

Research Article

Top-Tier Maternity and Children Specialist Smart Medical Care and Innovative 5G Outpatient Service Model

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Purposes. Under the influence of big data, 5G technology, and the two-child policy, we are facing a shortage of medical resources, in short supply, and a substantial increase in demand for maternal and child health services. Medical needs improve patient experience, improve patient satisfaction, and apply smart medical care and 5G new model. *Methods.* Retrospective research methods and a large number of observation methods were used, and patient medical experience was improved through smart medical WeChat services, 5G technology, MDT (Multidisciplinary Team), one-stop services, and other measures. *Research Results.* Smart medicine and 5G models have effectively improved patient satisfaction and medical experience. *Conclusions.* Smart medicine meets the medical needs of women and children. 5G technology makes the medical model efficient and convenient and at the same time enhances the hospital's core competitiveness.

1. Introduction

China is the most populous country in the world and the second largest economic market. Problems such as difficult medical services, high costs, and strained doctor-patient relations have been reported frequently. The key problems are insufficient high-quality medical resources and imbalance between supply and demand [1]. During the “13th Five-Year Plan” period, under the influence of the comprehensive two-child policy, the annual population size will fluctuate between 17 million and 19 million people. With the new two-child policy and China's aging population, the workload of doctors has increased a lot. The adjustment of the fertility policy has brought about a substantial increase in the demand for maternal and child health services and the increasing demand for medical services by patients. In the “Thirteenth Five-Year” planning and construction layout, Internet medical care is taken as an important technological innovation method for healthy China, deepening the reform of the medical system and continuously promoting the development and innovation of smart medical care to better serve patients and medical workers.

With the integration and development of information technology, all spaces and objects of human life have been digitized. In the field of health and medical services, it supports medical services and patient healthcare systems based on the Internet of Things (IoT). The continuous improvement of medical facilities based on Internet of Things devices and digital information on human behavior and health make efficient and convenient medical services possible [2]. The information technology of smart medicine can free medical staff from tedious tasks and make them have more time to focus on diagnosis and treatment. The outpatient department is the window of the hospital and an important part of the hospital. It is the first department that all patients and pregnant women come into contact with. Their medical experience and satisfaction in the outpatient department play an important role in the reputation of the hospital.

The third-grade A-level maternity and children's hospital is responsible for the critical and severe referral of maternal and children in the whole province and has high-quality medical resources. It is responsible for the critical and two-way referral of maternal and children's medical industry in

the whole province and has established a Medical Association [3] cooperation with the lower level maternal and child health hospital. In the face of more than 2.8 million outpatient visits a year, through the development of smart medicine, WeChat service, 5G technology, MDT, and one-stop service to integrate medical resources, meet the needs of women and children patients, improve the medical experience of women and children patients, save time and other costs of the hospital and patients, and achieve win-win results.

2. Related Work

Smart medical care is proposed in recent years with the rapid application of the Internet of Things technology in the medical field [4]. Through the use of Internet of Things technology, mobile Internet, big data, and cloud computing technology, electronic health records are established, and a patient-centric medical service model is established with a four-party linkage of patients, medical staff, medical institutions, and medical equipment [5]. It is considered an extension of e-health and telemedicine. The Internet of Things (IOT) is a technology that has recently begun to have a huge impact on all aspects of life. Among them, electronic healthcare services are the most dependent key areas of human life [6]. In addition, the application of CloudIoT paradigm (cloud computing+Internet of Things) in the medical field can bring many opportunities to medical IT. Experts believe that it can significantly improve medical services and contribute to its continuous system innovation [7]. As the largest developing country, China is investing a lot of resources to promote the development of the International Health Organization. Smart medical care is one of the cores of China's new medical reform. People have high hopes for it, hoping that it can help resolve the conflict between limited medical resources and a huge patient population. Big data, artificial intelligence, and 5G wireless transmission technology improve the patient experience and the quality of medical services, while reducing the total cost attributable to medical care [8]. This is not an unrealistic fantasy because these emerging technologies are beginning to influence and rebuild healthcare in subtle ways [9].

