



CREATING CUSTOMER VALUE IN PRIVATE MEDICAL CLINICS BASED ON AN OMNICHANNEL INTERACTION SYSTEM

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Abstract: The purpose of this study is to develop theoretical and methodological approaches and empirical tools that ensure the creation of value for the patient in private clinics through the integration of an omnichannel interaction system. The study includes an analysis of the integration of various communication channels and their impact on the medical services value perception. Modern concepts of consumer value, customer behavioral models, and value co-creation principles were used as a methodological basis. The empirical part was based on a mixed design that included qualitative interviews with experts and quantitative patient surveys (n=619). The results of the study confirmed the significance of personalized communications through digital and traditional channels on the growth of patient satisfaction and loyalty. The introduction of omnichannel systems integrating various communication channels improves the quality of interaction with patients, which leads to an improvement in their overall experience. Omnichannel solutions allow private clinics to create a continuous and consistent customer journey, increasing satisfaction and loyalty.

Keywords: relationship marketing, digital communication channels, omnichannel interaction system, healthcare, Russia

1. INTRODUCTION

The rapid development of information technologies has contributed to the expansion of the ways companies interact with customers, which has allowed them to create additional value for customer (Barwitz & Maas, 2018). At the same time, with the advent of multiple channels of interaction between companies and consumers, the issue of customer experience management has become much more complex. The variety of channels makes it difficult to ensure consistency and a unified approach to customer service, which in turn affects their overall brand experience.

To solve these problems, companies actively seek to coordinate and integrate their channels, improving the quality of service. This involves the implementation of omnichannel

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solutions that allow you to synchronize and optimize the interaction between online and offline points of contact (Gao et al., 2021).

The role of patients is becoming increasingly important in the healthcare systems that are gradually moving away from the paternalistic model of doctor-patient interaction based on the authority to a model focused on the principle of patient autonomy (McColl-Kennedy et al., 2017). The focus on the needs of clients and their active participation in value co-creation has become crucial in the modern system of providing medical services (Rathert et al., 2013; McColl-Kennedy et al., 2012). A deep understanding of clients' needs and priorities plays an important role, as it allows medical companies to build effective communications, improve service quality and attract more clients. As a result, it becomes a source of competitive advantage in conditions of high competition and similarity of the services offered.

In this paper, we present the results of the study conducted in 2024-2025. The main research goal was to develop methods for creating customer value in private medical clinics using an omnichannel interaction system.

2. LITERATURE REVIEW

In the highly competitive contemporary markets, where products and services have increasingly similar characteristics, and consumer demands and expectations are constantly growing and changing, the ability to understand customer and create customer value is crucial for companies to gain significant competitive advantage (Parasuraman, 1997; Arslan, 2020). Accordingly, one of the most important tasks is to correctly define customer value and increase service attractiveness for the target audience. This approach leads to increased brand awareness and consumer loyalty in the long term (Van Boerdonk et al., 2021; Chakraborty & Paul, 2023). In this regard, issues of customer value creation have attracted considerable attention from academics and practitioners (Sun & Su, 2012; Zeithaml et al., 2020).

Currently, customer value concepts are increasingly based on the principles of value co-creation, where client becomes an active participant in the process (Eggert et al., 2018; Sheth, 2020). This is especially relevant for service-oriented industries such as healthcare, where quality and individual approach are becoming key factors in customer satisfaction and gaining sustainable competitive advantage (Saxena et al., 2021; Hidayat, Idrus, 2023). In the field of medical services, value co-creation is manifested through the patient involvement in the treatment process and the provision of personalized solutions (Samsa & Yüce, 2022).

Over time, the concept of multi-channel interaction has evolved to reflect changes in technology and consumer demands. In the past, companies tended to use only phone calls or face-to-face meetings to communicate with customers. However, with the development of technology and the growing expectations of customers accustomed to interacting through various channels such as email, social media, and chat rooms, businesses have begun to adapt their strategies to meet these new market needs (Moreira et al., 2023).

The benefits of an omnichannel approach are the synchronicity and integration of all channels. This removes company-consumer barriers and improves customer experience (Gao et al., 2021). For example, a customer can start the product selection process in a mobile app and complete it in a physical store, demonstrating the integration of data and communication within an omnichannel system (Buldeo Rai et al., 2019).

Modern clinics use telemedicine platforms so that patients can participate in their treatment plans development, share their preferences, and receive recommendations tailored to their specific needs. According to (Zeithaml et al., 1996), such interaction increases customer satisfaction by ensuring their involvement in the service delivery process and creating a trusting relationship. An example is the provision of chronic disease management programs, where

patients have access to regular consultations, to educational resources, as well as personalized recommendations developed based on their health data analysis (Sheth, 2020). This contributes not only to improving the quality of service, but also to strengthening patient loyalty, which is especially important in the context of increasing competition in the healthcare industry (Setyawan et al., 2020; Hidayat & Idrus, 2023).

