

# Audit of Caesarean section Documentation

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## Abstract

**Background:** To study the standard of caesarean section surgical documentation

**Methods :** In this retrospective study 30 consecutive cases who underwent cesarean section were studied. The surgical documentation was analyzed on 16 parameters under three major categories. Category 1 was regarding the personnel. This included the documentation of name of surgeon, assistant and anesthetist. Category 2 was surgical procedure giving detail about Status of uterine cavity, skin and uterine incision, uterine and skin closure, Venous thrombosis risk, blood loss and finally the instrument count, swab count and post op plan. Category 3 was regarding the baby gender, weight, Apgar score and cord pH.

**Results:** There were deficiencies in the surgical detail documentation of caesarean section. The documentation of personnel was 95%. The surgical documentation regarding uterine cavity and blood loss during surgery were 90%. Documentation regarding swab and instrument count being complete was only in 25% of the cases. Post op plan was documented in only 60% of the cases. Notes regarding the newborn were insufficient. The documentation of baby gender, weight and Apgar score were 85%, 45% and 65% respectively.

**Conclusion:** Caesarean section surgical documentation needs to meet international standard of minimal documentation. It is required to introduce a minimal standard surgical document to be attached in the notes of all patients undergoing caesarean section to be completed by the operating surgeon within 24 hrs of surgery.

**Keywords:** Caesarean section, Post operative, Documentation

## Introduction

The medical record is used to create an infrastructure that supplies the necessary personnel with imperative information to deliver the best patient care. Legible and accurate documentation within the patient's medical record is an essential step in supplying vital information. Communication between physicians is also driven by the patient's medical record. Without readable documentation, the patient's health can be in

jeopardy. The physician has an opportunity to increase revenue through educational sessions regarding "best practice documentation." Surgical documentation is essential for patient safety and future record keeping. Along with quality assurance measures which include audit cycles. Meticulous record keeping helps in assessing the quality of care provided in an Institution. In these times of competitive health care it is imperative that the Institution has a standard of care comparable to the accepted international standards. The documentation is evidence of care provided and helps to train the future nurses and doctors. In June 2008, the World Health Organization (WHO) launched a second Global Patient Safety Challenge, 'Safe Surgery Saves Lives' to reduce the number of surgical deaths across the world. The goal of the initiative is to strengthen the commitment of clinical staff to address safety issues within the surgical setting.<sup>1</sup>

In recent years there has been an epidemic of cesarean sections reaching 50% in some institutions. With limited family size, parents want minimum risk to their offspring. This, has also led to the high rate of cesarean section. The increased awareness of patients due to easy availability of medical information on the internet and the consumer based society has increased litigation. Obstetricians are the being sued the most and are facing extremely high insurance premiums.<sup>2</sup> The main pitfall in defending these cases is due to lack of documentation on part of the surgeons. There is a minimum requirement of documentation in such cases to avoid future problems.

## Patients and Methods

Caesarean section is the most commonly performed surgery in an Obstetric unit Tawam hospital, Al Ain, U.A.E. has a delivery rate of 4000-per year and cesarean section rate of 18%. We performed a retrospective audit on what was the status of surgical documentation in our Institution. We studied 30 consecutive cases who underwent cesarean section during the period of January 2012 till March 2012.

The surgical documentation was analyzed on 16 parameters under three major categories. Category 1 was regarding the personnel. This included the

documentation of name of surgeon, assistant and anesthetist. Category 2 was surgical procedure giving detail about Status of uterine cavity, skin and uterine incision, uterine and skin closure, Venous thrombosis risk, blood loss and finally the instrument count, swab count and post op plan. Category 3 was regarding the baby gender, weight, Apgar score and cord pH.

## Results

Names of the surgeon and the assistant were documented in 29 cases and the name of the anesthetist was documented in 27 out of 30 cases who underwent caesarean section (Table 1). Skin and uterine incisions were documented in 25 out of 30 cases. The uterine cavity was empty and blood loss was documented in 27 cases. Plan of care after surgery was written in only 18 cases. The count of swabs and instruments was done in only 8 out of 30 cases of caesarean section (Table 2). Baby gender and Apgar score were reported in n 24 and 20 cases, respectively. The baby's weight was documented in only 14 cases (Table 3).