Smart medical care originated from the "Smart Planet" strategic concept proposed by International Business Machines Corporation (IBM) in 2009. The strategy includes 6 major areas including smart cities and smart medical care. As the growth of the elderly population around the world will become a huge challenge in the future, they will participate in a large part of the healthcare facilities. Therefore, it is necessary to develop smart medical systems and deploy them to smart homes and cities for remote diagnosis [10]. Since the concept of smart medicine was put forward in 2009, a lot of researches and development have been carried out at home and abroad. After foreign research ideas on smart medical care were put forward, many countries and institutions including the United States, the European Union, and Japan have successively introduced a series of smart medical construction measures.

Petri Virtanen and Jari Stenvall's point of view is that an intelligent organization shares its expertise, crosses societies and medical professions, learns from mistakes, has anti-learning capabilities, and takes adaptive actions according to changes in the operating environment. Put medical institutions at the core of the emerging service system [11]. Some Korean literature believes that, with the development of medical technology and the increase in customer service expectations, as well as the diversification of employee needs and the various activities required to improve medical quality, the hospital's quality management system has undergone rapid changes. Most hospitals are trying to update patient-centered care strategies and systems, emphasis on customer focus, and putting customers first [12]. Integrating medical care and IoT functions into medical equipment improves service quality and efficiency, especially for the elderly, patients with chronic diseases, and patients who need continuous supervision [13]. Now, research is underway: how to transform the medical industry by improving efficiency, reducing costs, and refocusing on better patient care. The Internet of Things will change the pattern of the medical industry [14].

Remote monitoring of patients is possible with wearables facilitated by robust sensors coupled to 5G network [15]. The future smart healthcare networks are expected to be a combination of the 5G and IoT devices [16]. The vision of the future medical service delivery system is to promote continuous monitoring and timely intervention to improve the quality of life of patients at any time and any place and through any equipment and ubiquitous medical services. At the same time, it reduces related costs and eliminates socioeconomic barriers to obtaining professional medical care [17]. There are no research papers on the new medical model that combines 5G technology with smart medical care, MDT, and one-stop service.

3. Object and Method

3.1. Research Subjects. Inclusion criteria: outpatient and emergency data and WeChat service data from 2010 to 2020, WeChat online+offline service, special outpatient service, characteristic outpatient service, MDT, one-stop service, 5G technology, and other new initiatives from 2010 to 2020.

3.2. Research Methods

3.2.1. Data Collection. A retrospective research method was used to collect and sort out the volume of outpatient and emergency services from 2010 to 2020, the volume of kiosks and WeChat services from 2016 to 2017, the volume of WeChat services in 2019, and the volume of WeChat services from 2015 to 2020.

3.2.2. Questionnaire. A large number of observation methods were used to demonstrate the innovative outpatient service models such as smart medical care, 5G technology, and one-stop services developed to improve outpatient service capabilities from 2010 to 2020, and a

comparative analysis of third-party satisfaction surveys was performed before and after the launch of the new medical model. The innovative outpatient service model optimizes the processing process, shortens the processing and waiting time, and solves the problems of multiple inquiries, multiple round trips, long queues, long time-consuming, poor autonomy, and poor medical experience in the traditional model.

4. Research Results

4.1. Statistics of the Number of Outpatients and Emergency Services in the Past Decade. In 2017, there were 2, 252,795 outpatients and 1,881,757 outpatients. In 2019, the number of outpatients reached more than 2.8 million (see Figure 1). In the face of such a large number of outpatient services, in order to meet the medical needs of women and children and improve patient satisfaction, the new 5G mode of smart medicine integrates medical resources and comprehensively improves patients medical experience and sense of acquisition.

4.2. WeChat Online Service Volume. WeChat online services (see Figures 2 and 3) include WeChat self-service card application, registration, payment, WeChat online consultation, WeChat online report query, remote consultation, Women and Children Alliance, Medical Consortium, and other Internet platforms to meet the needs of foreign and different regions and the needs of the patient.

Offline services include self-service machines and manual windows for card registration, registration, and payment to meet the needs of ordinary patients, establish gold card outpatient clinics to set up hierarchical outpatient services for special needs, improve the hardware of the medical environment, improve the quality of special needs outpatient services, and meet the high-end needs of patients.