In general, omnichannel approaches allow doctors and clinics to establish effective communication with patients through a variety of modern platforms. Thanks to the coordinated work of all channels, a feeling of individual approach and attention to the needs of each patient is created.

3. MATERIALS AND METHODS

To obtain empirical data, a series of semi-structured in-depth interviews with healthcare experts were conducted, as well as two independent surveys using questionnaires developed by the authors.

The main purpose of in-depth interviews was to identify the factors influencing the medical services value perception, as well as methods and tools of interaction with patients. The surveys helped us to obtain quantitative data to test the hypotheses put forward.

The following issues were discussed during the interviews:

- main trends in the Russian medical market related to communications and digitalization;
- the role of an omnichannel system in improving interactions between a clinic and patients;
- key elements of an omnichannel system (automation, multichannel communication, CRM integration);
- factors affecting patient satisfaction and loyalty;
- typical communication problems in medical organizations;
- the impact of omnichannel approach on business performance.

Six expert interviews were conducted with participants who have significant experience in healthcare marketing and management, as well as the implementation of omnichannel systems. All answers had high relevance for the purposes of the study.

Based on the literature analysis and expert interviews, we put forward the following hypotheses:

H1: Personalized communication increases patient satisfaction.

H2: Most primary patients aged 35 to 44 make an appointment through a contact center.

H3: The main problem of the CC as a channel for recording primary patients is the busyness of operators and long waits for a response.

H4: The frequency of patient attendance at an appointment is higher for those respondents who receive automated reminders in WhatsApp

At the second stage of the study, two independent surveys were organized:

- a survey of 360 respondents to test hypotheses H1 and H4;
- a survey of 259 respondents using A/B testing to prove hypotheses H2 and H3.

All survey participants were primary patients of the *Poliklinika.ru* platform who did not use services through the voluntary health insurance (VHI) system.

4. RESULTS

4.1. Omnichannel systems in the Russian healthcare market

In Russia, the healthcare market is facing a number of challenges, while competition in the healthcare sector continues to grow, especially private medical services segment (BusinesStat, 2023). Therefore, it is extremely important for private medical organizations to pay special attention to customer relations in order to gain and maintain competitive advantages. One of the possible options is the introduction of an omnichannel interaction system, which helps to better understand patients' needs and desires. This, in turn, leads to increased patient satisfaction.

There is currently insufficient information about the implementation of an omnichannel system of interaction in Russian medical organizations. Nevertheless, a number of well-known examples can be noted.

Thus, the *Family Doctor* clinic has brought the customer notification system to a single standard, so that all information is provided to customers in the same way, regardless of the selected recording channel: calls, using the website or mobile application.

The introduction of an omnichannel system in the *My Doctor* medical center has significantly improved the organization of communication with patients and increased the efficiency of communication channels. Among the innovations are automation of recordings and appointment management, and a voice robot has been integrated to remind patients of upcoming visits, which automatically calls patients on the eve of their appointment, replacing the need to manually make calls to operators. To simplify record management, integration with the *My Doctor* CRM system was performed. This allows patients and operators to work with records directly via a chatbot, with automatic data updates in the system without employee intervention. These measures allowed not only to speed up processes, but also to increase customer satisfaction, thanks to faster and more coordinated service.

The introduction of trigger mailings and the customer data platform (CDP) has increased the revenue share to 22% of *Evalar*, a manufacturer of dietary supplements. CDP allows you to create a single customer database for the purpose of analyzing, monitoring and managing customer interactions, which in particular helps to control the customer experience at all stages and integrate communication flows. Among the automatic trigger mailings, the most effective were mailings related to items thrown into the basket, leaving product reviews for bonus points, and encouraging repeat purchases by accruing points that burn during the week (Mindbox, 2024).

Thus, marketing in healthcare is not just about promotion, it is more about the stable relationships with patients at every stage of their treatment at the clinic.

In the context of digitalization, medical institutions should use new technologies to provide patients with an easy and affordable way to obtain information and services to gain competitive advantages: improving the perception of the clinic helps to increase trust and commitment from customers, as well as reduce the cost of attracting new customers.

4.2. Empirical research results

4.2.1. Results of interviews with healthcare experts

All experts emphasized the importance of omnichannel in building communication with patients. Trigger mailings and reminders, which are automated using CRM systems, are one of the main tools that can improve the quality of patient care. Transparency of interaction with

patients was also highlighted as a key factor in building loyalty. However, in the process of implementing a CRM system, experts also highlight the problem of insufficient processing of patient feedback.

