# Telephone confirmation of a patient's intent to be present for elective surgery as a strategy to reduce absenteeism

CONFIRMAÇÃO DE PRESENÇA DE USUÁRIO À CIRURGIA ELETIVA POR TELEFONE COMO ESTRATÉGIA PARA REDUZIR ABSENTEÍSMO

CONFIRMACIÓN DE PRESENCIA DEL PACIENTE A CIRUGÍAS ELECTIVAS POR TELÉFONO COMO ESTRATEGIA REDUCTORA DEL AUSENTISMO

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#### **ABSTRACT**

This study evaluated the reduction in absenteeism by patients who were scheduled for elective surgery following confirmation of the appointment by telephone. The study was conducted in the Surgery Room at the Botucatu School of Medicine for a total of 30 days and involved 89 patients. The intervention was effective in reducing absenteeism by 30.0%. Calling the patient 48 hours before surgery is recommended to allow sufficient time to contact the individual at home and to schedule a different procedure if necessary. Establishing a service center could be a communication channel between the institution and patients to confirm that they are planning to be present. This service can also provide an opportunity to discuss concerns or questions about the treatment and inform patients about impediments to the surgery. This type of center would require professional staff with medical skills and knowledge because the patients require orientation regarding their treatment as part of the telephone contact.

# **DESCRIPTORS**

General surgery Absenteeism Telephone Evaluation Operating room nursing

#### **RESUMO**

O presente trabalho trata-se de pesquisa quase experimental para avaliar o impacto na redução do absenteísmo de usuários agendados para cirurgia eletiva, quando submetidos à confirmação de presenca por telefone. O estudo foi conduzido no Centro Cirúrgico do Hospital das Clínicas da Faculdade de Medicina de Botucatu, durante trinta dias, perfazendo 89 usuários. Os resultados indicaram a efetividade da intervenção, que reduziu o absenteísmo em 30%. Recomenda--se sua implementação na antevéspera da cirurgia, possibilitando novas tentativas para encontrar o usuário no domicílio e convocação de outro. A criação de um núcleo de atendimento poderia constituir um canal de comunicação entre instituição e usuário, permitindo a confirmação da presença da pessoa e a oportunidade de sanar dúvidas sobre o tratamento e comunicar eventuais impedimentos à cirurgia. O núcleo demandaria um profissional com habilidade e conhecimento do serviço, uma vez que os usuários requerem orientações sobre o tratamento durante o contato telefônico.

## **DESCRITORES**

Cirurgia geral
Absenteísmo
Telefone
Avaliação
Enfermagem de centro cirúrgico

#### **RESUMEN**

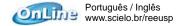
Investigación cuasi experimental evaluando el impacto en la reducción del ausentismo de pacientes agendados para cirugía electiva, confirmando su presentación por vía telefónica. Estudio realizado en el Centro Quirúrgico del Hospital de Clínicas de la Facultad de Medicina de Botucatu, durante 30 días, involucrando a 89 pacientes. Los resultados indican la efectividad de la acción, que redujo el ausentismo en 30%. Se recomienda implementarla en la antevíspera de la cirugía, con tiempo para nuevos intentos de encontrar al paciente en domicilio o de convocar a otro. La creación de un centro de atención podría constituirse en un canal de comunicación institución-paciente, permitiendo la confirmación de la presencia, la oportunidad de subsanar dudas acerca del tratamiento y comunicar eventuales impedimentos para la cirugía. El centro demandaría de un profesional con habilidad y conocimiento del servicio, dado que los pacientes habitualmente solicitan orientaciones sobre el tratamiento durante el contacto telefónico.

#### **DESCRIPTORES**

Cirugía general Absentismo Teléfono Evaluación Enfermería de quirófano

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#### INTRODUCTION

Cancellation of surgical procedures is due to lack of compliance with the administrative planning requirements of the Surgical Unit (SU). The repercussions for patients and the health institution should be considered<sup>(1)</sup>.

