

ORIGINAL ARTICLE

Development of the indicators of administration potentiality for local health security funds in National Health Security Office Region 10, Ubon Ratchathani, Thailand

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Abstract

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The objectives of this study was to establish and develop indicators and to assess and validate the indicators for measurement the capacity and potential of the local administration controlling the Local Health Security Fund (LHSF). The research took form of mixed methods which combined qualitative and quantitative research methods.

This study was started by studying related concepts and theories and synthesizing them into components and then into indicators. Concepts on administration potentiality were studied from related textbooks, academic documents and research reports published domestically and abroad. As a next step the possible components and indicators were explored in focus group discussions, in – depth interviews and finally in an operational seminar attended by community health alliance members, other stakeholders and experts. A Delphi technique of consensus development was used comprising three rounds. The subjects comprised 1,540 LHSFs administrative staff selected using proportional stratified random sampling of the population of staff in Health Region 10. The main quantitative data collection tool was a five – level Likert scale questionnaire with a reliability of .980 and validity ranging from 0.71 to 1.00.

The results of this study given guidelines document and wide support for developing an assessment instrument for measuring the capacity of local administration overseeing the LHSFs and the assessment instrument developed comprised 9 components and 65 indicators; (1) Leadership component is composed of 5 indicators, (2) Strategic Planning component is composed of 6 indicators, (3) Process Management component is composed of 11 indicators, (4) Customer and Stakeholder Participation component is composed of 7 indicators, (5) Measuring, Analysis and Knowledge Management component is composed of 10 indicators, (6) Human Resource Development component is composed of 3 indicators, (7) Output component is composed of 11 indicators, (8) Outcome component is composed of 9 indicators and (9) Health Status Impact component is composed of 3 indicators. The assessment instrument developed was congruent with empirical data, $\chi^2 = 1.520$, df = 13, p - value = 0.101, GFI = 0.997, AGFI = 0.990 and RMSEA = 0.018

The suggested that it was feasible to implement the assessment instrument in local government organizations and that comparative data on LHSFs capacity and potential would help policy makers identify where they need to invest to improve administrative capacity.

Keywords : indicators, local health security fund, administrative potential

การพัฒนาตัวชี้วัดศักยภาพการบริหารจัดการกองทุน หลักประกันสุขภาพในระดับท้องถิ่น พื้นที่สำนักงานหลักประกันสุขภาพแห่งชาติ

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การพัฒนาตัวชี้วัดศักยภาพการบริหารจัดการกองทุนหลักประกันสุขภาพในระดับท้องถิ่น

พื้นที่สำนักงานหลักประกันสุขภาพแห่งชาติ เขต 10 อุบลราชธานี

ว สาธารณสุขและการพัฒนา. 2559;14(1):53-66

การวิจัยนี้มีวัตถุประสงค์เพื่อสร้าง และตรวจสอบคุณภาพตัวชี้วัดศักยภาพการบริหารจัดการกองทุนหลักประกันสุขภาพในระดับท้องถิ่น ใช้รูปแบบการวิจัยและพัฒนา โดยใช้วิธีทายแบบพสman ระหว่างการวิจัยเชิงคุณภาพและเชิงปริมาณ การสร้างตัวชี้วัดศักยภาพการบริหารจัดการกองทุนฯ โดยการทบทวนเอกสารงานวิจัยและ แนวคิดทฤษฎีที่เกี่ยวข้องและเก็บข้อมูลเชิงคุณภาพจากการสนทนากลุ่มและสัมภาษณ์เจ้าลึกผู้เชี่ยวชาญ รวมทั้งจากการสัมมนาเชิงปฏิบัติการของภาคีเครือข่ายสุขภาพที่เกี่ยวข้องกับกองทุนหลักประกันสุขภาพท้องถิ่น และ ใช้เทคนิคเดลไฟน์ในการตรวจสอบความสอดคล้อง ความเหมาะสมและความเป็นไปได้ของตัวชี้วัดฯ จำนวน 3 รอบ สำหรับการตรวจสอบคุณภาพตัวชี้วัดใช้กลุ่มตัวอย่างเป็นคณะกรรมการบริหารกองทุนฯ 1,540 คน เครื่องมือวิจัยเป็นแบบสอบถามมาตราส่วน ประเมินค่า 5 ระดับ ค่า IOC = 0.71 – 1.00 และ มีค่าความเที่ยงทั้งฉบับเท่ากับ .980

