

Building the Construction of Grass-roots Medical Union with the Rehabilitation Medicine Specialty Alliance as the Link

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Abstract

The construction of medical consortia is an important part of the national medical system reform, and the specialty alliance is the main form of the construction of medical consortia, take the specialist alliance as the starting point to drive the all-round development of the medical consortia. With the alliance of rehabilitation medicine as the link, we help Grass-roots hospitals improve their medical level through personnel training, technical guidance and scientific research assistance. At the same time, it is gradually extended to relevant specialties and departments, which improves the service capacity of Grass-roots hospitals and reduces the burden of patients.

Keywords

Medical Consortia; Grass-roots Hospitals; Rehabilitation Medicine; Specialty Alliance.

1. Introduction

In 2017, "The guiding opinions of the general office of the State Council on promoting the construction and development of medical consortia" (GBF [2017] No. 32) clearly require that various forms of medical consortia be gradually formed according to the actual situation of the construction of hierarchical diagnosis and treatment system in various regions, including urban medical group, county medical community, cross regional specialist alliance and telemedicine cooperation network [1]. Therefore, the construction and development of medical alliances is an important measure to promote the sinking of medical resources, improve Grass-roots service capabilities, better implement hierarchical diagnosis and treatment, and meet the health needs of the masses. Large-scale public hospitals, which are at the core of the construction of medical alliances, are rich in high-quality resources and play an important role in integrating and effectively utilizing medical resources, improving the accessibility and affordability of services, and achieving the goal of national health [2]. Large public hospitals should give full play to their leading role, fully participate in the construction of medical alliances, and assist in the comprehensive establishment of a hierarchical diagnosis and treatment system [3]. The First Affiliated Hospital of Yangtze University, as a comprehensive tertiary first-class hospital and regional medical center, actively responds to the call of the state and participates in the construction of local medical associations through various forms. The more successful model is based on the specialist alliance, and drive the all-round development of the medical consortium. The following is the introduction of our experience in the construction of medical consortia with the Rehabilitation Medicine Specialist Alliance as a link.

2. Basic Overview of the Leading Hospital

The First Affiliated Hospital of Changjiang University is a comprehensive tertiary first-class hospital integrating prevention, medical treatment, teaching, scientific research and rehabilitation. It is the Southwest Hubei Regional Medical Center, and has 3,080 beds and 62 clinical and medical technology departments. The first in the province to carry out a variety of

difficult operations such as beating heart coronary bypass, cord blood stem cell transplantation, kidney transplantation, fetal brain transplantation, finger reconstruction, coronary stent implantation, congenital heart interventional blockade, artificial joint replacement, neurological intervention and fourth-level endoscopic surgery. The surgical treatment of tumors, three-dimensional intensity modulation, precise radiotherapy and chemotherapy are in the leading position in the province. The hospital has 2 specialized hospitals of brain and tumor, and has set up 10 clinical diagnosis and treatment centers for chest pain, stroke, trauma, critical illness, interventional diagnosis and treatment, reproductive medicine, digestive endoscopy diagnosis and treatment, blood purification, medical rehabilitation, and health management. It has 8 advantageous discipline groups of oncology, neurology, cardiovascular, digestion, urology, facial features, obstetrics and gynecology, and critical care medicine. Oncology, neurology, endocrinology, geriatrics, general surgery, urology, neurosurgery, pain, otolaryngology head and neck surgery, gynecology, neonatology, radiology, blood transfusion, pathology 14 departments are the clinical key specialty of Hubei Province. It has advanced equipment, fruitful research and teaching achievements, leading technology. The Rehabilitation Medicine Department of the hospital has a 48-year history of development. It has strong strength in teaching, scientific research and clinical practice. It has a variety of advanced equipment, such as cardiopulmonary exercise platform, pulmonary function measurement and so on. The specialty covers all aspects of modern medicine (including neurological rehabilitation, orthopedic rehabilitation, child rehabilitation, cardiopulmonary rehabilitation, chronic disease rehabilitation, psychological rehabilitation, etc.). Comprehensive technical development, including physical therapy, exercise therapy, occupational therapy, brace orthopedics, injection therapy and other modern rehabilitation methods and acupuncture, massage, small needle knife, traditional Chinese medicine fumigation and other traditional treatment methods. At present, there are 11 specialist physicians, including 6 with senior professional titles, 4 with intermediate professional titles, and 3 with primary professional titles. There are more than 20 rehabilitation therapists, 14 specialist nurses, 1 doctor and 4 masters.

