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# Designing Performance Evaluation Index System of Health Care Department in County-Level Maternal and Child Health Care Hospital

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#### **Abstract**

The health care department of county-level Maternal and Child Health care Hospital is an important part of maternal and children health care institutions. constructing a set of scientific and standard of performance appraisal index for the health care department is a prerequisite for improving the service objectives of county-level maternal and children health care institutions. This article designed a set of scientific and practical performance evaluation index system for the health care department of county-level Maternal and Child Health care Hospital through literature analysis, in-depth interviews, key performance indicators and Delphy law. The pertinence of evaluation index selection, the distribution rationality of each index weight coefficient and the better operability with scientifically designed evaluation index system could provide a useful reference for the performance appraisal of the health care department of county-level Maternal and Child Health care Hospital.

**Key words:** Maternal and child health care hospital; Performance appraisal; Index system

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# INTRODUCATION

At present, most of the maternal and child health care set up performance evaluation index system, most of them cited general hospital appraisal system, respectively the performance appraisal of clinical departments, medical department. It played a role performance appraisal, but design is not scientific performance evaluation indicator, weight distribution is not reasonable, evaluation is not outstanding, especially lack performance appraisal index system, for the ministry of health and the ministry of health in the health care of women and children's development of district maternal and child health care institutions at the county level plays an important role. County maternal and child health care department are mainly composed of the following departments: primary health care, health education section and maternal and child information management section. On the one hand, bear child and maternal health care in the rehabilitation work; on the other hand is responsible for medical institutions within their respective jurisdictions maternal and child health daily work instruction. Therefore, design a set of suitable for health care of women and children health care department at the county level of the performance appraisal index system, the health care of women and children's perfect appraisal system, strengthening performance appraisal and improve the level of performance has important practical significance.

### 1. MATERIALS AND METHODS

#### 1.1 The Information Source

First through Nanchong health bureau of county hospital maternity and child health care and the basic situation of the current situation of the development of data collection. Secondly according to the level of economic development

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from nine institutions extract three county maternal and child health care institutions, when conducting field investigation and survey content includes organization performance evaluation of the situation, the service personnel's work content, enthusiasm and satisfaction as well as the object of service satisfaction (Yan & Yang, 2014).

#### 1.2 The Research Principle

Care department performance evaluation index system is the standard for performance evaluation of the ministry of health and scale, both to achieve the purpose of evaluation, and to be accepted by the inspection department. Therefore, in the design, due to follow the science, operational guidance, systematic, comparable and five principles (Xiao, 2013). In the process of examination, adhere to the principle of just, fair and open. Work more, the principle of optimal blue-chip rewards.

#### 1.3 The Research Methods

Using the literature research, brainstorming method, balanced scorecard, key performance index method, Delphi method, expert sorting method and analytic hierarchy process to design the maternal and child health care institutions at the county level health department performance evaluation index system.

# 1.4 Design Steps

#### 1.4.1 Selecting Experts

Selected four health management experts and six senior care experts groups, forming expert questionnaire, consulting experts. Experts with an average age of 46.2 years, all have college degree or above and senior professional titles, engaged in the ministry of health management and related work for more than 10 years.

#### 1.4.2 Screening Index

Invite county with rich experience of health management, health education, maternal and child health information, the respect such as primary health care experts held 10 people screening panel assessment index, to listen to expert advice. According to the original state of the ministry of health of Sichuan province in 2011 "in Sichuan province secondary appraisal standard of maternity and

child care institutions". Combining with the development plan and the strategic target of the maternal and child health care institutions at the county level and the specific situation of the ministry of health, using the balanced scorecard, from financial, customer, internal management process (patients), learning a framework to build the index system of four dimensions (Gou, Xu, Gao, & Liu, 2013), and a preliminary screening of 13 secondary indicators, 38 tertiary indicators. Primary indicators at various levels to 10 experts to the first round of consultation, eventually determine 4 first-level indicators, 9 secondary indexes, 33 tertiary indicators.

# 1.4.3 Weight Distribution

Will initially distribute to 10 experts to determine the indicators at all levels of the second round of consultation, by expert judgment level index and its corresponding index level of importance. According to the expert judgment conditions, using the method of expert sort to allocate primary index's weight coefficient, using analytic hierarchy process (AHP) to calculate the weight coefficient of the secondary and tertiary indicators (Chang & Jiang, 2007). With consistent judgment matrix, finally the result consistency index less than 0.10, the weight coefficient of the index at all levels is credible.

#### 1.4.4 Index Classification

In order to carry out standardized treatment of each index, according to the nature of the assessment criteria will be divided into low optimal index and optimum assessment index standard index, the best interval, yields, yields and standard index 5 classes.

#### 2. THE RESULTS

Through a large number of literature investigation and study, according to the design principle, use a variety of management methods, through the index selection, weight distribution, the classification and standardization process, by repeated for advice and modification, and finally designed a county maternal and child health care department performance evaluation index system (Table 1).