ผลการศึกษา มีดังนี้คือ ได้คู่มือการใช้ตัวชี้วัดและแบบประเมินศักยภาพการบริหารจัดการกองทุนฯ ประกอบด้วย (1) ตัวชี้วัดศักยภาพการบริหารจัดการกองทุนฯ มี 9 องค์ประกอบ 65 ตัวชี้วัด ดังนี้ ด้านภาวะผู้นำองค์กร 5 ตัวชี้วัด ด้านการวางแผนเชิงยุทธศาสตร์ 6 ตัวชี้วัด ด้านการจัดการกระบวนการ 11 ตัวชี้วัด ด้านการมีส่วนร่วมของผู้รับบริการและผู้มีส่วนได้ส่วนเสีย 7 ตัวชี้วัด ด้านการวัด การวิเคราะห์และการจัดการความรู้ 10 ตัวชี้วัด ด้านการพัฒนาทรัพยากรบุคคล 3 ตัวชี้วัด ด้านผลการดำเนินงาน 11 ตัวชี้วัด ด้านผลลัพธ์การดำเนินงาน 9 ตัวชี้วัด และ ด้านผลกระทบต่อสถานะสุขภาพ 3 ตัวชี้วัด และ (2) ได้แบบจำลององค์ประกอบด้านศักยภาพการบริหารจัดการกองทุนฯ มีความสอดคล้องกับข้อมูลเชิงประจักษ์ ($\chi^2 = 1.520$, $df = 13$, $p\text{-value} = 0.101$, $GFI = 0.997$, $AGFI = 0.990$, $RMSEA = 0.018$)

ข้อเสนอแนะ สามารถนำตัวชี้วัดและเครื่องมือการประเมินไปใช้ประเมินกองทุนฯ และเปรียบเทียบให้เห็นข้อมูลประสิทธิภาพและศักยภาพการบริหารจัดการกองทุนฯ ซึ่งจะช่วยให้ผู้กำหนดนโยบายแยกแยะได้ว่ากองทุนใดสมควรจะได้รับการปรับปรุงประสิทธิภาพการบริหารจัดการ

คำสำคัญ: ตัวชี้วัด; กองทุนหลักประกันสุขภาพในระดับท้องถิ่น; ศักยภาพการบริหารจัดการ

Introduction

In the last two decades, health sector decentralization policies have been implemented on a broad scale throughout the developing world, usually as part of a wider process of political, economic and technical reform¹. Decentralization , involving a variety of mechanisms to transfer fiscal, financial administrative, and / or political authority for health service delivery from the central Ministry of Health (MOH) to alternative institutions, has been promoted as a key means of improving health sector performance². It has usually been argued that the benefits of such policies include : 1) improved “ technical” efficiency through greater cost consciousness at the local level; 2) service delivery innovation through experimentation and adaptation to local level; 3) improved quality, transparency, accountability, and legitimacy owing to user oversight and participation in decision making ; and 4) greater equity through distribution of resources toward traditionally marginal regions and groups. One of the major problem with contemporary discussion of decentralization is a tendency to view the process in simplistic terms. Usually decentralization is seen as a single activity of granting authority from the central national governmental agencies to other institutions at the periphery of the national system. The predominant framework for this analysis was pioneered by Rondinelli³., and applied to health sector by Mills⁴ and this provides a theoretical background for policy debates in this field. As mentioned earlier, the government of Thailand recently the universal coverage scheme(UCS) to provide care for the most disadvantaged fraction of the population. To date the system has been mainly governed by centralized agencies and power has been devolved down to