3. Technical Needs of Township Health Centers

There are more than 100 township health centers in Jingzhou City, and the level of development is also uneven, but there are some problems as follows: First, the development of diagnosis and treatment subjects is not complete. Internal medicine, obstetrics and gynecology, surgery, ENT, traditional Chinese medicine, rehabilitation, emergency, pediatrics and preventive health care should be set up as required. However, most township health centers only have internal medicine, traditional Chinese medicine (or rehabilitation), emergency, and public health departments. Surgery can only do basic treatment, and the operating rooms of some hospitals are just decorations without professional anesthesiologists, and the rehabilitation departments of many hospitals overlap with the National Medical Hall. Second, the equipment is extremely lacking and aging. Good health centers have CT and MRI, and some health centers only have DR and B ultrasound. The rehabilitation equipment only has traditional acupuncture and traction beds. Third, The talents is lack, the aging of the personnel structure, and the phenomenon of disconnection. Most of the medical staff in the township health centers are still mainly trained in traditional Chinese medicine in the past. There is a shortage of talents with high education and high professional titles, and it is difficult to meet the needs of hospital development[4-5]. Fourth, the development of technical projects is incomplete, mainly due to the limitation of talents and equipment, as well as the limitation of national policies. The main diseases and service groups for diagnosis and treatment are the elderly, chronic diseases and people who need rehabilitation during the recovery period of diseases. Fifth, the construction of information technology is lagging behind, the personnel composition, hardware investment, and software

construction are insufficient, and the electronic medical record system, HIS, PACS, LIS, ECG and other systems are lacking or have backward functions [6]. Sixth, the management is not standardized. In the past, due to less government investment, the hospital management was extensive and loose, lacking an effective incentive and restraint mechanism, and one-sided pursuit of economic benefits.

4. The Main Advantages of the Rehabilitation Specialist Alliance

The construction of medical alliance includes four forms: urban medical group, county medical community, cross-regional specialist alliance and telemedicine collaboration network. Substantive urban medical groups are difficult to promote on a large scale due to the limitations of different regions and administrative affiliations. The telemedicine collaboration network is limited by the hardware of information construction. However, the requirements for assistance from tertiary hospitals (regional medical centers) in cross-regional specialist alliances are relatively lower. Only the relevant personnel of relevant departments are required to provide assistance, which can save the consumption of tertiary medical personnel resources to a certain extent and reduce the cost of assistance. Moreover, due to less geographical restrictions, distance learning guidance can be provided. It saves the time and money consumption of relevant personnel in the tertiary hospital. Therefore, the specialist medical alliance, as a form of medical alliance, can promote the tertiary hospital to better help the development of the primary hospital. Promoting the construction of a medical consortium in the form of a specialist alliance of rehabilitation medicine has the following advantages: First, equipment, venues and technologies are easy to be promoted in primary hospitals, and general township health centers also have the foundation of rehabilitation medicine. Second, with the progress of modern medicine, the sub-specialty of rehabilitation medicine has covered all majors of clinical medicine, and the development of rehabilitation medicine can drive the development of other related specialty. Third, the service scope and service objects of the township health centers also require the construction and development of the rehabilitation medicine department to be accelerated. Effectively achieve the sinking of rehabilitation resources. At the hospital level, the formation of a rehabilitation medical consortium will enable graded rehabilitation, two-way referral, and improve the rehabilitation capacity of primary medical institutions [7-8]. At the patient level, each patient can enjoy high-quality rehabilitation resources nearby, save economic expenses, and improve the efficiency of medical treatment [9]. Therefore, the construction of rehabilitation specialist alliance that is an unique and technical and can effectively solve the difficult problem of seeing a doctor can be the key to the success or failure of the medical alliance construction [10].

5. The Main Measures and Results

On the basis of the previous investigation, we selected the rehabilitation medicine department of our hospital as the lead unit, and 5 township health centers of different scales (2 have standardized rehabilitation wards and outpatient clinics, 3 have only rehabilitation department outpatient clinics, and patients are admitted to other ward) as the first batch of alliance units for trial operation, it is planned to explore the mechanism and method of operation, and then include more member units in the next step. The main operational measures are as follows. The first is to establish a working mechanism. The two hospitals sign a cooperation agreement. At the hospital level, the main tasks are the deployment of coordinators, the implementation of venues, the transportation, accommodation, and catering arrangements for training and guidance personnel, and referral patient medical insurance, etc. At the department level, docking personnel training, technical guidance, scientific research assistance, consultation, ward rounds, difficult case discussion, clinical path and medical quality guidance.

