthopaedic operative notes become pivotal, bearing ramifications not only for immediate patient care but also for legal, research, educational, and quality improvement facets of healthcare. The audacious endeavor of this clinical audit, therefore, resides in scrutinizing the landscape of orthopaedic operative notes at Adesh Medical College and Hospital, wherein a panoply of documentation elements shall be scrutinized for their adherence to the aforesaid Royal College of Surgeons' guidelines.

Surgical documentation, characterized by its kaleidoscope of roles, assumes a central position in the sphere of healthcare. At its core, meticulous documentation epitomizes the bastion of patient safety. The surgical narrative

encapsulated within the operative notes serves as a compass that guides postoperative care, identifies lurking complications, and safeguards the patient's well-being [2]. In the annals of healthcare communication, surgical documentation stands as an indispensable conduit, facilitating the seamless transmittance of information among a phalanx of healthcare providers including surgical teams, nursing personnel, anesthetists, and postoperative care attendants [3]. In the realm of research and quality improvement, surgical records emerge as veritable goldmines, providing the bedrock for the assessment of surgical outcomes, the identification of trends, and the instatement of evidence-based practices [4]. Moreover, surgical documentation, in its capacity as a legal document, assumes pivotal importance in the event of medical malpractice claims or disputes [5].

Furthermore, the documentation of surgical procedures in its meticulous form resonates as an educational paradigm. It sets an illustrious precedent for trainee surgeons and medical students, imparting the quintessential lesson on the primacy of scrupulous record-keeping within the surgical milieu [6]. From an administrative prism, accurate surgical documentation holds sway over the domains of billing and reimbursement, ensuring that financial transactions are congruent with the services rendered [7]. Thus, surgical documentation, while ostensibly a conduit for preserving clinical events, emerges as an intricate web that entwines patient safety, healthcare communication, research, legal diligence, education, and administrative efficacy.

In the ensuing sections of this audit report, we shall traverse the labyrinthine pathways of our methodological framework, traversing the empirical terrain of our findings, embarking on discourse concerning the implications of these findings, and culminating in a salvo of recommendations aimed at optimizing the pantheon of surgical documentation practices within the orthopaedic surgical department at Adesh Medical College and Hospital. Through this endeavor, we aspire to illuminate the path towards augmented patient care, enhanced communication among the healthcare coterie, and the perpetuation of best practices in surgical documentation.

CASE PRESENTATION

Mr. Ajaipal, a distinguished 58-year-old gentleman, embarked on a poignant medical odyssey that led him to the hallowed halls of Adesh Medical College and Hospital. His grievance, a protracted and relentless affliction, manifested as an inexorable pain that had besieged his right hip for half a decade. This anguish, akin to a ceaseless, gnawing torment intermingled with sporadic, searing paroxysms, had ruthlessly eroded the once-fluid grace of his mobility. Even the most rudimentary weight-bearing activities bore the imprint of Herculean trials. His nights, once tranquil, were now disrupted by the relentless specter of discomfort.

As we delved into his medical dossier, it revealed a history underscored by hypertension, a malady under the judicious sway of pharmacological intervention. Remarkably, the annals of surgery bore no record of prior engagements. Allergen aversions remained nonexistent, and a history of erstwhile smoking, curtailed a decade past, presented no residual impediments. His judicious indulgence in occasional social libations bore testimony to a life lived in moderation. Professionally, he had graced the academic sphere as a pedagogue, now navigating the tranquil waters of retirement. The once-active pursuits of his golden years lay curtailed, throttled by the relentless grip of hip pain.

Clinical scrutiny painted a portrait of Mr. Ajaipal as a well-nourished individual, devoid of overt distress. Vital signs, those harbingers of homeostasis, stood resolutely within the citadels of normalcy. Yet, upon delving into the intricate anatomy of his right hip, a disconcerting tableau unveiled itself—a constriction of range of motion, interspersed with tenderness, and an aversion to movement, whether through flexion, extension, or rotation. The sinister cadence of crepitus echoed with every palpation, yet no overt deformities or signs of edema emerged. Neurological interrogations painted a contrasting canvas, one devoid of deficits, with motor strength unassailed and sensory acuity intact in the lower extremities.

Radiographic scrutiny, a silent witness to the interplay of disease and resilience, laid bare the stark reality—a right hip besieged by severe osteoarthritis. The joint space, once a realm of fluidity and cushioning, stood obliterated by the unrelenting march of pathology. Subchondral sclerosis and the ostentatious embellishments of osteophytes, etched indelibly in the X-ray's canvas, bore witness to the rigors of a battle lost.

