# VIETNAM MISSION REPORT

Revising Basic Health Benefit Package for Social Health Insurance 19 – 20

April 2016

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# Abbreviations

| | |
|---|---|
| BHSP | Basic Health Service Package |
| CT | Computed tomography |
| CUA | Cost-utility analysis |
| DM | Diabetes mellitus |
| GBD | Global Burden of Disease |
| HITAP | Health Intervention and Technology Assessment Program |
| HSPH | Hanoi School of Public Health |
| HSPI | Health Strategy and Policy Institute |
| HTA | Health Technology Assessment |
| ICD | International Classification of Disease |
| IHME | Institute for Health Metrics and Evaluation |
| IV | Intravenous |
| MOH | Ministry of Health |
| MRI | Magnetic Resonance Imaging |
| PET-CT | Positron emission tomography/computed tomography |
| SHI | Social Health Insurance |
| UHC | Universal Health Coverage |
| VND | Vietnamese Dong |
| VSS | Vietnam Social Security |
| WHO | World Health Organization |

# Introduction

Vietnam is one of the countries that are on the journey to achieve Universal Health Coverage (UHC). With the Health Insurance Law enacted in 2008, and master plan for UHC approved by the prime minister in 2012, health insurance coverage has been continuously developed both in terms of population and services covered. Currently, there are more than 20,000 items covered in the benefits package, which is generous. In the revised Health Insurance Law, the concept of Basic Health Service Package (BHSP) was introduced under the Social Health Insurance (SHI) scheme, overlooked by Vietnam Social Security (VSS) with the aim to help prioritise and rationalise the use of health interventions in the benefits package. Appointed by Vietnamese Ministry of Health (MOH), Health Strategy and Policy Institute (HSPI), Vietnam, collaborates with Health Intervention and Technology Assessment Program (HITAP), Thailand, to generate evidences to inform the Council for BHSP who is responsible for the development of the BHSP. HITAP is responsible to provide technical support on health technology assessment (HTA) and supervisions to 8 Vietnamese researchers who are recruited by HSPI to work full-time on producing the evidences. The evidence generation and policy recommendation formulation started in April and is expected to be finished and presented to the Council for BHSP in May.

Prior to this visit, HSPI hosted HITAP a visit during 7-18 March 2016 to discuss the scope and framework of the work with HSPI and research team, comprising staff from HSPI and Hanoi School of Public Health (HSPH). The scope, framework, list of interventions selected for review, and the manner for result presentation were developed and presented to stakeholders to consult for their opinions. 8 scholars from HSPI and HSPH led the effort by reviewing the evidence according to agreed protocol with the support from HITAP staff throughout the process. Afterwards, the Vietnamese researchers continue to work on the review with constant communication with HITAP staff to ensure that guidance can be conveniently sought and provided.

As a follow-up to the first visit, another visit was scheduled in Vietnam on 19-20 April. The objectives of the visit were to update the progress of the reviews, discuss obstacles found and solutions, and plan for the next steps with the Vietnamese researchers.

# Summary of the Visit

The list of participants can be found in Appendix 1 while the agenda of the visit can be found in Appendix 2.

During the first visit, it was agreed that it is not feasible to conduct full HTA studies due to a short timeframe. Quick review of existing evidences on safety, clinical efficacy/effectiveness, and cost-effectiveness of the interventions was therefore be adopted. Additionally, given the large number of interventions in the current benefits package, a consultation meeting was arranged to discuss about a selection of priority interventions for the review. Priority criterion was given to the highest budget reimbursed from the VSS. Based on the criterion, the list of 30 prioritised interventions for review was constructed. A protocol of the review was also developed to guide the Vietnamese researchers, who would work as primary reviewers with support from HITAP staff who are secondary reviewers. After a review of an intervention was finished, a technical report summarising the findings should be produced. Moreover, to facilitate data analysis, data extraction forms were used in Microsoft Access and send to the Vietnamese researchers after HITAP staff was back in Thailand.

Prior to the second visit, the reviews of 4 interventions were completed, 4 were interventions in the final stage while those of 10 interventions have been initiated. HITAP developed and sent the Microsoft Access Database to Vietnamese researchers as agreed. After the Vietnamese researchers have tested the usability of the database, they gave feedback to HITAP staff on what improvements were needed to make the database most compatible with the use by the Vietnamese team. Although the database was perceived as very useful, one of the major concerns of the Vietnamese counterpart was the too much time needed for entering data in the database and it therefore might not be feasible with the time constraint. The use of the database for data extraction was agreed to be discussed during the second visit.