4.3. Highlights of Outpatient Innovation. In order to improve the patient's medical experience (see Table 1), outpatient clinics strictly implement three-level preexamination and triage, and smart medical care has developed a one-stop service centralized appointment platform, a new 5G medical service model, medical consortia, women and children alliances, two-way referrals MDT clinics, and other measures to improve service capabilities and launch PAC (Post-abortion Care) consultation clinics, pediatric Chinese medicine clinics, children's dental clinics, children's sedation clinics, pharmacy clinics, radiology clinics, and other special clinics. The use of CA (Certificate Authority) electronic signatures in 2020 means "paperless." The official arrival of the era has greatly reduced the invalid waiting time of patients in the hospital.

4.4. MDT Clinic Integrates Medical Resources. With the support of 5G technology, 22 high-level MDT teams in obstetrics, obstetrics, obstetrics, and pediatrics have been formed, and a number of MDTs with specialties have been

created. The most distinctive of these is the MDT diagnosis and treatment system based on the fetal medicine platform (see Table 2).

4.5. New Model of 5G Medical Service. In terms of smart medical care, with the support of 5G technology (see Table 3), 5G digital panoramic hospitals, 5G emergency rescue systems, and other 5G medical services have been realized.

4.6. One-Stop Service. In terms of smart medical care, with the support of 5G technology (see Table 3), one-stop service of outpatient service center + centralized appointment platform (see Figure 4) is one of the innovative models to be launched in 2020.

5. Discussions

5.1. Smart Medical Online + Offline Combined Service Model. The hospital's "WeChat service account" was used to implement the full-process WeChat service in the outpatient clinics of the two hospitals (see Table 4), "electronic cards" were implemented, the WeChat link interface was optimized, the convenience of the "WeChat self-service billing" function was improved, and "decard removal" was achieved. Seek medical treatment, and lay the foundation for paperless medical treatment. Online consultations, online examinations, prescription drugs, and mailed home make up for the difficulty and time-consuming problems of public hospitals.

Offline services are self-service kiosks and manual windows. MDT multidisciplinary joint consultation outpatient clinics and special outpatient clinics are opened. Based on the survey of women and children's needs, the special outpatient clinics are continuously adjusted, and the special outpatient clinics are convenient for patients and reflect the purpose of precision medicine. Special needs outpatient services: the medical environment is beautiful and comfortable, and the hardware conditions and management have been improved, which has brought the service capacity to a new level. Formulate special needs outpatient expert qualification review work, standardize special needs outpatient medical service management and related regulations, establish gold card outpatient clinics to set up hierarchical special needs outpatient services, strengthen special needs nurse etiquette and service awareness training, improve the service image of nursing staff, require Mandarin, light makeup to work, provide patients with special personnel to accompany the examination and treatment, and set up special B-ultrasound rooms and blood collection rooms to achieve one-stop, full-process one-to-one high-end services, improve patient experience in medical treatment, and improve patient satisfaction. There were 31,604 special needs outpatient services in one year, accounting for only 1.71% of all outpatient clinics in the hospital (the National Health and Family Planning Commission stipulated <10%), and 25 cases of letters and visits were accepted, which improved the medical experience of patients, and the patient satisfaction rate was 99.7%.

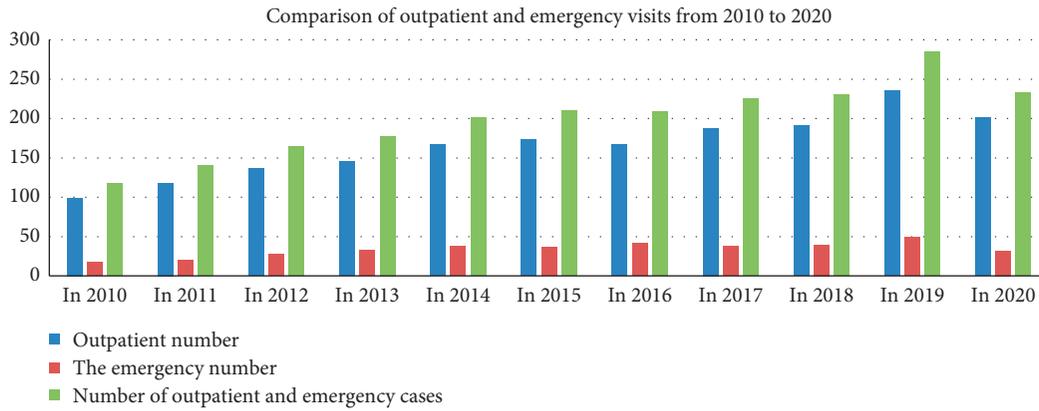


FIGURE 1: Comparison of total outpatient and emergency volume and outpatient volume from 2010 to 2020 (West China Second Hospital of Sichuan University).