Table 1
County Maternal and Child Health Care Department Performance Evaluation Index System

Level indicators	Weights	Secondary indicators	Weights	Three indicators	Weights	Category index
Finance category	0.20	Income policy	0.38	Annual income policy	1.00	High-priority indicators
		Assets operation	0.62	Percapita income over expenditures	0.54	High-priority indicators
		Return on assets (%)	0.46	Return on assets	0.46	High-priority indicators
Class internal management processes		Allocation of resources	0 .144	Staff and service area population ratio	0.58	Best interval indicator
				Medical staff and the area ratio	0.42	Best interval Indicator
		Workload	0.13	Service area population	0.61	High-priority indicators
				Number of area of medical institutions	0.39	High-priority indicators

To be continued

#### Continued

Level indicators	Weights	Secondary indicators	Weights	Three indicators	Weights	Category index
		Working efficiency	0.58	Maternal system management rate%	0.09	High-priority indicators
				Management rate risk pregnant women	0.12	High-priority indicators
				Critical assessment rate of maternal	0.06	High-priority indicators
				Maternal mortality rate review	0.08	High-priority indicators
			-	Children system management rate	0.12	High-priority indicators
				Health care nursery kindergarten rate	0.06	High-priority indicators
				IMCI rate	0.06	High-priority indicators
		Neonatal mortality rate review	0.14	Management of high-risk children and child injury prevention management rate	0.05	High-priority indicators
				The rate of premarital health care	0.03	High-priority indicato
				Prenatal screening, prenatal diagnosis rate	0.05	High-priority indicators
				Midwifery management rate	0.05	High-priority indicators
				Neonatal screening rates	0.11	High-priority indicators
				Ligation and termination of pregnancy rate technical management	0.03	High-priority indicators
				Free pre-pregnancy health check coverage	0.02	High-priority indicators
				Maternal and child health information collection, collation, reporting accuracy	0.02	High-priority indicators
		Quality of work	0.14	Health promotion of appropriate technology the number of cases	0.27	High-priority indicators
				Medical institutions within the jurisdiction of the number of birth defects	0.23	Low priority indicator
				The number of maternal deaths area	0.18	Low priority indicator
				The number of deaths of children within their jurisdiction	0.18	Low priority indicator
				Health education and health promotion to promote its frequency	0.14	High-priority indicators
The satisfaction class	0.20	Staff feedback	1.00	Staff feedback 1.000 the satisfaction	0.65	High-priority indicators
				The incidence of complaints	0.35	Low priority indicator
Class learning and growth	0.20	Staff development	0.43	Undergraduate room staff to participate in continuing education or vocational training hours average	0.64	High-priority indicators
				Undergraduate room staff to improve professional knowledge, education levels mean people	0.36	High-priority indicators
		Research papers	0.58	The average number of research projects	1.00	High-priority indicators

### 3. DISCUSS

#### 3.1 Select Key Content as Evaluation Indexes

When choosing evaluation index, based on the new health care for maternal and child health care institutions at the county level of the management requirements, and to take into account the status quo and characteristics of health care of women and children health care department at the county level. And according to the maternal and child health care service which hospital policy: health care and clinical combination. Ensure the timeliness and importance of assessment index.

# **3.2 The Hospital Strategic Objectives Into Department Performance Targets**

The ultimate goal of performance appraisal is to realize the strategic goal of health care institutions, therefore, the strategic target of maternal and child health care institutions and health care department combining the responsibility of the mission (Li & Sun, 2013). According to maternal and child health care institutions at the county level for the purpose, vision and goals, and function of the task to select the performance evaluation indicators, effectively convert hospital strategic objectives into the ministry of health evaluation indicators and worker

action. Can make the department more aware of their role in the development of hospital work efficiency, motivate health department staff to work hard for the realization of hospital strategic goals.

# 3.3 Timely Adjust Evaluation Index Weight Coefficient

Evaluation index weights allocation is reasonable, it's very important to use data on characteristics of comprehensive evaluation method, the hospital care department performance evaluation plays a very important role. Therefore, using two methods to allocate index weight coefficient. After two rounds of expert consultation, using expert sorting method to allocate primary index's weight coefficient, using the analytic hierarchy process to assign the secondary and tertiary indicators weight coefficient, and consistent inspection, to ensure that the index has higher reliability and validity. At the same time combined with health care policy adjustments timely adjust index weight, to combine with policy indicators in a timely manner has important significance.

# **REFERENCES**

- Yan, X, Yang, L., & Lin, H. (2014). Studying on the application of standard services amount in preformance appraisal of grass-roots medical institutions. *Chinese Health Service Management*, 31(2), 119-121
- Chen, X. J. (2013). Research on difficulties and countermeasures of the implementation of performance pay in public welfare institutions. *Human Resource Management*, (11), 84-85.
- Gou, Z. X., Xu, P., Gao, W., & Liu, H. C., et al. (2013). The design of performance evaluation index system of clinical departments at the county level hospitals. *Chinese Health Economics*, 32(11), 82-84.
- Chang, J. E., & Jiang, T. L. (2007). The Analytic Hierarchy Process (AHP) to determine weights of research. Journal of Wuhan University of Technology, 29(1), 153-156.
- Li, X. L., Sun, L. H. (2013). Construction of three general hospitals, deputy director of the nurse performance appraisal system. *Chinese Nursing Research*, 27(5), 1393-1395.