The second is personnel training. Lower-level hospitals send personnel to the leading unit of the alliance for further study, including doctors, nurses and rehabilitation therapists, the duration of each person's training shall not be less than 3 months, and the leading unit shall formulate a standard training syllabus, involving the technologies urgently needed by the alliance units. On the basis of formal training, they can also accept short-term learning and advanced training from alliance units at any time, focusing on a certain specialized technology. On the basis of regular training, we also conduct training in the form of large-scale academic conferences, technical demonstrations, group tours, and continuing education projects. Third, in terms of technical guidance, we led the unit to set up a support team composed of doctors, nurses and technicians to form pairs with 7 units, and take one day a week to conduct on-site ward rounds, case analysis, operation guidance, medical quality management. A WeChat group is usually established, and subordinate units contact their counterpart of assistance groups at any time to conduct remote consultations and live broadcast operations. All operating procedures are implemented in accordance with the training outline formulated by the leading unit. The fourth is to establish a patient referral channel within the alliance. The leading and core hospitals need to establish a "up-to-down" channel with the partner hospitals within the radiation range, and transfer patients who need to be rehabilitated to the lower-level hospital in time; at the same time, the lower-level hospital has difficult and critical patients are also referred to the lead unit in a timely manner. For the convenience of patients, we have also established a referral mechanism within the alliance, with mutual recognition of results and sharing of results within the alliance. Fifth, on the basis of the Rehabilitation Medicine Alliance, the pain department is covered (there is no special pain department in the township health center, all of which are in the rehabilitation department), and it is extended to neurology, pediatrics, cardiology and obstetrics and gynecology in real time.

Through the implementation of nearly 1 year, 10 people have received advanced studies and 4 items of continuing education have been carried out. On the basis of the original personnel, the alliance units have made significant progress in medical technology, standardized management, and enhanced their ability to serve patients. The business volume of each hospital's rehabilitation medicine department has increased by more than 10% compared with the previous year. More rehabilitated patients are kept in primary hospitals. At the same time, the pain department, cardiology department, respiratory medicine department, endocrinology department and orthopedics department of our hospital are introduced to the primary hospital, gradually forming a comprehensive of the medical consortium.

6. The Main Problems at Present

The first is the distribution of interests among the member units of the medical consortium. The current specialist alliance is still extensive and shallow, mainly based on technical collaboration as a non-close cooperative relationship. The content of cooperation is generally based on consultation, teaching, counterpart help. Each hospital is an independent legal entity, and the administrative affiliation of different medical institutions is different. Therefore, how to distribute the benefits, the performance guarantee of the participants, and the integration of human, financial and material resources among hospitals need to be further explored. At the same time, there is a competitive relationship between the member units of the medical consortium, especially the leading unit has better technical advantages. Some medical consortia have difficulty in "transferring" patients, and even "staking" the opportunity to expand their "sphere of influence", forming a "siphon" effect on Grass-roots patients [11], which not only lost the original intention of building a medical alliance, but even damaged the interests of Grass-roots hospitals. The second is the issue of medical insurance payment. Since the participating units of the medical consortium involve hospitals of different levels, and different

regions and different hospitals have different payment standards for the rehabilitation medicine department, some are paid for workload, some are prepaid in total, and some regions are directly average daily cost and the number of daily treatments times. Therefore, different hospitals are involved, and there are also a variety of cost settlement and medical quality control. The third is that talent development cannot keep up with the pace of specialist development. Especially in township health centers, the rehabilitation therapists trained and qualified have leave their jobs after 2 months, and it is difficult to recruit new staff. Fourth, the informatization construction is backward. At present, the informatization connection between alliances still relies on WeChat groups and QQ conference groups. There is no more convenient and smooth informatization channel. Especially during the novel coronavirus pneumonia epidemic, the technical guidance to subordinate units is relatively lagging behind.

7. Further Work Ideas

The first is to explore a more scientific management mechanism and incentive mechanism, establish a joint management model in the form of a board of directors and a fact-based mechanism, build a joint management organization of city (county district) health administrative department - the leading unit of the medical alliance the medical alliance member unit - the local health administrative department where the member unit is located, break the management and operation restrictions of medical institutions at different levels, and provide guarantee for the integration of internal resources and unified management of medical alliances [12, 13]. At the same time, the medical alliance should be integrated into a whole, with similar performance management methods, similar medical insurance payments, the same quality management, mutual sharing of equipment, and the same assessment standards, and establish a strict referral mechanism. The second is to speed up the construction of the talent team of the regional alliance, use several colleges and universities in the city, and use the policy of entrusted training in rural areas to train rehabilitation specialists and rehabilitation therapists, and provide mandatory employment, determine the service period. The doctors and nurses and therapist in the alliance can keep the original unit, with regular and orderly flow. The third is to improve the information construction in the medical alliance. The alliance has a consistent LIS, HIS, imaging system and rehabilitation management system, and establishes a remote consultation center. The fourth is to establish the regular evaluation and assessment mechanism, adapt to local conditions, research and formulate personalized assessment terms. Incorporate the effectiveness of medical alliance construction into the performance assessment of tertiary public hospitals, The results are linked to planning, financial investment, key specialties, regional medical centers, etc., and fully mobilize the enthusiasm of medical institutions at all levels to participate in the construction [14]. Fifth, it is necessary to strengthen the cultural construction within the medical alliance, advocate the culture of "harmony", a culture of harmony, kindness, harmony and integration, and cannot rely on an incomplete contract theory based on government participation, so as to continuously improve economic and social benefits, promote the healthy and sustainable development of the medical alliance [15].

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