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Departmental collaborative approach for improving in-patient clinical documentation (five years experience)

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ABSTRACT

Introduction: Health care institutes are cooperative areas where multiple health care services come together and work closely; physician, nurses and paramedics etc,. These multidisciplinary teams usually communicate with each other by documentation. Therefore, accurate documentation in health care organization is considered one of the vital processes. To make the documentation useful, it needs to be accurate, relevant, complete and confidential.

Objectives: The aim of this paper is to demonstrate the effect of the collaborative work in the Department of Pediatrics on improving the quality of inpatient clinical documentation over 5 years.

Methods: Improving clinical documentations went through several collaborative approaches, these include: Departmental Administration involvement, establishment of quality management team, regular departmental collaborative meeting as a monitoring and motivating tool, establishment of the residents quality team, Integration of quality projects into the new residents annual orientation, considering it as a part of the trainee personal evaluation, sending reminders to the consultants and residents on the adherence for admission note initiating and 24 h's verification, utilization of standardized template of admission note and progress note and emphasizing on the adherence to the approved medical abbreviation list only for any abbreviation to be used.

Results: During the period between the first quarter of 2012 to the fourth quarter of 2017; a significant improvement was noticed in the overall in-patient clinical documentation compliance rate, as it was ranging from lower 50% in 2012 and 2013, and increased gradually to reach upper 80% in the last quarters of 2016 and 2017. These figures are based on an independent audit that being done by the hospital quality management department and received by the department in a quarterly basis.

Conclusion: Despite multiple challenges for improving the compliance for clinical documentations, major improvement can be achieved when the collaboration and efforts among all stakeholders being shared and set as a common goal.

1. Introduction

The importance of clinical documentation has been recognized very early in the history of medicine. It goes back to the ancient time and has undergone several changes in its content and scopes since then. In the past two centuries, they called a variety of records that is generated by literate men, including medical profession, as “Casebooks”. Theodore de Mayerne, famous Huguenot and Royal physician, has probably the most extensive surviving casebooks which he called “observations medicine” [1]. The evolution, uses and development of these records over time can be observed over two centuries from the records of The New York Hospital [2].

Nowadays, clinical documents have become more complicated

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and detailed. It represents the thoughtful process of health care providers and their decision's rationale. It is the main vehicle to transfer and store patient's health conditions and their needs. Its importance and complexity have grown alongside the development of health care systems and information technologies [3]. Proper and accurate clinical documentation could improve the quality of care provided especially in those with chronic diseases [4,5]. If structured in templates, it may enhance the trainees' knowledge and early recognition of subtle conditions [6]. Moreover, legal clinical documentation is essential component of quality accreditation agencies surveys. Despite the doubts about its benefit, the interest in these accreditations has increased as a reflection of the increasing awareness of the public about medical errors and malpractice. The interest has switched to the hospital compliance to the accreditation requirements and their ability to maintain valid ones. Therefore, it will be of particular importance to health care institutions to develop and monitor appropriate documentations policies [7–9].

When it comes to the economic impact, appropriate clinical documentation plays critical role too. In the recent years, many health care institutions have linked the patient's visit cost to a specific coding system that requires appropriate documentation. Some physicians finds this coding system complicated and time consuming [10]. This issue becomes more complex in teaching hospitals where inadequate and inappropriate coding and documentation may result in loss of revenue, exaggerated cost or delayed reimbursements [11,12].

Other aspects that give the clinical documentation vivid challenges are the emerging information technologies. Electronic-based medical record (EMR) has dramatically replaced paper-based documentation in many institutions. Many other new information technologies are expected to improve the patient care and enhance the physician performance. It was shown that EMR would eliminate many concerns associated with paper-based medical records like illegible handwriting, ambiguous and incomplete data, data fragmentation, and poor availability [13]. However, the cognitive and social interactions between these emerging technologies, physicians and their patient have changed our reasoning, decision making and, of course, clinical documentation [14]. Also, EMR and the accessibility to it, especially for minors, have raised concerns about confidentiality and privacy [15]. The debate about its content and structure is still needed to be examined more to achieve a good quality and more user-friendly content [9,16,17].

