



Indicators for Primary Care Services: Importance, issues, and approach towards development

In the Universal Health Coverage scheme, primary care services are very important as these are the basic health services which all citizens should have access to regardless of their health conditions. Thus, the National Health Security Office (NHSO) in 2014 initiated the Quality and Outcomes Framework (QOF), which uses financial mechanisms to incentivize hospitals to provide quality primary care services based on the designated indicators. However, current research has shown that the QOF should be amended and revised in many areas. One of these areas is the development of quality indicators so that they are appropriate and reflect the actual quality of services provided and are accepted by all stakeholders.

What are quality indicators for primary care?

Quality indicators for primary care services are a tool for measuring the quality of primary care. In addition, these indicators also provide information for primary care service providers about the required care activities following set standards.

Issues with the QOF primary care service indicators

- Not evidence-based
- Service providers do not see the benefits
- No piloting prior to implementation
- Lack of stakeholder participation
- Creates inequality between different areas
- Additional work in recording data
- Create work-related biases

Research Recommendations

- The National Health Security Office (NHSO) and the Ministry of Public Health (MoPH) should together hold a policy training session for policymakers in related organizations.
- The MoPH and NHSO should support service providers in improving the quality of services based on the indicators, e.g. procurement of necessary equipment, capacity building of personnel, and providing recommendations in terms of academic research and management.
- The NHSO should develop quality indicators via an evidence-based systematic process. The indicators should also be tested prior to implementation
- The NHSO should have a system that sends data back to primary care service providers while services are being provided.
- The NHSO should monitor and evaluate the indicators.

The importance of quality indicators for primary care services



Quality indicators for primary care services are a tool that measures the quality of primary care services by comparing and ranking the performance as well as quality between hospitals.² The QOF uses these results as the basis for determining how much funding these service providers should receive. At the same time, these indicators are also indicative of national policy, e.g. health problems that are of primary importance, addressing primary care services which deviate from practice guidelines, and how to improve each type of service based on the performance and quality provided.

Experiences in implementing the QOF internationally such as in the United Kingdom, United States, Denmark, Netherlands, Canada, and Germany have shown that good indicators should have these attributes: should be accepted by service providers, is linked to public health, must be feasible to implement, have a reliable data source, sensitive to changes in quality of services, can be used country-wide, and must consistently address service quality issues.^{1,3} The QOF indicators used in Thailand emphasize working processes and immediate health outcomes that can be measured within 1 year so that front-line service providers may know what they need to improve upon. The indicators can also be used to allocate resources and plan for providing services in a timely manner.

Issues with the qualitative indicators for primary care services in Thailand

During the beginning of the QOF, the indicators at the time comprised both core indicators – which came from MoPH indicators or were chosen by the NHSO – and local indicators – which each region could develop and use on their own. The results from research conducted by HITAP in 2015 found that there were problems with the indicators in many aspects, such as:



- 1 Local and core indicators lacked evidence-based support
- 2 Indicators used were not tested prior to implementation, resulting in questions from service providers about their capabilities in providing services based on the indicators
- 3 Local indicators developed by different areas vary in levels of difficulty, resulting in unfair budget allocation.
- 4 Some indicators may have caused service providers to focus on certain activities while neglecting other activities that were of equal importance but did not serve as indicators, e.g. focusing more on the screening process instead of reporting the screening results to patients with abnormalities
- 5 The development of core indicators lacked participation from main stakeholders such as the MoPH's policymakers and service providers
- 6 Service providers did not see the benefits provided by the indicators
- 7 Some chosen indicators were not recorded or reported in the 43-folder database of the MoPH, resulting in an increased workload for service providers in collecting and sorting the data for the NHSO


The appropriate approach to developing quality indicators for primary care service providers


In 2015, HITAP developed a framework and process for developing and testing indicators in Thailand by reviewing multiple approaches from international literature. This included recommendations from experts at the NICE and University of Birmingham – who have more than 10 years of experience in developing QOF indicators in the United Kingdom.




