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**A commentary to the article by I.N. Chernomurov and S.A. Dukoyan “Operation of the call center at a high-technology pediatric healthcare facility”**

The competition between healthcare facilities primarily reflects on the activity of high-technology centers and the specialists employed thereby. That is why healthcare providers utilize marketing tools, such as a modernized incoming call processing center at the Scientific Center of Children’s Health (Federal State Budgetary Research Institution). I would like to attract the readers’ attention to the mission of that department within a high-technology establishment formulated by the article’s authors: “this... is a department established for interaction with patients (or the legal representatives thereof) intended to develop the organization’s public image and demand for the available services, as well as the promotion thereof” in a highly competitive environment of Moscow.

Experience of the call center’s modernization and operation described in the article is of interest on the following grounds:

1. The personnel are not employed by a specialized outsourcing company. The operators do not have medical degrees; however, they are introduced to the organization’s structure and the main lines of activity of diagnostic-treatment departments. In the course of work, psychologists employed at the Scientific Center of Children’s Health teach them effective communication skills; short trainings before the start of a workday helps to steadily concentrate attention on the subject of incoming calls and the further forwarding thereof.
2. Establishment of a call center helped not only to increase the number of the daily received and processed calls, but also to actively call parents of the children having appointments to specialists; this helps to plan the specialists’ work and minimize the patient’s appointment queue time.
3. The call center’s technological resources are a part of a common information space within a multi-profile facility intended to satisfy patients’ needs in specialized and high-technology care.

There is no denying that the described technology will develop as the information system’s analytic base sprawl; this will allow heads of clinical consultation departments:

- to swiftly receive analytical information on the pediatric care indicators for any given period of time;
- to reduce time spent on healthcare provision;
- to improve patients’ satisfaction with contact with specialists.

Thus, a call center at a high-technology multi-profile medical facility totally meets competitive challenges at the healthcare market.

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**Operation of the call center at a high-technology pediatric healthcare facility**

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*Introduction of modern information systems is one of the important objectives of medicine, as it contributes to higher availability of medical services for the population. Public relations of medical organizations involve websites of these organizations, outdoor advertising and other information sources. However, obtainment of competent inquiry answers by telephone remains a problem. People often choose between organizations depending on quality of the obtained information. Apparently, the issue can be resolved by establishing call centers that are not merely communications centers, but are staffed with competent trained personnel, who support the organization's interaction with patients (or the legal representatives thereof). The article presents the authors' experience of establishing a call center dedicated to the organization's public image development, as well as higher demand of the available services and promotion thereof. The fulfilled modernization resulted in a sharp increase in the amount of calls received (1,500-1,600 within the working hours; 900 – before modernization) and reduction in the number of complaints of busy line.*

**Keywords:** call center, medical facility, digital menu, medical services.

Federal State Budgetary Research Institution “Scientific Center of Children’s Health” – is a multi-profile healthcare provider of a broad range of specialized and high-technology services to children. Operation of the call center at the consultative-diagnostic center of the Scientific Center of Children’s Health intended for telephone contact had not catered for increasing demand for professional answers and call distribution between specialists at the Scientific Center of Children’s Health before the modernization. As up to 1,500 calls per day required processing, the daily loss amounted to ca. 40%.

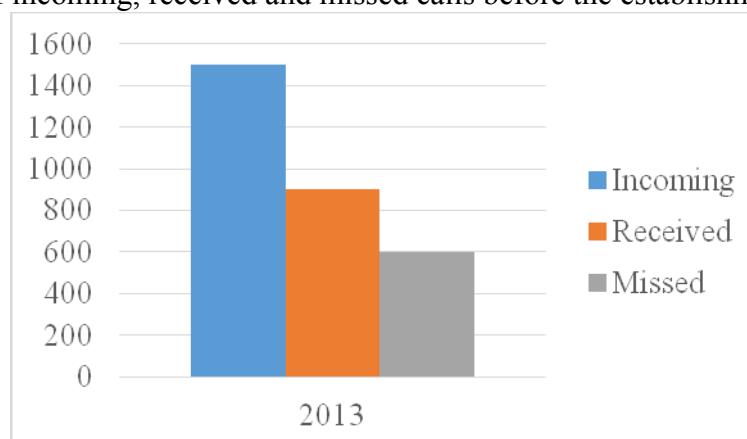
In order to resolve this problem a high-capacity call center, which would ensure the maximum effective support of potential users of medical services, was equipped at the Scientific Center of Children’s Health.

**The article was aimed at** evaluating the call center’s effectiveness at the Scientific Center of Children’s Health after the modernization.

## **MATERIALS AND METHODS**

Before the modernization the consultative-diagnostic center of the Scientific Center of Children’s Health could receive up to 900 calls per workday (pic. 1). Calls were processed by five specially trained operators without medical degrees.

**Pic. 1.** Structure of incoming, received and missed calls before the establishment of a call center



The operators did not have enough time to attend to a number of points of interest; this would result in the loss of potential patients and mistakes regarding referral to certain specialists.