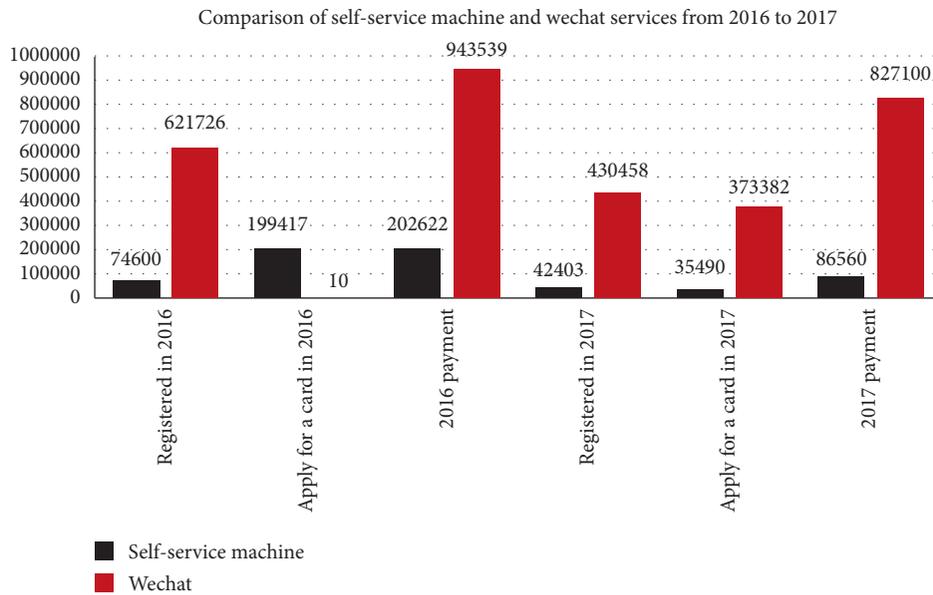


FIGURE 2: Self-service machines from 2016 to 2017 compared with WeChat service capacity.

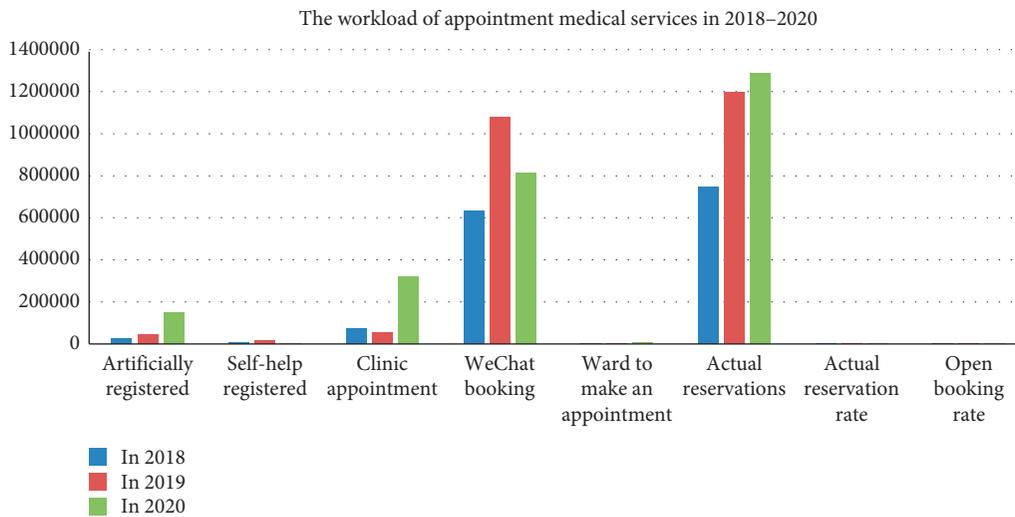


FIGURE 3: The workload of appointment medical services in 2018–2020.

TABLE 1: Continuing to enhance service capacity and improve patient experience.