local administrations only slowly and in line with the requirements of decentralization legislation already in place when the UCS was introduced⁵. The Decentralization Act became effective in November 1999 to define the roles and responsibilities of the National Decentralization Committee (NDC)⁶. The process of decentralization and transfer of monies from central to local government required by the Act has been a gradual one and so far has only affected the local health care system at the margins. However there is less top-down control than in the past and scope for regional National Health Security Office (NHSO) outposts and Provincial Health Offices (PHOs) to develop a distinctive local approach within a particular province. Joint working between local government and the health sector is still developing. Local health funds have been established and there are about 30 Tambon Health Promotion Hospitals (which can draw on the funds for promotion and prevent -P&P - work). Much of this work is project-based ,with a range of community projects in operation, focusing on disability, rehabilitation and training as well as traditional P&P activities such as sanitation, food hygiene, mosquito control and exercise classes. The urban and rural local government units (the tes –sa – ban and OBD) are starting to work in partnership with the health sector to plan and co-ordinate P&P work in their catchment areas⁷. Local Government Organizations (LGOs) can enter agreement with the NHSO to jointly administer and jointly finance local health funds to support promotion and prevention work. Most health centers have now been converted into Tambon Health Promotion Hospitals (THPHs) which will support primary care and health promotion work at sub-district level with mainly MoPH but also

some local government funding. A primary responsibility of the National Decentralization Constitution is to produce a decentralization plan, defining relationships and functional responsibilities between central and local governments. It also defines local revenue sources and identifies means to improve the mobilization to transfer certain functions from central government to local governments, as well as recommendations regarding the means to coordinate the transfer of public officials from central government to local governments and state enterprises involved in the new assignments of functions and resources⁸. The National Health Security Act B.E. 2545 (A.D. 2002), requires government “to set up national health security for people in local areas by encouraging the process of participation according to the readiness, reasonableness and need of people in such areas, the board shall support and cooperate with local government organizations determining regulations so that the said organizations shall implement and manage the National Health Security system in local areas by earning expenses from the form as provided by” (s. 47)⁹. This provision forced the NHSO to coordinate activities with local governments for co – matched funding¹⁰. Thus local health security funds (LHSF) were developed as a kind of extension of the UCS scheme to channel funding for P&P activities (which are not covered by the other public insurance schemes). The LHSFs initiative was intended to combine central funding from the National Health Security Office with matching co- funding channeled through local government. Currently more than 10,000 million baht were allocated to the population covered by LHSFs, and 99.67 % of all local government organizations are participating.

At the end of February 2010, there were 3,946 Tambon Administrative Organizations and municipalities with LHSFs. This number increased, because the many creative activities of the pathfinder authorities have inspired other communities nationwide to develop community health programmes¹¹. From reviewing related documents and research reports, we found that no standardized measurement tools or performance indicators for local health security funds had been developed in Thailand. Most health fund related literature was found to be about the problems of administration and budget allocation for P&P work and weaknesses in planning by local health security fund administrative committees. No studies about tools or development of indicators of local health security fund were found. More recently a self - evaluation checklist for local health fund administrations has been developed by the National Health Security Office (NHSO), but there are still no robust measurement tools and no means of verifying the accuracy of an assessment instrument to measure the capacity of LHSFs administrations, This leaves local health security fund administration committees lacking useable indicators to measure performance and the potential for service improvement that might be achieved by wider public participation. Thus, it is necessary to develop concrete and clear indicators of LHSF administration performance and potential to facilitate proper evaluation. LHSFs seek to improve the health of their local population by involving members of the public and local health networks in the administration of the scheme. They spend a significant proportion of Thailand’s UHC budget, but as yet there are no formal instruments to assess the capacity and effectiveness of the local administrations running

the funds. There is a need to develop measurable indicators of current administrative capacity and its potential for future improvement. At the present the policy maker and inspector were used an assessment instrument to measure of NHO of Thailand is composed of 4 component 28 indicators which remain cannot be indicate that concrete and clear indicators of LHSF administration performance and potential. We need to have standardized measurement tools and indicators because policy maker and inspectors still have not an assessment instrument to measure of Local Health Security Funds (LHSFs) administrative potential which clear , accuracy and cover for all dimension of health system. The problem of the previous tools had difficultly and have not been more details to evaluate and measure really and truly capacity and potential of local administration toward on fund and fund's management, therefore we need to develop measurable indicators.

The above mentioned phenomena captured the research team's interest and highlighted the necessity to develop indicators of local health security fund administration performance and potential, It was decided to develop a structural model incorporating such indicators and to collect data on current performance that would allow the research team to assess how close the current situation is to the desired model. This would be assessed using a goodness of fit calculation between empirical data and the model.