King Faisal Specialist Hospital & Research Center (KFSH&RC) was officially opened by His Royal Highness King Khaled Ibn Abdulaziz Al Saud more than 40 years ago. It is a state-of-the-art Joint Commission International (JCI)-accredited tertiary care hospital and American Nurses Credentialing Center (ANCC) Magnet designation. KFSH&RC has over 18,000 employees, of 65 different nationalities working in different health care and administrative areas.

The facility is the national referral center for oncology, organ transplantation, cardiovascular diseases, neurosciences and genetic diseases. It also specializes in medical, surgical, pediatrics, perioperative, obstetrics/gynecology, research, education and outpatient and Health Outreach Services.

KFSH&RC's internship, residency and fellowship programs are organized in collaboration with Saudi Commission for Health Specialties.

The objective of the residency program in Pediatrics is to provide outstanding education in pediatric medicine while delivering the highest caliber of patient care. The program provides the residents with strong foundation in general pediatrics and allows excellent exposure to all subspecialty care at King Faisal Specialist Hospital and Research Center (Gen. Org.), which make the program have the broadest patient population.

Residents are the key people for clinical documentations in our hospital. They learn to treat common diagnoses and see diagnostic dilemmas that are presented in a tertiary center. In the core of their training is how to document clinical care properly. They are expected to write daily progress notes admission, discharges etc.

Poor documentation in both paper-based medical record and EMR has been an ongoing concern especially from faculty staff [18,19]. we have been facing this issue in our institution as well. Therefore, we have done several intra departmental steps to improve the compliance to our clinical documentation for both paper-based charts and EMR whenever applicable. Our goal was to educate our staff member about its importance and achieve the quality target that has set by our quality control committee. We will present here our efforts and findings.

2. Objectives

The aim of this paper is to demonstrate the effect of the collaborative work in the Department of pediatrics on improving the quality of inpatient clinical documentation over 5 years.

3. Methodology

We proposed improving clinical documentations through several collaborative approaches, which include:

3.1. Administration involvement

Improving staff performance and maintaining the highest level of quality, patient safety and experience will be achieved by continuous monitoring, feedback and coaching by health care administration.

Departmental administration ensures the availability of qualified manpower resources, proper training and education to achieve the desired goals that are measurable, attainable and aligned with the organization 's vision, mission and strategic priorities.

Clinical documentation is one of the measures to monitor the quality and the outcome of patient management. On a daily basis, patient care must be documented properly as per standards of national and international accreditation institutions and the administration provides constructive feedback and coaching once needed and participate in initiating and updating documentation standards and policies.

3.2. Establishment of quality management team

Establishment of quality management team, which started on January 2012, was a strategy to formulate a team who are receiving regular updated reports about the progression of quality improvement plan, evaluating the quality of documentation of the physician, emphasizing on the importance of timing in writing admission and discharge notes as well as reconciliation of medications, finding deficient area in documentation and creation of different solutions to overcome this deficiency.

3.3. Departmental collaborative meeting

Collaborative meetings started on July 2012. It involves a group of medical practitioners from different professions in the Department of Pediatrics who share patient care goals and have responsibilities for complementary tasks on an ongoing basis. The departmental collaborative meeting is held on a regular basis to discuss all quality measures and performance of the department,

the progress in improving the quality of writing the documents, to correct the weaknesses and emphasize on the strength points of staff, and to discuss deficient areas and find solution to solve it.

3.4. Establishment of resident quality team

The quality of patient service is an important part of the daily activities of the pediatric resident, and in order to reach the optimum patient care, on November 2014, we established the Resident Quality Team. The team consists of medication reconciliation group, admission note group and discharge note group.

The medication reconciliation group reviewed the medication reconciliation for all newly admitted, transferred and discharged patients on daily basis to make sure each patient get supplied with the required medications without missing or duplicating any, and to make sure the patient is receiving the medications with the correct dose.

Admission note group reviews the admission note of all newly admitted patients to the pediatric ward, NICU and PICU and checks if the resident is following the template of the note and has the right content. They also make sure the resident signs the note and then send it to the admitting consultant for signature.

The discharge note group follows the patient admitted for 5 days or longer and make sure there is an informative and well summarized discharge note started for the patients. The target for the team is to discharge all the patients from the hospital with the discharge summary signed by the resident and the treating consultant. If there is any delay, they will contact the primary resident to initiate the note as soon as possible.