Strict implementation of three-level preexamination and triage	Service capability	Characteristics of outpatient	CA electronic signature for outpatient service The “paperless” era	Time-sharing appointments shorten waiting times
Primary preexamination and triage at the gate of the hospital	One-stop service Centralized reservation platform	Wound treatment (nursing) clinic	Outpatient electronic medical record	The appointment time has been improved from one hour to 30 minutes
Secondary preexamination and triage at the entrance of each diagnosis area	A new model of 5G medical services Medical treatment alliance	Traditional Chinese Medicine Outpatient Department of Obstetrics and Gynecology Pediatric Chinese medicine clinic	Electronic outpatient report Outpatient electronic prescription	The average time to wait for a doctor is about 27 minutes
See the three-level pretest triage in the consultation room	Children’s union Two-way referral MDT outpatient	Children’s stomatological clinic Pediatric sedation clinic Medicine clinic Radiation outpatient Prenatal ultrasound clinic Teleconsultation clinic PAC consultation clinic Postpartum review clinic		The average treatment time was saved by 2 hours

TABLE 2: MDT clinic based on the characteristics of fetal medicine platform.

MDT clinic before pregnancy	MDT clinic during pregnancy	Integrated disciplines
Fertility assessment and fertility treatment/ recurrent abortion MDT	Genetic disease diagnosis and high-risk prenatal diagnosis MDT for health and disease screening	Obstetric Pediatric cardiovascular department Pediatric surgery Radiology department Antenatal diagnostic center
PGD/PGS MDT	The fetus has congenital heart disease MDT	Birth defects center ultrasound
Decrease of ovarian reserve function MDT		Reproductive medicine New pediatric Pediatric neurology department
Female fertility preservation MDT	Abnormal fetal development MDT	Rehabilitation medicine Clinical laboratory
Fertility in patients with endometriosis protects MDT		

5.2. Ensuring Medical Safety and Meeting the Medical Needs of Women and Children

5.2.1. Strictly Implementing the Three-Level Preinspection and Triage. Establish three-level preinspection triage points at the hospital gate, clinic area, and clinic, establish a green channel for pregnancy checkups during the epidemic, innovate in the development of general fever clinics for children, and strictly supervise fever patients to ensure the safe and smooth treatment of various patients during the epidemic.

Through the statistics of the outpatient data of the HIS system, daily and weekly reports are formed, medical resources are scientifically adjusted, and outpatient arrangements are made rationally. In order to prevent and control the epidemic and reduce personnel gathering and cross-

infection, self-service and convenient outpatient clinics are promoted, and new patients’ new crown nucleic acid and antibody tests are self-service orders, so as to “check and check.” The intelligent centralized appointment mode of “full resources, multiple channels, one-click” during the epidemic prevention and control period realized the normal prevention and control measures of “zero contact for appointments, no queuing for examinations, and no gathering of patients,” which greatly reduced the number of hospitals and the risk of cross-infection.

5.2.2. Continuing to Improve Service Capabilities. Relying on 5G technology, the outpatient window one-stop service, centralized appointment platform, new 5G medical service model, medical consortium, women and children alliance,

TABLE 3: A new model of 5G medical services.

5G digital panoramic hospital	5G emergency rescue system	Other 5G medical services
AI face recognition	Emergency vehicle position display	Outpatient one-stop service, centralized reservation platform
Abortion statistics and analysis	Vital sign data monitoring	Intelligent medicare guiding service
Video surveillance and patrol inspection	Vehicle-mounted video monitoring	Smart leading examining
	Remote consultation by car	Wisdom parking Nutrition order
	Suggestions on emergency arrangements and preparation plans are given according to the patient's condition dynamics	Newborn VR remote visitation
Warning for abnormal behavior		Online diagnosis and treatment platform Online science course Online office for doctors Medical association, women, and children's alliance remote consultation Administration and logistic management