Research objective

The main objectives of this research were to : to establish and develop indicators for measurement the capacity of LHSF in National Health Security Office Region 10 Ubon Ratchathani of Thailand

to assess and validate the indicators for measurement the capacity of LHSF in National Health Security Office Region 10 Ubon Ratchathani of Thailand.

Methods

Development of the indicators involved five steps : (1) Indicator establish , (2) Indicator examination,(3) Data collection and analysis, (4) Model validation and (5)Guidelines development

Step 1 Indicator establish : The component and indicators was constructed based on conceptualized concepts and theories from reviewing and synthesizing them into components and indicators. Focus group among representative of LHSF at sub – district level and community health alliance and local health fund stakeholders. Ten focus groups were conducted which involved with 120 subjects. In-depth interview were arranged of include experts on LHSFs such as policy makers, researcher, and representative from LHSFs administrative committees are composed of nine experts. Finally, the study were used finding of consensus from workshop seminar of all groups before to indicators examination and the indicators of administration potentiality of LHSF were synthesized and hypothesis model for research was determined.

Step 2 : Indicator examination: The Delphi process is an expert consensus method that can be used to develop best practice guidelines¹². The advantage of an the Delphi method over other methods used in the projects described above, such as expert working groups and focus group, is that the expert opinion is gathered anonymously through the use of an online (or postal) surveys¹³.,allowing for all participants on the panel to equally influence the results. This study used a Delphi technique compris-

ing three rounds, A list of respondent was selected purposively to represent the various groups mentioned above 21 experts drawn from this group completed the Delphi instruments. The first round instrument summarized opinion about the possible component and indicators of potential of LHSFs and invited the experts to refine this idea. The second round effectively repeated this exercise, but added information on what had been said in the first round. This gave respondents an opportunity to change their minds or to confirm their views given that they had learnt how other respondents responded. The questionnaire was tested by seven experts for its content validity and content coverage of the components, and then Index of Item- Objective Congruence(IOC) was analyzed¹⁴, before indicators with an IOC index of .50 and above were selected as this indicated that particular indicator was in congruence with the objectives and content to be measured¹⁵. The results was that the IOC indexes were in the range from 0.71 to 1.00. Construct validity and suitability were also tested by pilot testing the questionnaire with 50 subjects in order to find the reliability of the entire questionnaire. The result was that the reliability was in the range of .796 to .946. The questionnaire was improved and then used to collect data from a group of 1,540 subjects. The construct validity and suitability of the indicators were tested and the results was .549 - .986.

The data from the expert panel were analyzed using two criteria: level of agreement and level of consensus. The level of agreement for each of the 108 indicators was expressed using the median as the unit of measurement because the median is less sensitive to extreme scores with small groups¹⁶. The interquartile range (IQR) is the difference between

the values at the 75* percentile and the 25* percentile and is often used in Delphi studies as a measure of consensus. Previously Delphi studies have identified interquartile ranges of 1 or less as representing a statistical consensus, because 50% of the responses are within one point of the median¹⁷. While small ranges represent a degree of consensus around a median, wide ranges reveal no consensus. Williams defined *statistical dissention* as items that have an interquartile range of 2.5 or greater.

In conclusion, the Delphi methodology is a frequently used technique for addressing questions that have little or no historical information and for addressing questions that require the consideration of numerous issues for which there is a need for pooled judgment. Some items reported in the final round of the Delphi technique often represent compromise and lack the significance that conflicting positions may reflect^{18, 19}.

Step 3 Data collection and analysis: The questionnaire was improved and then used to collect data from a group of sample comprised 1,540 LHSFs administrative committee from 239 funds 5 provinces across the NHO region 10 Ubon Ratchathani, Thailand , who were not in the earlier interview samples: The survey samples was selected by multi – stage random sampling and sample size was determined with a ratio a of 20 respondents per parameter which was considered as the most appropriate²⁰. As the proposed model was relatively complex. (estimation of approximately 77 parameters).The study required 1,540 respondents. The data analysis procedure was followed after the components and indicators of LHSFs from the first step were obtained, the goodness of fit and appropriateness of the indicators had to be

confirmed. Therefore, the second order confirmatory factor analysis (second CFA) technique was used to analyzed the data collected from nationwide survey questionnaires which were sent back from LHSFs administrative committee through AMOS programme. This technique was used to confirm whether or not the factors and indicators of administrative potential of LHSFs from the initial interviews were consistent with empirical data. In this research, The second CFA of LHSFs indicator latent variable analysis to check model validity or the consistency of the developed model that are consistent with any particular level of the empirical data. The cut-off values for assessing model fit indexes are shown in Table 1. The results of analysis also enable us to weight the importance of each indicators which would be used to determine the weight for further evaluation.