Cancelling surgery can negatively affect the patient by breaking the bond of trust with the institution. It also affects the nursing team (work performance, consumption of time and material resources, reduced quality of care), surgeons, anesthetists, other professionals and the health care institution<sup>(1-3)</sup>.

Studies at public teaching hospitals in Brazil have reported varying rates of surgery cancellations (19.9%<sup>(1)</sup>, 5.1%<sup>(4)</sup> and 22.7%)<sup>(5)</sup>. In international studies in countries such as Mexico<sup>(6)</sup>, Australia<sup>(7)</sup> and the United States, high surgery cancellation rates have also been reported. Patient absenteeism and inappropriate conditions for surgery are the primary causes for cancelling procedures. Organizational causes related to the health institution include lack of beds, scheduling and communication errors and related administrative problems<sup>(1-6)</sup>.

In an attempt to achieve quality of care, many professionals and institutions are concerned about the cancellation of surgeries. Increased involvement of these professionals is needed, and solving this problem is an even greater challenge at teaching institutions. Several studies have demonstrated that a pre-anesthesia outpatient evaluation by nurses<sup>(9)</sup> and anesthetists<sup>(10-12)</sup> leads to an improved analysis, allows for additional investigations and improves the quality of preoperative preparation.

The primary challenge is to evaluate and acknowledge the factors that favor the cancellation of surgeries and propose measures to minimize this event.

Evaluation of health actions has stood out among planning and management actions. Recent trends consider the specific details of each context, including the relationships that directly affect the management of health practices<sup>(13)</sup>.

At the institution where this study was performed, patient absenteeism from elective surgeries over the last five years has ranged between 19.0% and 26.0%. We questioned whether this rate could be reduced by confirming the patients' intent to be present for the scheduled procedure.

The objectives of this study were to:

- Survey the reasons for absenteeism from scheduled surgical procedures;
- Identify the origin of the patient and the type of call made (local or interurban);

- Determine which patients received calls to confirm elective surgery according to specialty; and
- Evaluate the effectiveness of telephone confirmation of the patients' intent to be present for the elective surgery to reduce absenteeism.

## **METHOD**

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A quasi-experimental study was performed at the Hospital das Clínicas (HC). HC is maintained by the Botucatu Medical School (FMB), which is the largest public institution affiliated with the Unified Health System (SUS) in the region. The estimated population coverage of care is approximately 1.5 million users from 68 cities in Regional Health Department (DRS) VI – Bauru in addition to other cities throughout Brazil.

The HC offers 415 beds, with 52 ICU beds (30 adult, 15 neonatal and seven pediatric), 194 medical consultation rooms and 31 specialized rooms. On average, two million tests, 600,000 consultations and 20,000 hospitalizations take place each year. The SU consists of 11 surgery rooms

for class I, II, III and IV surgeries in various specialties according to a weekly schedule for each team. Approximately 9,000 surgeries are performed per year, with a surgery cancellation rate of 17%.

The surgeries are scheduled with the patients at outpatient clinics or hospitalization units. However, scheduling occurs the day before the procedure at the SU. Many reasons for cancellations exist.

The individuals responsible for cancellations may be the surgeons (e.g., change of conduct, more critical patients who need to be operated on or the surgeons are not available), anesthetists (e.g., lack of examination, clinical alterations or infections), nurses (e.g., lack of materials, insufficient staff or surpassing the preset time) or patients who decide not to have the surgery.

The study was performed in October 2010 in compliance with Resolution 196/96 regarding the ethical aspects of research involving human beings. The resolution confirms the autonomy of the individual through the provision of written informed consent form, commits to the maximum level of benefit and minimal damage and risks, provides significant advantages to and minimizes the onus on vulnerable subjects, and guarantees that predictable damage will be avoided<sup>(14)</sup>. The research project received approval from the Research Ethics Committee (Protocol 3655/2010).

One of the researchers collected the data by telephone after the patients provided informed consent to participate in the study. The consent terms were read aloud during a recorded phone call. The records were securely stored for five years prior to being destroyed. The



call was made between 8h00 and 12h00 the day before the surgery. A form that had been submitted as a pretest to confirm consistency was used.