Despite the availability of systems for collecting data and feedback, in some cases medical organizations do not use all the possibilities for a full-fledged analysis and processing of the information received, which reduces the effectiveness of CRM and leads to a loss of trust on the part of patients. It is important that clinics not only collect feedback, but also respond to it in a timely manner, giving patients the confidence that their opinion matters.

Thus, the introduction of CRM systems in medical institutions has a significant impact on improving the quality of patient care, improving the internal organization of processes and strengthening customer loyalty.

4.2.2. Survey results

Key factors that influence the effectiveness of interaction with patients in private medical institutions have been identified. The survey results show that the introduction of omnichannel interaction systems significantly increases the value of medical services for clients, and improves their satisfaction and loyalty.

One of the most significant results of the study is the confirmation of the hypothesis *H1: personalized communication increases patient satisfaction*. Patients receiving personalized messages such as reminders and recommendations report a higher level of comfort and trust in medical facilities, which contributes to an increase in their loyalty and satisfaction with the services they receive.

In addition, the study confirmed the importance of choosing an appointment channel. For patients aged 35-44 years, the contact center remains the preferred channel, which indicates the need for convenient and accessible telephone communication. However, with the development of digital technologies and the increasing availability of mobile applications, we can expect a change in preferences towards online channels. This implies the need for medical institutions to adapt their recording processes to meet new patient requirements.

In addition, automated reminders of upcoming appointments and tests, especially through messengers such as WhatsApp, significantly increase patient turnout. This confirms the importance of implementing such technologies to improve the accuracy and effectiveness of communication with patients, which directly affects their behavior and increases their involvement in healthcare processes.

The introduction of omnichannel systems integrating various communication channels (phone, e-mail, messengers and mobile apps) improves the quality of interaction with patients, which leads to an improvement in their overall experience. Omnichannel solutions allow clinic to create a continuous and consistent customer journey, increasing satisfaction and loyalty.

However, the study also revealed existing problems associated with the implementation of omnichannel systems, such as limited technical and financial resources of medical institutions, especially in small clinics. Despite these difficulties, there are successful examples of omnichannel implementation, such as in Polyclinic.ru, demonstrate that with proper process configuration and integration of various communication channels, it is possible to significantly improve the clinic efficiency and the quality of patient care.

5. CONCLUSIONS

After conducting a survey, we can conclude that implementing omnichannel systems helps private clinics to increase the value of medical services, improve patient satisfaction and thus to become more competitive in the healthcare market.

Based on the results of the study, recommendations were formulated for private medical organizations that relate to various aspects of patient interaction, with an emphasis on personalization, record availability, and customer retention.

As for *personalization*, one of the key steps is to segment the patient base based on their demographic and behavioral characteristics. This allows you to adapt the style and tone of communication, providing a more accurate and individualized approach. The introduction of personalization elements in letters is an important step that helps to increase the response and improve the quality of interaction with patients. In addition, it is important to integrate a personalized approach into the omnichannel strategy, which will allow maintaining a uniform style and level of individual approach in all communication channels. Regular testing of communication effectiveness is also important to optimize emails and increase response.

As for the recommendations on the *initial flow of patients*, it is important to take into account that now most patients choose to call the contact center for recording, and maintaining the convenience of this communication channel remains relevant. However, when forming a communication strategy, it is necessary to take into account not only the current, but also the future target audience. The study showed that patients between the ages of 18 and 34 are increasingly choosing to make an appointment via instant messengers, in particular via WhatsApp. This generation will become the core audience in the coming years, and ignoring their preferences may lead to missing out on important potential for long-term engagement.

As part of the recommendations on *recording accessibility*, it was revealed that there is a problem of a long wait for a response when recording via WhatsApp. More than 40% of the respondents using this channel expressed dissatisfaction with the response rate. Given that the 18-34-year-old audience actively uses messengers and will become the main segment of the customer base in the coming years, it is extremely important to urgently optimize the processing of requests via WhatsApp. To solve this problem, it is recommended to implement a chatbot for the initial processing of requests, as well as expand the staff of operators working in messengers. These measures will increase responsiveness and improve interaction with patients.

Finally, recommendations for *patient retention* include expanding the practice of sending automated reminders via WhatsApp, especially for primary patients and patients with a high probability of non-attendance. It is recommended to redirect reminders from less effective channels such as SMS and PUSH to WhatsApp for key segments where it is technically and legally possible. It is also important to integrate WhatsApp reminders into standard communication scenarios and regularly monitor turnout metrics to confirm the sustainability of the effect and the effectiveness of this strategy.

The implementation of the proposed recommendations will improve the communication process with patients, increase their satisfaction, and ensure higher efficiency of all recording and interaction channels.

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