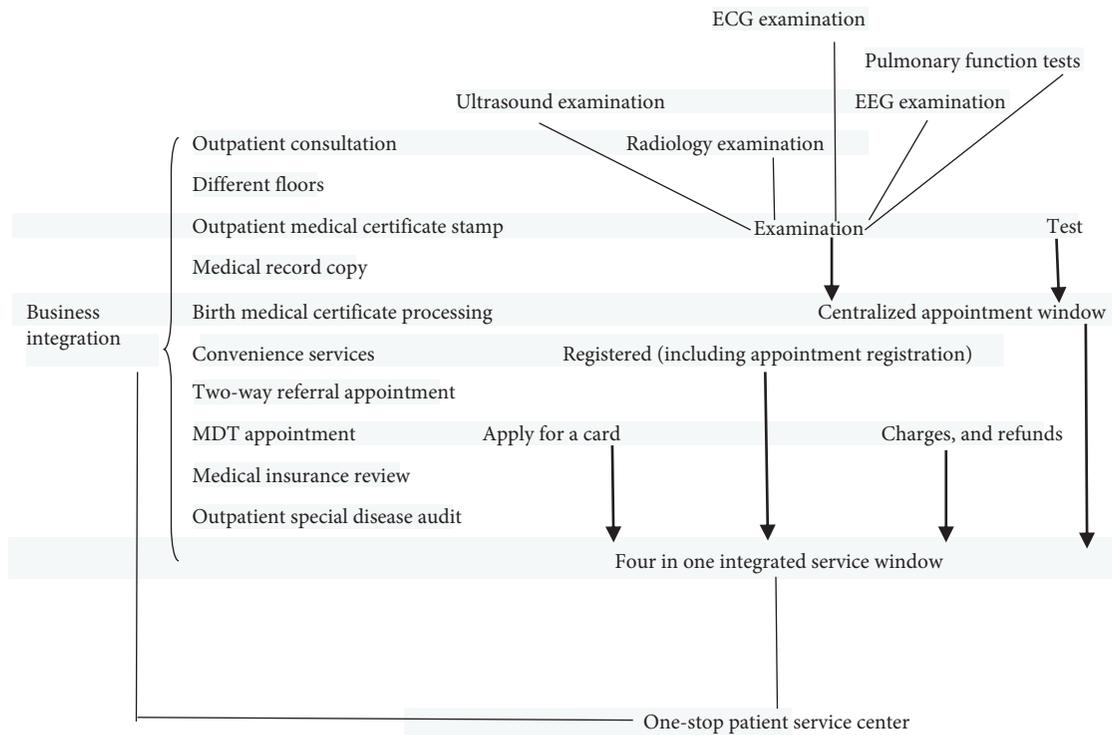


FIGURE 4: One-stop service integration structure frame diagram.

TABLE 4: WeChat whole process service.

In 2019	In October 2020
Convenience self-service registration 68,313	The number of followers of WeChat service was nearly 25,42036
Self-service billing 32,976 times	The number of transactions was 1,0432,585
248,700 patients received online consultation	WeChat report query 206156 million times
	B-ultrasound booking 596.03 million

two-way referral, and MDT outpatient services have been developed. It not only solves the diagnosis and treatment of difficult and severe outpatients but also makes it standardized, scientific, efficient, and convenient. It also avoids waste of medical resources and saves patient time and hospital costs.

5.2.3. Newly Opened Special Clinics. To meet the needs of women and children, wound treatment (nursing) clinic, obstetrics and gynecology Chinese medicine clinic, pediatric Chinese medicine clinic, children's dental clinic, children's sedation clinic, pharmacy clinic, radiology clinic, prenatal ultrasound clinic, remote consultation clinic, PAC consultation clinic, postpartum review clinic were newly opened.

5.2.4. CA Electronic Signature. Entering the era of "paperless," CA electronic signatures are used in outpatient clinics. The outpatient department cooperates with the information department, medical department, legal department, and other departments to promote digital signature (CA) certification online outpatient clinics. Every doctor needs to cooperate when visiting outpatient clinics. UKEY performs digital authentication and completes electronic signature operations such as electronic medical records, electronic reports, and electronic prescriptions, which greatly protects medical safety.

5.2.5. Making Appointments at Different Times to Shorten the Waiting Time for Consultation. Make full use of big data to make refined calculations of patient appointment waiting time. On June 1, 2020, our hospital will make the appointment time from the original 1 hour to 30 minutes, shorten the waiting time of patients in the hospital, and reduce the risk of cross-infection. In the performance appraisal review of national tertiary public hospitals in 2019, the average waiting time for consultation in our hospital was about 27 minutes, and the average time for consultation was saved by 2 hours, which greatly reduced the invalid waiting time of patients in the hospital and effectively alleviated the congestion state of the hospital. Improve the hospital environment, and continue to improve patient satisfaction.