Step 4 Model validation : After confirmatory factor analysis was performed to tested the goodness of fit for the structural model of factors, weights were assigned to constructing the indicators and empirical data to determine the weights of the main variables used in constructing the indicators. Then the goodness of fit of the theoretical model to the empirical data was tested using the following statistics²¹ such as Chi – square, GFI, AGFI and RMSEA. 1) Chi – square is a statistical value used to test a statistical hypothesis to see whether the fitting function value is null. If the Chi – square value is very low or close to null, it indicates that the AMOS model data fits well with empirical data. 2) Goodness of Fit Index is a ratio of difference between the fitting function of model before and after being adjusted. If the GFI value is more than 0.90, it indicates that the model fits to the empirical data. 3)AGFI (Adjusted Goodness of fit

Index) refers to a GFI that has been adjusted taking into consideration the sizes of variables and subjects. AGFI is used in the same way as GFI which mean that if it is close to 1, this indicates that the model is a good fit with to the empirical data. 4)RMSEA (Root Mean Square Error of Approximation) is a value that indicates a lack of fit of the model to the population covariance matrix. According to an RMSEA value less than 0.05 indicates a close fit²². However, a value that is valid and with a fit to a model should not be more than 0.08.

Then the indicators of Local Health Security Fund Administration Potentially in National Health Security Office Region 10 Ubon Ratchathani Thailand with factor loading of .30 or above, and with an average of suitability equal to 3.50 or above, were selected for guideline development.

Step 5 : Guidelines development:

All of the well endorsed statement were written into prose to form the guidelines document. This document was given to the expert panel members for comment and final endorsement.

Results

The results of this study have prospected within two prospectuses as empirical indicators and confirmative indicator. The findings are presented below.

Empirical Indicators

The first step shown that the literature were relevant to the issues of LHSFs including 1) Most local fund had appointed subcommittee delegation following the NHSO criteria for administrative work, finance and project assistant secretary, etc. 2) Secretary

of LHSF were usually the municipal and the Tambon Administration Organization (TAO) workers. 3) Most of board committees had management processes for planning on community health plans. The majority of boards knew the committee role in relation to a local health security fund management from training courses, conferences, seminars, etc. Thus, they believed theirs local funds had potentialities to manage in problem bases and community needs effectively. Moreover, an assessment instrument development finding show a develop of an indicators to measure were obtained 9 component 69 indicators 81 questions which each quote is classified by an identifier in consensus at the end of quote. The identifier are: Leadership component (LDS); Strategic Planning component (STP); Process Management component (PCM);Customer and Stakeholder Participation component (CSP); Measurement component (MKM), Analysis and Human Resource Development component (HRD); Output component (OTP); Outcome component (OTC) and Health Status Impact component (IMP).

Further to the second step is indicators examination it was resulted of Delphi technique in the final round were shown that Delphi questionnaire contained 77 questions that included the rationale for the LHSFs indicators of 9 components 65 indicators (as mention above) were comprised 1) LDS component is composed of 5 indicators, 2) STP is composed of 6 indicators, 3) PCM is composed of 11 indicators, 4) CSP is composed of 7 indicators, 5) MKM is composed of 10 indicators, 6) HRD is composed of 3 indicators, 7) OTP is composed of 11 indicators, 8) OTC is composed of 9 indicators and 9) IMP is composed of 3 indicators.