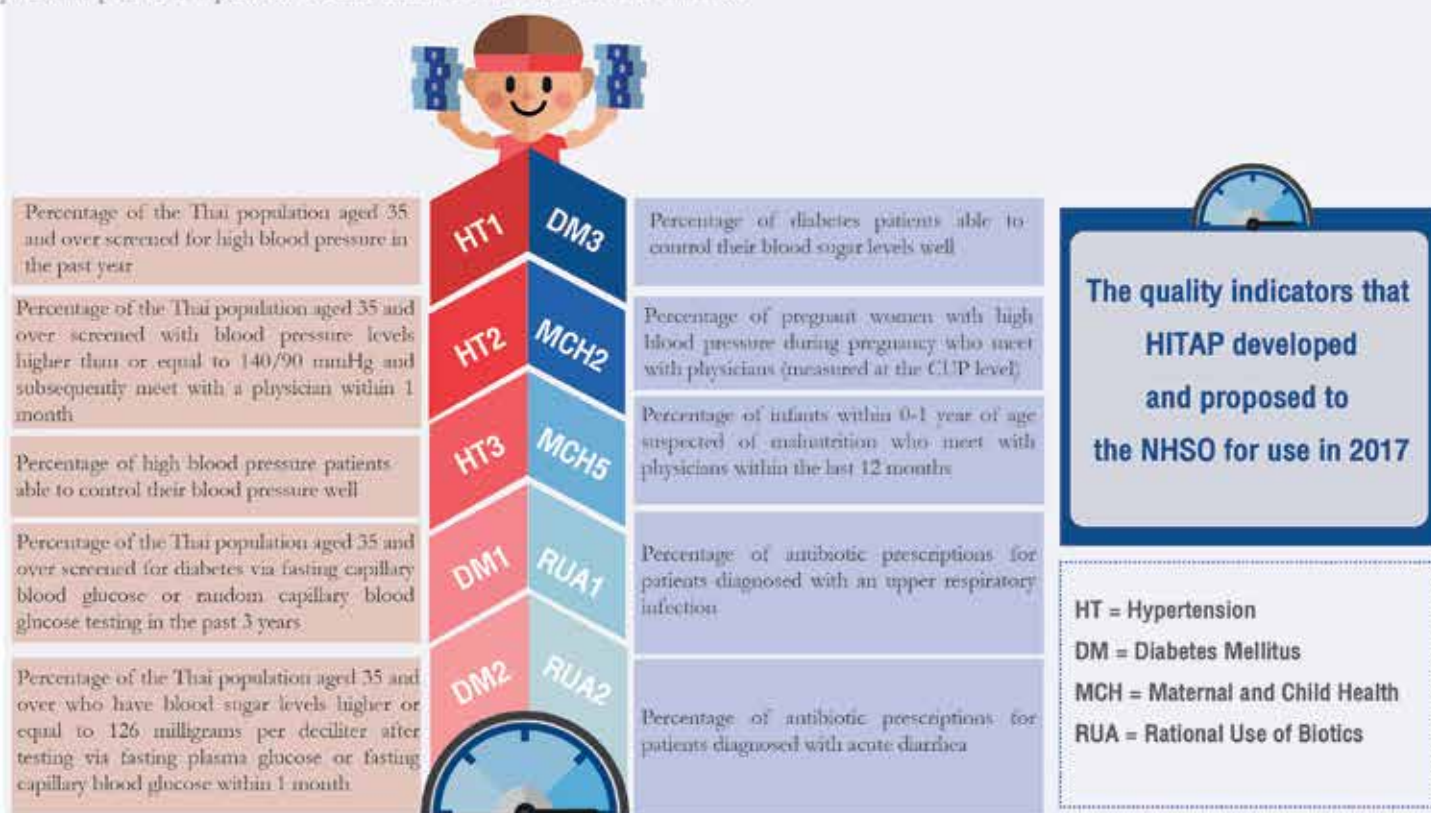
Benefits of the new quality indicators for primary care services on the Thai health care system

The quality indicators that HITAP developed and proposed to the NHSO for use in 2017 consisted of 8 process indicators (HT1, HT2, DM1, DM2, MCH5, RUA1, and RUA2) and 2 immediate health outcome indicators (HT3 and DM3). Services which are provided based on these indicators will not only improve the health of the Thai population but can also reduce economic losses from premature injuries and death as well as reduce government spending on health care by providing high quality care, e.g.