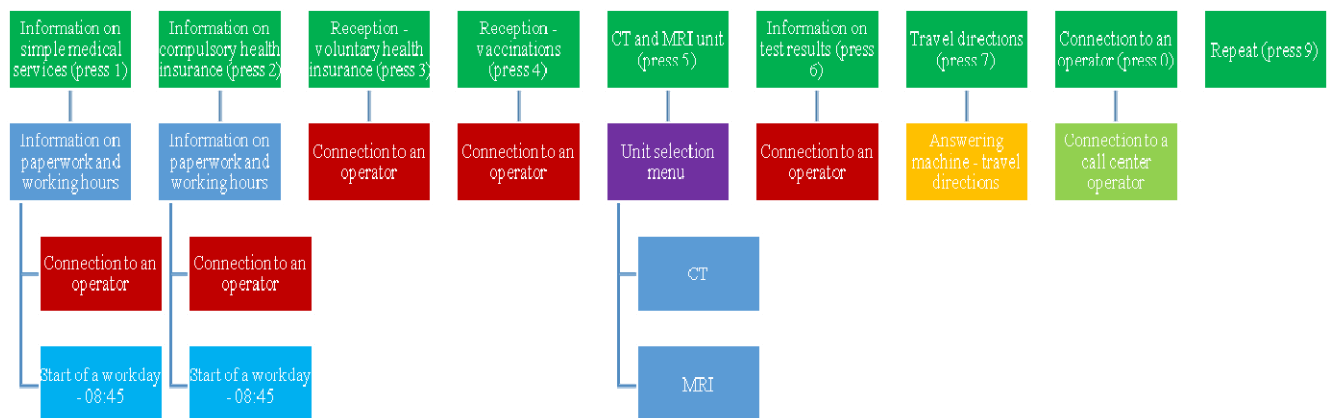
Analysis of this situation served as a basis for an administrative decision of the Scientific Center of Children's Health to modernize the call center. Implementation of this project was divided into several stages.

At stage 1 a communicative strategy aimed at leadership in a highly competitive environment of Moscow pediatric facilities was developed; this helped to achieve the following advantages:

- possibility to create a base of loyal patients residing in Moscow, Moscow Region and Russia in whole;
- increase in the amount of patients by means of processing calls from more potential patients;
- quality support of potential users of medical services;
- development of robust long-term competitive advantages.

At stage 2 technological objectives were resolved; this helped to automatically distribute calls between the operators and identify the most frequently asked questions, such as the admission paperwork list, working hours of specialists, address and travel directions to the facility. An automated voice response system with a digital menu was introduced to provide answers to the most frequently asked groups of questions. Callers select the required service themselves. Having received the basic information, the caller is connected to an operator to arrange and appointment or obtain additional information (pic. 2).

**Pic. 2.** The call center's digital menu



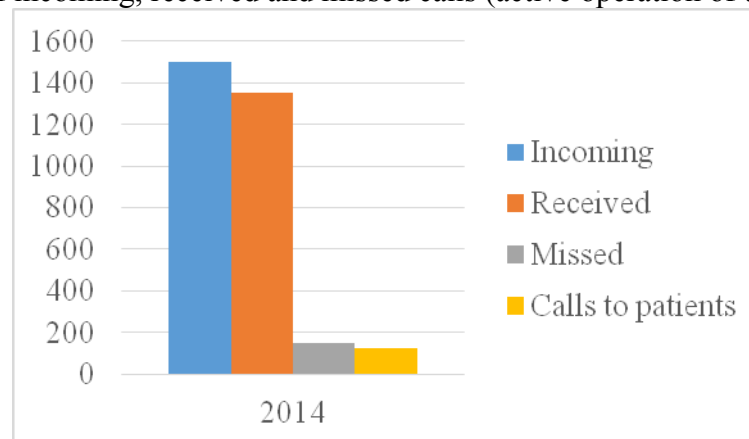
## RESULTS

Modernization of the call center helped not only to increase the number of received and processed calls, but also to actively call parents of the children having appointments to specialists (pic. 3).

Pic. 3 shows that the number of missed calls reduced 4 times (150 vs. 600). Accordingly, the number of complaints of the call center's operation reduced sharply. The system allows the operators to call the patients having appointments on a daily basis to confirm the visit. The last stage of modernization involved the following organizational measures:

- assignment of the call center head;
- development of the operators' responsibilities;
- recording of telephone conversations of the operators in order to improve public service quality.

**Pic. 3.** Structure of incoming, received and missed calls (active operation of the call center)



The systems allows registering the questions, which presented a problem or required plenty of time to answer. In the end of the shift these questions are analyzed by the call center head in order to improve such lines of activity as the operators' advanced training and technical development of the information system.

Special attention is given to the selection of operators. In order to advance the professional skill thereof (persons without medical degrees) a daily briefing based on study of specific cases is conducted. After that, operators check the equipment, enter login and password thereof into the telephone and start working (receiving calls).

Thus, modernization of a call centers affects not only the patient flow development, demand for medical services and the promotion thereof, but also the organization's public image.

## CONCLUSIONS

1. Modernization of a call center at a multi-profile high-technology medical facility helped to increase the number of received calls to 1,500-1,600 vs. 900 before the modernization and sharply reduce the number of complaints of busy line.
2. Operator productivity increase helped to ensure quality customer support without personnel increase.
3. The sphere of services provided by call center operators broadened; active daily calling of parents of the patients having appointments improves availability of medical services.

## CONFLICT OF INTEREST

The authors have indicated they have no financial relationships relevant to this article to disclose.

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