5.3. Smart Medical and 5G Medical Service Model Is the Bright Spot of Outpatient Innovation

5.3.1. Construction of MDT System Based on Fetal Medicine Platform. Since the start of MDT work, service capabilities have been greatly improved. Types of disease and service volume: the types of MDT for women and children have gone from unidentified disease types to the initial 7 types. Up to now, 22 difficult and severe MDTs in obstetrics, obstetrics, and pediatrics have been established, the most distinctive of which is the MDT diagnosis and treatment system based on the fetal medicine platform. From January 2011 to July 2018, 2020,823 cases of MDT were completed, including 73 cases of interhospital consultation. From January 2018 to June 2020, 546 cases of MDT were

hospitalized, and from January 2019 to July 2020, there were 26 cases of interhospital consultation. The radiation range is wide: patients come from nearly 20 provinces, cities, and regions including Sichuan, Yunnan, Xinjiang, Qinghai, Gansu, Tibet, and Hebei.

The construction of the MDT system based on the fetal medicine platform concentrates on multiple advantageous disciplines related to fetal medicine: obstetrics, pediatric cardiovascular, pediatric surgery, prenatal diagnosis center, birth defect center, reproductive medicine, neonatology, pediatric neurology, rehabilitation medicine, ultrasound, radiology, laboratory, and other departments cooperate with each other, share resources, realize the integration of diagnosis and treatment, aim to standardize the diagnosis and treatment mode of fetal medicine, facilitate the process to better serve patients, and promote the discipline of fetal medicine sustainable development of construction.

Taking fetal congenital heart disease MDT as an example, a first-class fetal cardiovascular disease MDT team in southwestern China has been constructed to jointly make more accurate and effective diagnosis and treatment decisions for the affected fetus. First, the MDT team included pregnant women with congenital heart disease in their fetuses into group management, managed pregnant women through WeChat groups, and conducted regular health education and publicity. Second they made green channel identification for patients who have established a card, provided obstetric card number source for patients who have not established a card, followed up services during pregnancy, provided individualized one-to-one services, set up a dedicated blood collection window without queuing, and saved blood and urine specimens for etiological research. Third, they will make an appointment directly with the QR code. Fourth, they provided admission to the hospital. Fifth, they provide postpartum health services and medical services after childbirth. Within 28 days of childbirth, they collect some placenta and umbilical blood samples for the etiology of fetal congenital heart disease. Sixth, they provide cardiac B-ultrasound and cardiac ultrasound examinations for infants within 28 days of birth. Pulmonary function check was performed, specialist follow-up consultation number source (MDT team expert clinic) was provided for all parturients, a tracking system for children with congenital heart disease was established, and a "cloud follow-up" information system, early detection and early intervention of abnormal conditions, and active health guide were established.

5.3.2. New Model of 5G Medical Service. The new 5G medical service model includes 5G digital panoramic hospital, which realizes AI face recognition, pedestrian flow statistics and analysis, video monitoring and inspection, and abnormal behavior warning; 5G emergency rescue system: emergency vehicle position display, vital signs data monitoring, onboard video monitoring, onboard remote consultation, first aid arrangement suggestions, and preparation plans according to the patient's condition dynamics; other 5G medical services: one-stop outpatient service, centralized

appointment platform, intelligent medical guidance, intelligent guidance, intelligent parking, nutritional ordering, neonatal VR remote visit, online diagnosis and treatment platform, online science class, doctors online office, medical association, women and children's alliance remote consultation, administration, and logistics management. Among them, the one-stop innovative service model launched in 2020 has greatly improved the patient experience.

5.3.3. One-Stop Service + Efficient and Considerate Service of Centralized Booking Platform. There were problems in the past: business division and division, scattered locations, waste of space and personnel, inconsistent processes, patients not clear about the process, medical workers unclear about the process, many inquiries, many round trips, long queues, long time-consuming, poor autonomy, and medical experience difference.