This team is under supervision from the head of quality service in the department, residency training program director and the chairman of the Pediatric Department.

3.5. Integration of quality projects into the new resident annual orientation

The residents play a very important role in the quality process of the hospital. Since October 2014, it became mandatory for all residents to attend the departmental orientation where the patient quality of care is the corner of it. The head of the quality in the department will lead the quality discussion and orient them about the various quality projects in the department. A representative from each group of the resident quality team will give a talk to orient the new residents before getting involved in the service. The new residents are also required to attend the hospital quality orientation which involves the hospital policies, safety measures and patient care.

3.6. Making it part of the trainee's personal evaluation

The residency training program in the hospital is supervised by the Saudi Commission for Health Specialties which requires monthly and yearly evaluation of the trainee. The quality of patient care is part of the monthly evaluation for the residents and done by the supervising consultant. The trainee is required to pass the quality evaluation in addition to other parameter in order to pass the block evaluation. The annual evaluation of the trainee by the program director contains great emphasis on the quality of patient's care and input from the chairman of the quality service in the department. In addition to this, the quality of patient care of the trainee is part of the criteria of choosing the best resident of the month and the resident of the year which motivate the trainee to perform better in the daily work and improve the patient's care.

3.7. Sending reminders to the consultants and residents on the adherence for admission note initiating and 24 h's verification

The resident's quality tram, under direct supervision from the head of the quality in the department and the pediatric residency training program director and the chairman of the pediatric department, check the admission note on a daily basis. The admission note should be appropriate and follow the admission note template in the system. It should be signed within 24 hours from the patient's admission by the admitting resident and consultant. If there is any delay or improper information in the note, the admission note quality group will contact the concerned physician directly to maintain the target of having all admission note signed within 24 hours from the admission.

3.8. Template of admission note

History taking and clinical examination are very important tools to reach the patient's diagnosis. In order to help the resident to remember the important parts in the history and physical examination,the admission note template was created on April 2017. It consists of mandatory blanks and checklists to be filled. The note involves the time of interviewing the patient, diagnosis, problem list, primary consultant, history, physical examination, investigations and treatment. The vital signs, investigations, radiology and medications can be recalled from the system to the admission note directly using the integrated hospital system. After writing the admission note, the resident is required to sign it electronically and send it to the admitting consultant to be signed within 24 hours of the admission.

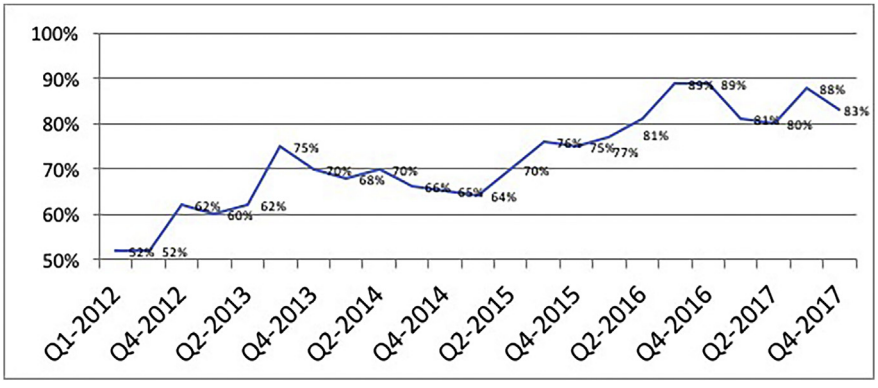

Fig. 1. Quarterly Departmental Clinical Documentations' compliance rate.

Department of Pediatrics
Medical and Clinical Affairs
Clinical Documentation Comparison Report 2017