**Table 1: Documentation of personnel**

Parameter	No (%)
Surgeon	29 (95)
Assistant	29 (95)
Anesthetist	27 (90)

**Table 2: Documentation of surgery**

Parameter	No (%)
Skin incision/closure	25 (83)
Uterine incision/closure	25(83)
Uterine cavity	27(90)
Count of swabs and instruments	8(25)
Postoperative plan	18(60)
Blood loss	27(90)
Venous thrombosis risk	13(42)

**Table 3: Documentation of Baby**

Parameter	No (%)
Gender	24 (80)
Weight	14 (45)
Apgar score	20 (65)
Cord pH	12 (40)

## Discussion

Surgery is not a solitary activity. Patient safety and good practice certainly depend on the individual surgeon, but also on effective team working both within the surgical team and the wider multidisciplinary team. Maintaining effective relationships with non-clinical management is also

critical. An adequate document helps to improve care delivery. Detailed surgical notes are required for patient safety and obstetrician's defense in court.<sup>3,4</sup>

The present audit confirmed our assumption that the overall documentation was inadequate and at any time did not meet the minimum requirement. The main areas of litigation involve a Junior performing a more complicated surgery, Patient requiring Blood transfusion although the blood loss documented is less. Type of anesthesia, any retained products in the uterine cavity, skin, uterine incisions and closure which led to surgical complications in present and future surgeries<sup>4</sup>. Fetal gender, baby weight Apgar score at birth is important as well as the Cord pH being performed on all the babies who have undergone a cesarean delivery due to fetal compromise. When such children have physical developmental delay or develop neurological delay. The commonest cases involve retention of a surgical swab or instrument at the time of surgery.<sup>5-7</sup>

The method of documentation in surgery is being taught in textbooks for practicing doctors and nurses in all the major medical and nursing institutions.<sup>8,9</sup> The subject is extremely important from both the practitioner and patient point of view. The document gives the practitioner ability to check and compare the standard of care given in an institution to more advanced institutions. With increasing population and more complications arising in surgeries it is imperative that we keep ourselves updated with the changes and implement them in our workplace.<sup>10,11</sup>

It is important to remember that "Not documented is Not done" in any court of law. We should not complete the documentation in fear of litigation but also due to the fact that the documentation is required for patient safety, a tool for future assessment of quality of care in an Institution. Anyone performing surgery in future on the patient finds your notes helpful in planning the surgery.<sup>12-15</sup>

By adherence with Royal College recommendations, a prospective completed audit loop study, showed an improvement of nearly 100% in documentation after surgeon education and reminders in the operation theatre.<sup>14</sup>

Also was a completed loop of audit and emphasized the fact of certain areas in the documentation where it is necessary to understand the difference whether the information is Not Applicable or Failure to record.<sup>16</sup>

In view of this audit we have devised a basic surgical document checklist to be completed by the operating surgeon within 24 hrs of surgery. Local adaptation of this Checklist is encouraged to ensure it is effectively

integrated into clinical practice. This may mean that some of the interventions are moved to a different step in the Checklist, for example from 'Time Out' to 'Sign In'.<sup>8</sup> Some interventions may also be moved to the Preoperative team brief. Any adaptations should be undertaken in accordance with your organization's governance scrutiny process. The checklist has been modified as a surgical document which included the date and time of surgery, name of Surgeon/ Assistant and Anesthetist, type of anesthesia, type and indication of Cesarean section. Surgical documentation to include, Findings and details regarding the Skin incision, Uterine incision, Uterine cavity empty, Uterine closure, Skin closure, Counts of swabs and instruments complete, Blood loss, Antibiotic prophylaxis and VTE risk. We have submitted the document to be included in all the medical records of all the patients undergoing C- section. The concerned staff has been instructed to complete the form within 24 hrs of surgery. We will repeat the audit of completion of documentation at cesarean section after 3 months to complete the audit loop. After the introduction of this document the acceptable standard for the completion of the notes should be 95 -100% Physicians are encouraged to periodically review a selection of their own medical records before the repeat audit to assess and maintain the quality of their documentation. The Documentation Review Self-Assessment form can be photocopied from the initial audit and used to document these reviews. Depending on the size of the practice and the quality of the medical record documentation, it may be appropriate to use a separate form for each provider in the practice. Or, one form may be used and the reviewer may enter pertinent notes about the habits of individual providers in the "comments" section. In some medical practices, an initial screening of the charts can be done by a qualified assistant; the assistant sets aside the charts that do not meet the listed criteria so that they can be reviewed by a physician.<sup>8-10</sup> The results of the periodic reviews can be tracked over time and discussed at formal or informal meetings of the practice's physicians.<sup>11-18</sup>

### **Conclusion**

In order to improve patient and physician safety to an international standard in an Institution, it is imperative that we continue to look and analyze our practices

periodically and have a mechanism in place to correct the deficiencies in the system .

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