Confirmative Indicators

The results was that the reliability was in the range of .796 to .946. The construct validity and suitability of the indicators were tested and the results was .549 - .986. The questionnaire was improved and then used to collect data from a group of 1,540 subjects. The results of the third step was found that most of administrative committee of LHSF in NHSO region 10 Ubon Ratchathani Thailand included 887 of male (57.59 %) and average age was 47 years (S.D. = 9.41).The majority of the respondents in group are married (81.94 %) Most of career are government worker (46.94 %). Most of education level are Bachelor's degree (39.87%). Most of them average income more than 20,000 baht (39.87%). More than half of committee position in LHSFs is committee (52.53 %) and average of work experience was 4 years (S.D. = 1.97). The results of data analyzed from inter- correlation matrix of 9 components of LHSFs is value from 0.324 to 0.765. All of the component of correlation is significant at 0.01 level (2-tailed).The results of the fourth step , found that the first – order confirmatory factor analysis (First model) revealed that the chi-square (χ^2) value was 37.941 at the degree of freedom , df = 13 and a probability of 1 (p – value = 0.000). This means that the Chi – square value is significantly from the null. The GFI and AGFI value are 0.61 and 0.768 respectively, and RMSEA = 0.155. Additionally the result of the second order confirmatory factor analysis with a statistical program for developing indicators of LHSF in National Health Security Office Region 10, Ubon Ratchathani of Thailand. This study found that: (1) Our search for tools to measure LHSF performance and potential yield 9 components which could be broken down

into 65 indicators. The Leadership (LDS) component composed of 5 indicators. The Strategic Planning (STP) component composed of 6 indicators. The Process Management (PCM) component is composed of 11 indicators. The Customer and Stakeholder Participation (CSP) component composed of 7 indicators. The Measurement, Analysis and Knowledge Management (MKM) component composed of 10 indicators. The Human Resource Development (HRD) component composed of 3 indicators. The Output component (OTP) composed of 11 indicators. The Outcome

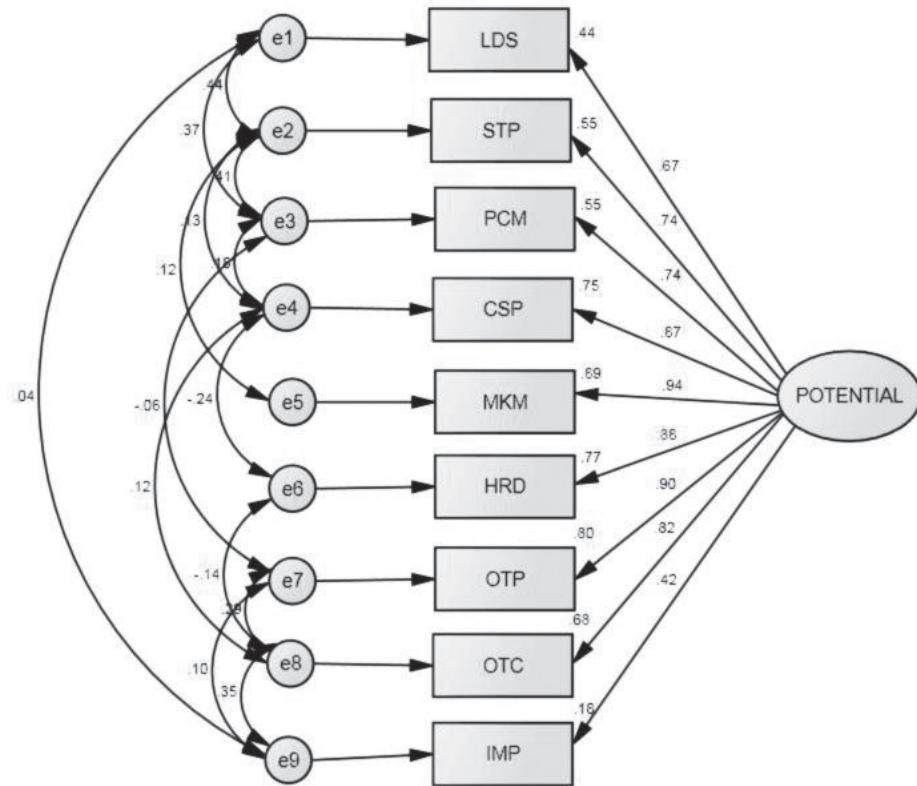
(OTC) component of 9 indicators and The Health Status Impact (IMP) component composed of 3 indicators and (2) the developed Indicators of Local Health Security Fund Administration Potential were congruent with empirical data including Chi – square (χ^2) = 19.756 ,and degree of freedom (df) = 13, χ^2 /df = 1.520, p- value = 0.101, goodness of fit index(GFI) = 0.997, adjusted goodness of fit index (AGFI)= 0.990 and root mean square error of approximation(RMSEA) = 0.018.