And so, the tapestry of Mr. Ajaipal's narrative unfolded, unveiling a tale of relentless suffering, meticulous evaluation, and the impending promise of intervention—a testament to the resilience of the human spirit and the unwavering commitment of the medical fraternity to restore the luster of life's simplest joys.

DISCUSSION

The findings of this clinical audit offer valuable insights into the quality of orthopaedic operative note documentation at Adesh Medical College and Hospital. The discussion will delve into the implications of these findings and their broader significance for patient care, healthcare communication, education, research, and administrative efficiency, while also considering potential strategies for improvement.

One of the strengths identified in this audit is the consistent documentation of critical elements such as the date and time of surgery, the identification of the operating surgeon, surgical procedure details, and the surgeon's signature [8,1]. These elements are fundamental to ensuring patient safety, attributing responsibility for the procedure, and maintaining the integrity of the surgical record. Adherence to these documentation standards is essential, as they serve as the foundation for effective communication among healthcare providers and legal documentation.

However, a significant area of concern is the omission of operative diagnoses in a substantial number of operative notes. An operative diagnosis is a crucial piece of information that provides context for the surgical procedure, aiding in postoperative care and research efforts [6]. The absence of this information may hinder the ability to track and analyze outcomes, potentially impacting patient care and the quality of data available for research.

Similarly, the inconsistent documentation of incision specifics, tourniquet times, and postoperative instructions raises concerns about the comprehensiveness of the surgical record. Incision details are essential for understanding the surgical approach taken, while tourniquet times are critical for assessing the duration of tissue ischemia, which can have implications for patient outcomes [8,2]. Postoperative instructions are vital for guiding postoperative care and patient education. The variability in documenting these elements suggests a need for greater attention to detail and consistency in documentation practices. The absence of tourniquet times in all operative notes is particularly noteworthy. Tourniquet use in surgery is associated with potential complications, and documenting the time of tourniquet application and release is essential for monitoring patient safety and outcomes [5]. The complete absence of this information underscores the importance of addressing this deficiency in documentation.

Furthermore, the inconsistent documentation of complications encountered during surgery is a cause for concern. Complications are critical events that need to be documented accurately to guide postoperative management and identify areas for improvement in surgical techniques and practices [8]. Inadequate documentation of complications may result in suboptimal patient care and hinder quality improvement efforts. The low rate of documentation for prosthesis details, including serial numbers, also has implications for patient safety and accountability [3]. Accurate recording of prosthesis details is essential for tracking and ensuring the quality of implants used in orthopaedic procedures. In the event of recalls or adverse events related to specific implants, comprehensive documentation becomes crucial for patient follow-up and safety.

The distribution of documentation responsibilities between consultants and registrars reveals an interesting aspect of documentation practices within the orthopaedic department. While registrars are primarily responsible for operative note documentation, it emphasizes the need for consistent training and education for registrars in adhering to documentation standards [9]. Proper mentorship and guidance can help bridge gaps in documentation practices among junior staff and promote uniformity in record-keeping.

In light of these findings, several strategies can be considered to improve orthopaedic operative note documentation at Adesh Medical College and Hospital. First and foremost, education and training programs should be implemented to ensure that all surgical team members, including registrars, are well-versed in documentation standards and the importance of comprehensive record-keeping. Regular workshops and updates on documentation practices can help reinforce these principles.

The implementation of a standardized documentation template that prompts the inclusion of critical elements can streamline the documentation process and reduce the likelihood of omissions [10]. Such templates have been shown to improve the completeness and accuracy of surgical records. Additionally, the use of electronic health records (EHRs) with built-in documentation prompts can facilitate more consistent and comprehensive documentation practices [11].

Regular clinical audits, similar to the one conducted in this study, should be performed at intervals to monitor compliance with documentation standards and identify areas for improvement. Feedback provided through these audits can serve as a valuable tool for continuous quality improvement in surgical documentation.

CONCLUSION

In this clinical audit highlights both strengths and areas in need of improvement in orthopaedic operative note documentation at Adesh Medical College and Hospital. Adherence to documentation standards is crucial for patient safety, healthcare communication, research, legal diligence, education, and administrative efficiency. Addressing the deficiencies identified in this audit through education, standardized templates, and regular audits can lead to enhanced documentation practices and ultimately improve the quality of care provided to orthopaedic patients.

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