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To Study Wardside Diagnostic Test Cancellation and Control Measures

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Abstract: Diagnostic Lab Test cancellation is an intermittent event that is occurring in every multi- specialty or single specialty hospital. All over the world different hospitals have taken different measures to deal with it. Many researchers have conducted in order to minimize diagnostic lab test cancellation in hospitals which may have helped them indirectly. The problem of diagnostic test cancellation has arrived due to many reasons. One of them is the advancement in the field of medicine which increases the test options. The same test has different compositions of the element. As far as humans are dealing we cannot neglect the possibilities of errors that can happen .There is always a room for a minimum amount of errors but the problem arises when errors are increased which causes wastage of resources, time and energy and that results in poor quality care and disappointments. This is totally opposite of what we expect from an institute that provides nursing care. The medical and the administrator team is always looking for ways to improve the quality conditions and brainstorming every strategy to provide best quality care and family environment. This paper studies the main reason behind diagnostic test cancellation and its control measures. A checklist was made with respect to the process of test cancellation in an inpatient ward with 106 patients. The findings are also expected to pave the way for future research work.

Keywords: Diagnostic lab test cancellation, Hospital, Lab test, Quality care

1. Introduction

Meaning

Cancellation events due to reasons like misunderstanding in putting orders potentially delay patient care. Cancellations due to repeated orders or excessive frequency of testing become operational challenges for the laboratory and inefficiency in the health care system.

Hospitals

A hospital is a health care institution providing patient treatment with specialized health science and auxiliary healthcare staff and medical equipment. In other words it's an institution that is built, staffed, and equipped for the diagnosis of disease; for the treatment, both medical and surgical, of the sick and the injured; and for their housing during this process. The modern hospital also often serves as a centre for investigation and for teaching.

Ward

A ward is a block forming a division of a hospital or a suite of rooms shared by patients who need a similar kind of care. There are different types of wards:

- Casualty
- General ward
- Special wards
- Deluxe rooms

Diagnostic test

Diagnostic test is a test used to identify a condition or its cause. A diagnostic test performed as a part of a medical exam may be used to identify the cause of symptoms or identify a disease. When used for other purposes, a diagnostic test may be used to identify specific strengths and weaknesses.

Lab test

A <u>laboratory test</u> is a procedure in which a sample of <u>blood</u>, <u>urine</u>, other bodily <u>fluid</u>, or <u>tissue</u> is examined to get information about a person's health. Some laboratory tests provide precise and reliable information about specific health problems. Other tests provide more general information that help doctors identify or rule out possible health problems. Doctors often use other types of tests, such as <u>imaging tests</u>, in addition to laboratory tests to learn more about a person's health.

Common tests

- Albumin Serum
- Billirubin serum (total)
- Billirubin Serum full

Lab Test cancellation

When a test is ordered by doctor for a particular patient and it get cancelled due to some reasons. The reasons can be many, may be misunderstanding in communication between nurse and doctor or system error. Sometimes the doctor cancels the test himself or to add any other component or it may be affordability issue from patient's side.

Whatever the cases maybe there are a lot of cancellations occur in a multispecialty hospital. This causes trouble for patients, medical staff and the management which causes the delay in patient discharge. This increases the bed time of the ward in an inpatient setting.

The lab test order is always given by the doctor. It may be written or verbal which is given to the nurse and the nurse put the order request in the system. So that it can reach the respective labs.

The samples are taken by nurse and pass it to the other staff who takes the sample to the respective labs.

The objectives of the study includes,

- To study the reason for wardside cancellation
- To analyse wardside cancellation and its process
- To suggest control measures for cancellation

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2. Literature Review

According to David Ryamukuru - University of Rwanda article - Vol. 4 No. 3 (2021) A study conducted on Lab Test cancellation shows that how challenging and costly event it is resulting in operating lab and wards inefficiency and psychological and financial problems for the patients and their families. This study aimed to find out the incidence and reasons for Lab test cancellation at a Rwandan hospital.

According to Teresa. P Darcy MD from the Department of Pathology and Laboratory Medicine, University of Wisconsin School of Medicine and Public Health, Madison 2016 A study conducted in delay in discharge shows that Requests for laboratory testing are canceled after a specimen has already been collected from the patient for many reasons. Regardless of the cause, test cancellation represents significant resource expenditure for laboratories, and many cancellation events impact patient care by delaying the reporting of test results and even discharge and create confusions.

According to Dr. Michael Laposata, PhD (2009) the medical specialty that nearly every practicing physician relies on every day, for which training in many medical schools is limited to no more than a scattered few lectures throughout the entire curriculum, is "laboratory medicine." The importance of understanding the principles for selecting and ordering the most rational laboratory test(s) on a specific

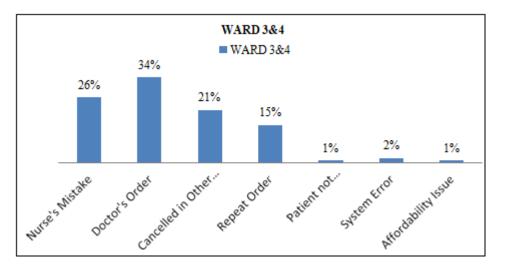
patient is heightened in the current age of managed care, medical necessity, and outcome-oriented medicine

3. Methodology

This is an exploratory research that aims on the process of ward side diagnostic test cancellation of the selected hospital and their frequency of cancelling the lab tests in the particular ward. The simple random sampling is used in order to collect data. About 4 to5 average cancellation occurs daily in the particular ward and sometimes none. All the data are collected in the 3 month duration which is around 80. For this purpose a checklist has been prepared, making sure that the research options do justice to what the researcher is trying to find.

4. Analysis

Reason For Cancellation'	Percentage of Cancellation in Ward 3&4
Nurse's Mistake	26%
Doctor's Order	34%
Cancelled in Other department	21%
Repeat Order	15%
Patient not Cooperating	1%
System Error	2%
Affordability Issue	1%



5. Major Findings & Recommendations

Majority, 34% of the tests are directly cancelled by the doctors. Other tests are sometimes cancelled via phone call. Tests that get cancelled due to repeat orders are 15%

26% of the test cancellation occurs because of the misunderstandings in the communication of the nurses with doctors because sometimes they get confused about the components of the tests or they put repeat orders.

21% of the tests are cancelled in other departments but showing in the ward's software.

Other tests are cancelled due to reasons like system error, patient's affordability issue, some time the patient is not

cooperative in taking the sample so they have to reschedule.

The recommendations include;

- Doctors can give written test orders to the nurse as it helps the nurses to confirm the test components and avoid any confusion.
- Nurses should be well versed with the tests at least those test that are done on the daily basis in the ward, which would make their work easier, and they should be more attentive.
- Through analysis it was found sometimes the nurses are allotted with more no. of patients so it's difficult for them to manage everything.
- There are some system errors too where the tests orders were repeating that can be fixed by IT department.

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- Nurses and Doctors can confirm with the patients before putting test orders to avoid cancellation due to affordability issues.
- Sometimes the patient don't cooperate for the sample taking so the test is cancelled that too can be avoided by confirming with the patient prior to putting the test orders
- Sometimes the test cancellation is not approved due to various reasons so the same cancellation is repeated in the system which increases the count on daily basis, That non confirmed tests can be segregated and immediate actions can be taken

6. Conclusion

In a nutshell wardside diagnostic test cancellation is a gratuitous work which causes wastage of money resources and time, which directly questions the quality of care of that particular hospital.

And correcting the error is again tiresome and monotonous. As prevention is always better than cure focusing on preventing the cancellation will increase the quality of care.

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