 Indicators for screening high blood pressure and diabetes (HT1 and DM1), referring patients who were screened positive to be diagnosed with physicians (HT and DM2), and controlling blood pressure and blood sugar levels in normal ranges (HT3 and DM3). Diagnosing and treating high blood pressure and diabetes in a timely manner can prevent strokes, coronary heart disease, and chronic kidney diseases. It is also economically cost-effective as the services provided in Thailand clearly vary between primary care service providers, e.g. the percentage of screening for high blood pressure varies between 20% and 94%, the percentage of patients who were screened positive and sent to physicians within a month varies between 0-75% , and the percentage of controlling high blood pressure well is between 50% and 60%. Having quality indicators in all three areas may stimulate improvement in the quality of services provided, which benefits public health and the economy.


 Indicators related to the rational use of antibiotics (RUA1, RUA2) – Sickness due to resistant bacteria in Thailand results in economic losses from illness and premature death of at least 40 billion baht per year. Moreover, using antibiotics to treat bacterial infections costs approximately 2.5 – 6.1 billion baht per year.⁶ Primary care providers prescribe a large quantity of antibiotics for patients who have upper respiratory infections and acute diarrhea. However, in some cases, antibiotics are inappropriately prescribed, and it was found that there were differences in the percentages of prescribing antibiotics among primary care providers by approximately 0-100%. Upon further examination, it was found that only 15% of patients had bacterial infections.⁷ Therefore, prescribing antibiotics based on these indicators should lessen the probability of the bacteria becoming resistant to antibiotics as well as lessen the burden of economic loss.


 Indicators for sending pregnant women with high blood pressure to see the physician immediately (MCH2) – High blood pressure is a complication that is frequently seen and is the 3rd highest cause of death among mothers – only after blood loss and bacterial infections.⁵ The practice guidelines therefore suggest to urgently send the patient for treatment by a physician. However, it was found that between 0-67% of primary care providers sent these patients to immediately seek physician consultation. Therefore, if they are able to comply with the indicators, this should help reduce the impact and prevent pre-eclampsia as well as deaths in mothers and infants.





Policy Recommendations

 Before implementing the quality indicators, the NHSO and MoPH should jointly organize a training seminar to inform service providers from various departments, health auditors, and the NHSO regional offices about the policy. They should also develop a manual for the indicators to provide information to the NHSO regional offices, provincial health offices, district health offices, service providers, and employees who record the information.

 The MoPH and NHSO should support service providers in developing quality services based on the indicators such as procuring essential equipment necessary, capacity building of personnel, and providing recommendations based on scientific research as well as from a management standpoint.

 The NHSO should monitor and evaluate individual indicators to determine barriers in providing services related to mentioned indicators, including periodically reviewing them to evaluate the results and negative impacts which may occur during service provision.

 The NHSO should have a system that reports real-time information to primary care service providers when services are provided so that they may learn and improve to achieve designated targets.

 The NHSO should develop quality indicators in a systematic manner that are based on empirical evidence and should be tested prior to implementation.

This paper is a part of a research project entitled developing health care quality indicators and improving the QOF program for the Thai Universal Health Coverage – Part 1 by Roongnapa Khampang, Sripen Tantivess, Sarocha Chootipongchaivat, Juntana Pattanaphesaj, Rukmanee Butchon, Natthida Malathong, Boontharika Rachatasetanant, and Yot Teerawattananon

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Further Reading

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