Table 1. The results of the second – order confirmatory factor analysis with a statistical Program for developing indicators of LHSF in National Health Security Office Region 10 Ubon Ratchathani of Thailand

Components number	Indicators	Factor loading	t	Prediction coefficients (R ²)	Factor score coefficients (FS)
		b (SE)			
1	Leadership (LDS)	0.67	15.763	0.44	0.15
2	Strategic Planning (STP)	0.74	16.043	0.55	-0.002
3	Process Management (PCM)	0.74	16.091	0.55	0.007
4	Customer and Stakeholder Participation(CSP)	0.87	16.668	0.75	0.05
5	Measurement, Analysis and Knowledge Management (MKM)	0.94	16.846	0.89	0.06
6	Human Resource Development (HRD)	0.88	16.794	0.77	0.09
7	Output (OTP)	0.90	17.129	0.80	0.03
8	Outcome (OTC)	0.82	18.519	0.68	0.02
9	Health Status Impact (IMP)	0.42	15.763	0.18	-0.002

Chi – square (χ^2) = 19.756 ,df = 13, χ^2 /df = 1.520, p- value = 0.101, GFI = 0.997,

AGFI = 0.990, RMSEA = 0.018



CMIN/df=1.520, df=13, p-value= 0.101, GFI= 0.997, AGFI=0.990, RMSEA= 0.018

Figure 1. The results of the model analysis of indicators of Administration Potentially of LHSF in National Health Security Office Region 10 Ubon Ratchathani of Thailand obtained from the second-order confirmatory factor analysis

From Table 1 and Figure 1, the results of the second – order confirmatory factor analysis revealed that the chi-square value was 19.756 at the degree of freedom , df = 13 and a probability of 1 (p – value = 0.101). This mean that the chi – square value is not significantly different from the null. The GFI and AGFI value are close to 1 (0.997 and 0.990, respectively) and RMSEA = 0.018. This shows the main hypothesis was accepted meaning that the research model fitted well to empirical data.

According to the details of the model in Table 1 and Figure 1, it was found that the weights of all the nine factors of the indicators of Administration Potentially of LHSF in NHSO Region 10 Ubon Ratchathani of Thailand were in a positive range from .42 to .94 with a statistical significance of .01 for all of them. The order of indicators according to degrees of suitability from highest to lowest of was as follows. The Measurement, Analysis and Knowledge Management (MKM) component was with a weight of .94; the Output component (OTP) with a weight of .90; The Customer and Stakeholder Participation (CSP) component of .87; The Human Resource Development (HRD) component with a weight of .88; The Outcome component (OTC) with a weight

of .82; The Strategic Planning (STP) component and The Process Management (PCM) component with a weight of .74 ; The Leadership (LDS) Component with a weight of .74; and the Health Status Impact (IMP) component with a weight of .42, respectively. Then the indicators of LHSFs Administration Potentially in NHSO Region 10 Ubon Ratchathani Thailand with factor loading of .30 or above, and with an average of suitability equal to 3.50 or above, were selected for guideline development. From table 1 the results of Factor score coefficient (FS) was found that the most of 3 important indicator was administrative potential of LHSFs followed by Leadership (LDS), Human Resource Development (HRD), Measurement, Analysis and Knowledge Management (MKM) respectively.

And the results of the final step is the guidelines document composed new indicators and new assessment instrument to measure of administrative potential of Local Health Security Funds.

The guideline document is composed two part; (1) The LHSF Quality award is composed of 5 level ; Five Star or Excellence, Four star or Very good, Three star or Good, Two star or Fair and One star or Poor and (2) An assessment instrument to measure is composed of 4 Dimension 65 indicators 200 point ; Efficiency Dimension, is composed of 11 indicators 31 point, Quality Dimension is composed of 28 indicators 85 point, Organization Development Dimension is composed 3 indicators 8 point and Effectiveness Dimension is composed of 23 indicators 76 point. This guidelines to make improvement in the way they manage local funds. And this tool also has potential utility inspectors and policy makers who can benefit from and improved assessment instrument.