Exclusion criteria included patients who could not be reached during the first telephone call, patients without a registered telephone number, patients who were already hospitalized at the institution and patients scheduled for surgery after 12 o'clock. Patients who confirmed that they would be present but did not show up for the surgery were contacted regarding the reason for their absence. Based on the inclusion and exclusion criteria, the final sample consisted of 89 patients who received a phone call to confirm elective surgery.

The surgery remained on the schedule even if the patient confirmed that they would not be present.

The data were descriptive, including indications of absolute and relative frequencies, for interpretation and analysis.

#### **RESULTS**

Of the 872 surgeries scheduled during the study period, 706 (81.0%) were performed and 166 (19.0%) were cancelled. Of the 166 surgeries that were cancelled, 30 (18.1%) were due to patient absenteeism. Other reasons for cancellation included unfavorable clinical conditions for performing the surgery (20.6%) and surpassing the selected time (12.7%). According to professional records, lack of beds was responsible for 13 (7.8%) cancellations (Table 1).

**Table 1 -** Distribution of reasons for surgeries canceled according to the professionals' justifications at Botucatu Medical School Hospital da Clínicas - Botucatu, 2010

Reason for cancelled surgery	N	%
Non-hospitalization due to patient absenteeism	30	18.1
Unfavorable clinical conditions	34	20.6
Surpassed time scheduled	21	12.7
Team not available	19	11.4
Change of conduct	17	10.2
Surgery was anticipated	10	6.0
Administrative problems	10	6.0
Lack of surgical preparation	08	4.8
Lack of beds	13	7.8
Change of mind	03	1.8
Death	01	0.6
Total	166	100.0

The final sample consisted of 89 (100.0%) patients who received phone calls. Most of the participants (72.0%) lived outside of Botucatu and had surgeries scheduled in orthopedics (25.8%) and plastic surgery (24.7%) (Tables 2 and 3). In response to the call, 80 (90.0%) confirmed that they would be present for surgery, and nine (10.0%) said they would not. Four patients (5.0%) stated that they had not been informed of the date of the procedure, two (2.0%)

indicated personal problems, one (1.0%) had already been operated on at the institution, one (1.0%) did not have the prosthesis to be installed during the operation, and one patient (1.0%) changed his mind due to fear (Table 2).

**Table 2 -** Distribution of users according to confirmation of presence for elective surgery by telephone, city of origin/type of call, Botucatu Medical School Hospital das Clínicas - Botucatu, 2010

Variáveis	N	%
Intent to be present for surgery (N 89)		
Yes	80	90.0
No	09	10.0
City of origin/type of call (N 89)		
Botucatu (local call)	25	28.0
Other cities (interurban)	64	72.0

**Table 3 -** Distribution of users who received calls to confirm the elective surgery according to the specialty area, Botucatu Medical School Hospital das Clínicas - Botucatu, 2010

Specialty	N	%
Orthopedics	23	25.8
Plastic surgery	22	24.7
Ophthalmology	10	11.2
Pediatric surgery	10	11.2
Gastric surgery	09	10.1
Gynecology	04	4.5
Urology	04	4.5
Otorhinolaryngology	04	4.5
Vascular surgery	03	3.5
Total	89	100.0

Out of 80 (90.0%) patients who confirmed that they would be present for the elective surgery, nine (10.0%) attended but were unable to be operated on because of an insufficient number of beds in the following specialties: four (5.0%) in orthopedics, three (3.0%) in ophthalmology, one (1.0%) in pediatric surgery and one (1.0%) in plastic surgery.

Of the 30 (100.0%) patients who were absent (Table 1), 19 (70.0%) did not comply with the inclusion criteria, 14 (46.7%) had surgeries scheduled after 12 o'clock, and five (16.6%) experienced errors in registration. Nine (30.0%) patients received the call and stated that they would not be present for the surgery, indicating that routine confirmation of the patients' intent to be present could reduce surgical absenteeism by 30.0%.