Now set up a patient service center in the outpatient department, First "patient-centered," centering on the needs of patients. Then comprehensively integrate hospital resources, optimize processes, improve service capabilities, and provide convenient and efficient multiple "one-stop services" instead of patients. To improve efficiency, multi-channel, multimode intimate "microservices," and warmth in the subtleties. Second, Diversified one-stop service model: change a window "single service" to "one window with multiple functions," similar businesses and integrated services are handled in one window: integrated card application, registration, collection and refund, centralized appointment, Realize a window "four-in-one" integrated service. Third, Intimate "microservice": According to the needs of patients, self-service equipment is set up in public areas to meet the different needs of patients (shared wheelchairs, shared lockers, medical cabinets, power banks, self-service vending cabinets, etc.) Recruitment, birth certificate warm reminder cards, "difficulties find heart," "care for the elderly," to help patients solve their difficulties, "listen to your voice" to collect patient opinions and suggestions from multiple perspectives, collect duty information of various departments on holidays and release it to patients and employees in a timely manner.

Effectiveness was evaluated by using the following ways: first is through one-stop service, window function "four-in-one" mode, use of intelligent centralized appointment platform, and implementation of multiple convenience measures, enhancing the patient's sense of obtaining medical treatment and the medical experience, and the third-party survey of outpatient satisfaction increased from 87.34% in 2018 to 87.5% in 2019 and 87.62% in 2020, which is significantly higher than the national and provincial levels. Second is through process optimization: one-stop processing of integrated services, integrating integrated services that were originally dispersed in different buildings, floors, and different departments into a centralized area for processing, optimizing the processing process, shortening the processing and waiting time, and solving the traditional model of patients problems such as multiple inquiries, multiple round trips, long queues, long time-consuming, poor autonomy,

and poor medical experience. Third is by fully integrating space, personnel, and functions, using the time shift of registration, charging and inspection appointments, improving staff efficiency, and optimizing the allocation of hospital space and human resources. Through accurate time-based appointments and personalized examination guidance prompts, patients are fully prepared and cooperated with examinations to improve examination efficiency.

5.4. Limitations of Smart Medical and 5G Model. Smart medical care and 5G technology is not yet mature and needs to increase professional guidance and publicity. For young people who do not use WeChat properly, elderly people who do not understand WeChat, and ethnic minorities who do not communicate well, the flowchart of publicity and education in practical operation needs to be simplified and simple and easy to understand. If there are problems with repeated deductions, network upgrades or network failures, long audit time, and other issues, it is also necessary to optimize information system maintenance and ensure equipment stability and improve the work efficiency of information management personnel. In addition, the one-stop service places high requirements on the business level of the window medical staff, and training needs to be strengthened to improve service quality, operational efficiency, and work efficiency and also improve patient satisfaction.

For smart medical systems, clinical information security is one of the key requirements. The smart medical system involves a large amount of user privacy information, and the security risks are greater. There are security risks in the process of data collection, transmission, and processing. Once information leaks or data tampering occurs, it will inevitably lead to economic losses and severely even threaten the lives of patients. In terms of information security and patient privacy protection, smart medical care also requires government legislation, macroguidance, and the formulation of standards and regulations to enhance information security and privacy protection awareness and measures, such as long-term maintenance by professional IT engineers and setting up firewalls to protect patients information security and privacy security, looking forward to the establishment of the MCPS system (Medical Cyber-Physical System) in the future to improve the efficiency and safety of medical care and also looking forward to the application of smart medical and wearable devices under 5G technology. The use of wearable devices is increasingly mature, combined with advanced information network technology, cloud computing, and data processing, to analyze the characteristics and structure of medical wisdom, promote the development of the medical and health information industry, and greatly promote the reform and progress of China's medical system.

6. Conclusion

In the context of the second-child era, with the substantial increase in the number of outpatient clinics each year, the smart medical and 5G technology model is the general trend.

WeChat online services are convenient and efficient. One-stop service + centralized appointment is even more popular, which improves the patient's medical experience and improves patient satisfaction. "Internet + smart medical care" is an indispensable part of the national "Internet +" strategy. Through patient diagnosis and treatment experience, the implementation of the national hierarchical diagnosis and treatment policy is an important direction for future hospital informatization construction. Because the maternal and child medical industry faces a special group, only by continuously improving and innovating existing problems in smart medical care can we adapt to the needs of maternal and child health care services and play the active role of smart medical care in improving patient medical experience, increasing patient satisfaction and the economic and social benefits of the hospital, and promote the harmonious development vision of the doctor-patient relationship.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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