

## Executive Summary

Research Project: Synthesis Research for Economic Evaluation of Primary Care Cluster Policy

The Primary Care Cluster (PCC) policy aims to reform the primary care system by forming teams of interdisciplinary medical staff, including physicians. Each team will be responsible for taking care of 10,000 people under the vision of “providing services using technology for everyone at any time”. This policy intends to develop the primary care system from both personnel and infrastructure perspectives in the upcoming 10 years.

Multiple research methodologies were used in this study to achieve its objective. A cross-sectional survey was conducted to collect primary data, and a model-based study was used to evaluate the expected benefits from a societal perspective.

Based on the results of the economic evaluation, the PCC policy was found to be cost-effective. Even though this policy will require an investment of 50 trillion baht in a 10-year period, the economic benefits resulting from its implementation amounts to 227.57 trillion baht, or 4.55 times more than the initial cost; essentially, for every baht invested, the return on investment will be equivalent to 4.55 baht. However, this result made the following key assumptions:

1. At least 6% of the current number of OPD patients not ill enough to require treatment at large hospitals was transferred to primary care clusters, or equivalent to approximately 9 million outpatient incidents per year.
2. Diabetic and hypertension patients were able to effectively monitor and control their diseases, resulting in the prevention of complications and deaths in at least 17,889 people within the 10-year span.
3. Increase the accessibility of screening for diabetes and hypertension from the current figure of 56% to 90%, or an increase in the number of patient diagnoses by 2.87 million people within the upcoming 10 years.
4. Enhance the quality of primary care service providers to improve patient satisfaction and confidence to 100%, up from current level of 10%.

Among these four assumptions, it was found that increasing the accessibility of screening for diabetes and hypertension provided the most benefit at 73.67 billion baht in the 10-year period. Effective control of diabetes and hypertension had the next highest benefit at 59.55 billion baht, followed by the transfer of patients to primary care clusters at 25.40 billion baht. Finally, the benefit of enhancing the quality of primary care service providers amounted to 68.94 billion baht; however, since this was an intangible cost, it was unable to be included in the final cost submitted to the government for budget allocation. The evaluation also showed that costs related to the management of public hospitals were reduced to 86.50 billion baht, costs saved in providing public services amounted to 28.54 billion baht, and the economic losses prevented due to premature death was 43.59 billion baht; this represented 55%, 18%, and 27% of the total amount for assumptions 1 through 3, respectively.

### Estimates of benefits from the PCC policy in the next 10 years

	Reducing costs from providing services at public hospitals		Public sector cost savings		Savings from economic losses due to premature death	Willingness-to-pay to improve secondary and tertiary care quality	Total cost benefit
	Treatment and service cost savings from transferring patients to primary care clusters.	Cost reduction in treating complications.	Cost reduction for transportation and food	Reduction in opportunity cost from taking leave	Reduction in economic loss from premature death	Willingness-to-pay to improve secondary and tertiary care quality	
1. Benefit from reducing unnecessary care	13,064	-	3,229	9,110	-	-	25,403
2. Benefit from improving complication prevention	10,389	19,579	2,757	8,163	18,664	-	59,552
3. Benefit from enhancing primary prevention	(4,910)	48,378	2,973	2,304	24,927	-	73,672
4. Indirect benefit of reducing overcrowding of outpatients and improving quality in secondary and tertiary care	-	-	-	-	-	68,943	68,943
<b>Benefit per section</b>	<b>86,500</b>		<b>28,536</b>		<b>43,591</b>	<b>68,943</b>	
<b>Total benefit from the PCC policy</b>							<b>227,570</b>

Figures in parentheses designate services in primary care clusters that are higher than the same ones in hospitals  
 Unit: Million baht

Overall, the PCC policy should be supported and implemented based on the following policy recommendations:

1. The PCC policy is likely to be cost-effective if implemented and the benefits cover a broad range of issues such as reducing costs for providing services to patients; reducing the number of chronically ill patients with complications; reducing the number of premature deaths; increasing the number of chronically ill patients unaware of their situation to receive treatment, and increasing patient satisfaction in hospitals by reducing congestion. As such, primary care service providers and relevant stakeholders involved in implementing the policy should be aware of its benefits, and be willing to remedy or address any incidents that occur during implementation so that these benefits are not mitigated.
2. Relevant stakeholders should be informed of the benefits, particularly the public, in order to raise support for the policy. If there is a lack of support and understanding from service users, then the policy will not be cost-effective and will be unable to achieve its goal.

3. Development of interdisciplinary teams should be emphasized – particularly in their capacities to efficiently deliver general health services – as the number of cases is expected to increase by 6-10% from the current statistic due to the transfer of patients from hospitals to primary care clusters. The teams should also have the ability to treat chronic diseases to the point where complications should not occur. In this scenario, the policy aims to have at least 40% of diabetes patients and at least 50% of hypertension patients who are able to control their diseases; current levels are at 18% and 27%, respectively.
4. The success of this policy will depend on its acceptance by its designated target groups, i.e. hospital patients as well as the public. In addition to having a family physician on the team and developing the quality of treatment services provided in the first policy recommendation, waiting time turned out to be an important factor too.; 66% of public hospital OPD patients were dissatisfied with the waiting time prior to receiving services. If this period can be shortened, not only will it result in more patients who utilize primary care clusters but it will also improve cost-effectiveness simply by reducing opportunity costs associated with the accessibility of services.
5. Consider increasing the policy's effectiveness by including additional primary care measures that have proven to be cost-effective, e.g. cervical cancer screening. This strategy would be consistent with the current situation because the government is in the process of introducing vaccines for the prevention of cervical cancer, with benefits expected to be seen in the next 10-15 years. If it is declared that 100% of cervical cancer screenings will be performed in order to eliminate the disease under the PCC policy, the stakeholders will be reassured of the efforts and intentions in addressing cervical cancer in a holistic manner. Another important measure that is medically cost-effective and can be included in the PCC policy is how to quit smoking and drinking.
6. Prioritize monitoring and evaluating the effects of the policy at the hospital, province, district, and national levels by using indicators and guidelines developed in this study. If it is found that the policy is unable to achieve its targets in any of the designated areas, the measures and implementation should be reviewed. The research team recommends that the PCC policy be evaluated every two years.

As this study was conducted as an ex-ante evaluation of the PCC policy prior to its implementation to provide supporting evidence to policy-makers, the next step should be to study the actual results obtained from the policy's implementation or to determine the factors which impact the public's decision to avail of the services under the primary care cluster. Satisfaction levels of services provided via primary care clusters from both service providers' and receivers' perspectives should also be measured. Another option could be to study factors which impact the performance of family physicians since they are considered as key personnel for this policy.

For more information: <http://www.hitap.net/documents/171267>