Discussion

This study was found that the most important indicator was administrative potential of LHSFs followed by Leadership (LDS), Human Resource Development (HRD), Measurement, Analysis and Knowledge Management (MKM), Customer and Stakeholder Participation(CSP) and Output (OTP) respectively.

Similarly, Promasatayaprot V., (2012) according to an evaluate study of Wungsang Local Fund Health Security (WLFHS), found that the health service and financial administrations of the Local Fund Health Security (LFHS) and the National Health Security Office (NHSO) should be further developed in areas listed below so as to accommodate demands of the universal coverage (UC) ; (1) Efficient administration system of municipality and Tambol administration organization (TAO) (2) Human resource management (3) Financial management (4) Governance of the system (5) Good knowledge and true understanding: including a dissemination of correct information about, for instance, insurance status and a promotion of positive attitudes towards health problem solving and local fund health security planning. This study could emerge the model of the WLFHS stakeholders. It is clear that policy makers in the TAO must cooperate with committees of the LFHS, people in a community, and also the academy and NHSO branch. Consequently, this study argues that to be successful in the WLFHS process it should look at not only the participation of stakeholders as mentioned above, but also preparation and knowledge. Moreover, outcome indicators should be developed because all activities in relation to the WLFHS have to be evaluated, recorded and reported. The cooperation between stakeholders of the WLFHS

has been smooth throughout the process because every agency feels as a team, a situation analysis is a prior activity, and there are interactions among members. There must be a preparation stage because the awareness of individuals will need to be transformed. In addition, the relevant indicators of all performances need to be developed regarding activities such as plans, work process, budget, and roles. This study could provide the basis for practical guidelines to inform the WLFHS process²³. Similarly, Patmasiriwat (2009) found that the local health security fund has enhanced the health promotion activities in many local areas. It is clear that these activities have a high chance of success, if the local administrators have the enthusiasm, and local officials are strongly supported. So the chief executive of the TAOs and the mayor of municipalities have opportunities to create a local health security fund that can increase public participation in their localities. The LHSF initiative mean that collaboration among the TAOs, municipalities, local communities and health centers have been established. Several areas provide new service, such as patient welfare; a shuttle or an emergency ambulance car to convey patients to Tambol Health Promotion Hospitals (THPHs) or larger hospitals. Health behaviours have been dramatically changed by measures such as halting tobacco and drug use, reducing salt consumption, controlling weight and using the correct medicines. These activities have brought considerable health benefits. As a result, the establishment of LHSFs marks a good start of the health promotion and disease prevention for Thai citizens²⁴. Similarly, Kamuzora P. and Gilson L.(2007) reported the finding of a study that

examined the factors influencing low enrolment in Tanzania's health prepayment schemes (community health fund). The paper argues that district managers had a direct influence over the factors explaining low enrolment and identified in other studies (inability to pay membership contributions, low quality of care, lack of trust in schemes managers and failure to see the rationale to insure). District managers, actions appeared, in turn, to be at least partly a response to the manner of policy implementation. In order better to achieve the objectives of prepayment schemes, it is important to focus attention on policy implementers, who are capable of re-shaping policy during roll-out, with consequences for policy outcomes²⁵.

Conclusion

This paper demonstrates the use of a Delphi technique and in-depth interviews to develop a tool to measure the performance and the potential of local health security fund administration. The Delphi explored the viewpoints of expert stakeholders (including policy makers, academicians, local health security fund administration committee members, health providers and local people). This study found wide support for developing an assessment instrument for measuring the capacity of the local administrations overseeing the LHSFs, and a high degree of agreement about what components and indicators should be included. It suggested that the assessment instrument could be implemented in local government organizations with little resistance, and that comparative data on LHSF capacity and potential would help policy makers identify where they need to invest to improve administrative capacity.

Recommendations

This study were found that a tool for assessing the potential of LHSFs should contain 5 important components: the Leadership component (LDS), the Human Resource Development (HRD), the Measurement, Analysis and Knowledge Management (MKM), The Customer and Stakeholder Participation(CSP)and the Output component (OTP) respectively. Local health security fund administration boards can use this tool and the associated guidelines to make improvement in the way they manage local funds. This tool also has potential utility inspectors and policy makers who can benefit from and improved assessment instrument. It can help policy makers identify where they need to invest to improve administrative capacity.

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