# DISCUSSION

The surgical cancellation rate of 19.0% was primarily due to patient absenteeism, which is in agreement with the rates reported in a previous study conducted at the same institution<sup>(5)</sup>. In these cases, absenteeism was thought to be related to communication errors between patients and professionals because four of the patients did not know the date of the surgery and one had already



been operated on at the same institution. The results agree with other studies at teaching hospitals in Brazil that have demonstrated that the main causes of surgery cancellation are related to the patients<sup>(4)</sup>, with absenteeism representing the highest percentage<sup>(4-5)</sup>. The main reasons for not being present for surgery are lack of knowledge of the date<sup>(1)</sup> and the length of time between the appointment and the surgery<sup>(5)</sup>.

Studies at teaching hospitals in other countries, such as the United States and Norway, have reported that unfavorable clinical conditions for surgery and lack of beds are major contributing factors, rather than absenteeism<sup>(15)</sup>. In a study evaluating the cancellation of pediatric surgeries, the information provided to the mothers and/or relatives was incomplete and superficial, which led to doubts and gaps in communication and caused feelings of anxiety, fear, insecurity and anguish. The authors suggested that interpersonal communication that provides information and orientation to patients, their relatives and the health team should be an inherent aspect of care<sup>(16)</sup>.

Of the 80 patients who confirmed that they would be present for the surgery, nine did not show up. After a phone call to inquire about the reason for their absence, the patients reported that they had arrived at the institution, but were not admitted because beds were not available for hospitalization. This indicated that the reasons for non-attendance were not properly recorded because the anesthetists who checked the patients' bed prior to the surgery as stated on the surgery schedule considered the patients' absence to be due to absenteeism. Anesthetists and SU nurses need to be informed about the lack of beds.

This study showed that confirming the patients' intent to be present by telephone 48 hours before an elective surgery can reduce cases of surgical absenteeism by 30.0%.

Surgery cancellation due to patient absenteeism is avoidable because patients who were not present were informed that they had an appointment 48 hours prior to the scheduled procedure. A study of 1,018 surgery cancellations over a 17-month period in Brazil reported that 41.0% of suspended surgical procedures should not have been scheduled. The authors believe that corrective management measures are needed to reduce the cancellation rate, including confirmation of patient attendance prior to elective surgery<sup>(17)</sup>.

Because only 28.0% of the patients lived in the same city as the institution, cancellation of the surgery led to negative effects, particularly for the patients who did not live in Botucatu. The time spent traveling to the hospital

and the emotional exhaustion of the situation certainly represented costs to the family budget.

#### CONCLUSION

The research showed that 18.1% of surgery cancellations were due to patient absenteeism, and most of the patients lived outside the city limits of Botucatu. Orthopedic and plastic surgeries were the specialties with the largest number of patients who received calls to confirm their intent to be present for the procedure. This strategy reduced the number of cases of surgical absenteeism by 30.0%.

The study revealed that although the surgical and nursing teams develop health care management plans, very few professionals take actions to minimize surgery cancellations.

This initiative is considered important and necessary. Positive aspects include support from the nursing and medical teams to implement routine phone calls and clarification for patients who often have many concerns regarding hospitalization, even on the day of the surgery. In addition, effective communication between health professionals and patients when scheduling surgery can minimize absenteeism.

Surgical absenteeism can be minimized by implementing routine telephone confirmation of the patients' intent to be present for the procedure. It is suggested that this call be made two days before the surgery so that another case can be scheduled if the patient will not be present, which avoids unoccupied rooms reserved for surgeries. Another reason is the difficulty of contacting patients at home. The selected time frame allows for several attempts to locate the patient. The establishment of a center is proposed so that the patients can resolve doubts, become informed about issues that may prevent hospitalization or change their minds about the surgery.

Limitations to this research include the fact that requests for surgery often occur when the surgical schedule is being developed, which contributed to the exclusion of many patients from the study and reduced the time available for data collection. Another reason for the exclusion of research subjects was outdated or incomplete patient registration and lack of a personal telephone number, which did not allow for contact with these patients.

In practice, skill and knowledge of the services are needed to perform telephone research because the patients frequently have concerns and questions about treatments and surgical procedures.

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