2017	1Q 2017	2Q 2017	3Q 2017	4Q 2017
Total Number of Charts Reviewed	**10**	**10**	**10**	**40**
Medical and Clinical Affairs (Physicians)				
PHYSICIANS ADMISSION NOTE (HISTORY AND PHYSICAL)				
Admission Note found in ICIS				
Admission Note signed by attending Physician within 72 hours in ICIS				
HISTORY AND PHYSICAL INCLUDES:				
Details of Present Illness/Chief Complaint				
Past history (Medical/Surgical)				
Allergies updated and reviewed				
Physical exam documented				
Medication Reconciliation				
Admission Medication Reconciliation documented				
Reconciliation on transfer documented (by receiving physician)				
PROGRESS NOTES (Interdisciplinary)- (ICIS)				
Patients are reassessed daily by a member of the medical team				
The Attending physician enters a note in the patient chart at least once a week				
ABBREVIATIONS				
Approved Abbreviations (Medical/ Medication) used (Admission Note in ICIS, Physician Order form and Progress Notes)				
CONSULTATION (In ICIS) **Service Requesting Consultation**				
Consultation Order in ICIS				
Service Providing Consultation				
Consultation note present in ICIS				
Service Providing Consultation documented in the consultation note				
Name of the Consultant from whom the consult is being requested documented in the consultation note				
Assessment and Recommendation documented in the consultation note				
Consultation note signed by a Consultant Physician within 72 hours				
OVERALL COMPLIANCE	**81%**	**86%**	**88%**	**83%**

Compliance Range: ≤ 75% = Severe deficiency; 76 % to 89% = areas for improvement; ≥ 90% = Compliance

Fig. 2. Sample of audited elements.

3.9. Progress note standard format

S.O.A.P. format is being used as a standard in our department to make sure that patient complaint, examination and all laboratory and radiological investigations as a well as patient plan of care and other important information are included in daily progress note, this format was launched on January 2015 in the general wards, on April 2015 in PICU, and on June 2015 in NICU and.

3.10. Approved medical abbreviations list

Approved medical abbreviations are used by health care facilities to support unified and standardized documentation in patient health information.

The staff were kept regularly updated about the most recent updated list of approved abbreviations to be used in medical documentations, prescriptions and orders. This list includes all

abbreviations that are frequently used. All medical staff should adhere to these abbreviations to avoid any error that can interfere with patient safety.

4. Results

During the period between the first quarter of 2012 to the fourth quarter of 2017, a significant improvement was noticed in overall in-patient clinical documentation compliance rate. It was ranged around lower 50% in 2012, and increased gradually to reach upper 80% in the last few quarters of 2016 and 2017 (Fig. 1). These figures are based on an independent audit done by the hospital quality management department and received by the department in a quarterly basis.

The audit process is as following:

A random 10 charts per department/medical services per quarter are audited for admitted patients (Fig. 2). If the result showed equal or more than 90% compliance, then the department will be considered as compliant with hospital target. If the result ranged between 76% - 89% compliance; then the department will be considered to have an area for improvement. While if the result showed equal or less than 75%; then the department will be considered as having severe deficiency or non-compliant.

5. Discussion

Health care in general is based on a cooperative practice approach and a lot of services gather and work together, for example: physicians, trainees, nurses, pharmacists, and respiratory therapists. These teams communicate with each other mainly by documentation, for which, proper and accurate documentation in patient medical records is considered one of the vital process [20]. To make the documentation appropriate, it needs to be accurate, relevant, clear, complete and confidential.

Incorrect handwriting or no documentation may negatively affect the quality of documentation through less accuracy, less accessibility, and may result in harm that affects the care given for the patients. This reduced quality may influence several major areas in the health care (2), for example:

- Patient safety, the inaccurate documentation may alter the patient care.
- Failure to collect information on a proper time at the provider level in response to epidemics which may affect the public health.
- Proper continuity of patient care anywhere else.
- Compromising health care economics.
- Alteration of the accuracy of the clinical research and outcomes analysis by missing of proper channels of data.

Documentation in general has two parts: information captures and report generation. Information capture contains handwriting documents, video recording, nursing notes and radiological images. Report generation contains analyzing the data and identifying the area of weakness and strength in the health care system [21].

Engaging physician and other stakeholders in clinical documentation improvement projects is needed to ensure and maintain the success of any project, and still, this may not be enough to improve the quality of the documentation, without the engagement of the higher authority in any organization [22].

In general, overall improvement of the clinical documentations would not be achieved without proper collaborative approaches among all stakeholders.

6. Conclusion

Despite multiple challenges for improving the compliance in clinical documentations, the improvement can be achieved when the collaboration and efforts among all stakeholders are being shared.

7. Limitations

The number of audited charts.

Conflicts of interest

No conflict of interest.

Ethical approval

RAC # (2180023).

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