In the second visit, the Vietnamese researchers presented the progress of the review for each intervention and obstacles encounter. Solutions to the obstacles were discussed. Examples of this included the lack of local data on prevalence for the calculation of budget impact. An alternative source of such data is the Global Burden of Disease (GBD) by the Institute for Health Metrics and Evaluation (IHME). HITAP also provided comments which informed the adjustment of the report by primary and secondary reviewers. Moreover, there was a concern on limited capacity to conduct the review since the reviewers from HSPI might not be able to work full-time until early May due to HSPI recruitment examination in which all the review team members from HSPI have to participate and of which the timeline coincided. As a result, it was agreed that the 30 selected interventions would be prioritised again to derive a new list of interventions that needed to be reviewed in this phase. Other interventions in the initial list would be reviewed afterwards. Finally, the new list was developed with the priority given to the interventions with the top 10 highest budget reimbursed. It comprised 17 interventions, including 11 medicines, 4 medical devices and 2 screening services, to be reviewed. These accounted for 24% of total expenditures on medicines and 12% of the total expenditures on medical devices under VSS. There was also redistribution of the work load among

primary as well as secondary reviewers, as can be found in Table 1. Besides, since the time is limited, the Microsoft Access database which was developed by HITAP would be kept for use in the next phase of the review.

Table 1 New list of interventions included for the review and their reviewers

| No. | Topics | Reviewer | HITAP | Status |
|---|---|---|---|---|
| 1. | Albumin | Do Tra My | Waranya | Finished |
| 2. | Oxaliplatin | HSPH | Benjarin | Finished |
| 3. | Preoperative tests for elective surgery | Phung Lam Toi | Thanthima | Finished |
| 4. | Screening for cervical cancer | Nguyen Tuan Viet<br>Vuong Lan Mai | Thanthima | Finished |
| 5. | Cilastatin, Imipenem | HSPH | Benjarin | Ongoing |
| 6. | CT | Nguyen Tuan Viet | Benjarin | Ongoing |
| 7. | Factor VIII | Phung Lam Toi | Thanaporn | Ongoing |
| 8. | Imatinib | Pham Van Hien | Thanaporn | Ongoing |
| 9. | Meropenem | Ong The Due | Waranya | Ongoing |
| 10. | MRI | Ong The Due | Kittiphong | Ongoing |
| 11. | Paclitaxel | HSPH | Thanthima | Ongoing |
| 12. | Positron Emission Tomography-Computed Tomography (PET-CT) | Do Tra My | Waranya | Ongoing |
| 13. | Rituximab | Pham Van Hien | Kittiphong | Ongoing |
| 14. | Erlotinib | Pham Van Hien<br>Phung Lam Toi | Kittiphong | To be initiated |
| 15. | Screening for breast cancer | HSPH | Thanthima | To be initiated |
| 16. | Sorafenib | Do Tra My | Thanaporn | To be initiated |
| 17. | IV amino acid | HSPH | Waranya | To be initiated |

| | | | | |
|---|---|---|---|---|

Furthermore, another concern on the locality of the information was discussed. According to the current protocol of the review, the indications and supporting evidences would mostly be retrieved from international sources which might limit the application of the result in the Vietnamese context. Although this was unavoidable since limited number of studies conducted in Vietnamese context were available, real world data from Vietnam should also be taken into account. Examples of such data which were planned to be incorporated included hospital data from 6 provinces in Vietnam of which the Department of Finance and Planning was analysing; claim data from VSS; data derived from a survey which might be done specifically for this review; and expert opinion which may derive from the survey or during an expert consultation meeting.

The plan for expert consultation meeting was also discussed. Since the interventions included in the review can be grouped according to their indications, e.g. cancer treatments, the consultation of interventions with the same group of indication can be done together in the same consultation meeting. Since it was found that indications for CT and MRI from international sources were very broad and the review of all the indications might not be feasible, there will be a separate consultation meeting on these medical devices with different groups of physician to scope down their indications for which supporting evidences should be reviewed. Afterwards, there will be 3 expert consultation meetings for review result presentation, namely, a meeting for MRI, CT, PET-CT and pre-operative tests before elective surgery; another meeting with internists; and the other with oncologists for medicines and screening services. Staff from HITAP will participate in the consultation meetings as observers. After the consultation meeting, the team will fine-tune the results and present the final result to the Council for BHSP in the end of May or early June before it is piloted in some provinces in Vietnam. HITAP team plans to join in the event for result presentation for the Council as well as will be responsible in preparing the English version of the full report based on technical reports for each intervention produced by the primary reviewers.

# Next steps

The plan for the next steps can be found in Table 2. Two HITAP staff will join in the expert consultation meeting on 9-10 May, and all the HITAP team will join in the meeting to present the review results to the Council for BHSP.

Table 2 Expected timeline for the next steps

| No | Activities | Deadline |
|---|---|---|
| 1. | Secondary data analysis of hospital data | 30 April 2016 |
| 2. | 1st expert consultation meeting on MRI and CT with surgeon, orthopaedist, oncologist, internist and radiologist for devices' indications | 28 April 2016 |
| 3. | Submitting 1st draft review report to HITAP team | 5 May 2016 |
| 4. | Sending feedbacks from HITAP | 8 May 2016 |
| 5. | Expert consultation meeting with internist | 9 May 2016 |
| 6. | Expert consultation meeting with oncologist | 9 May 2016 |
| 7. | 2 st expert meeting on MRI and CT with surgeon, orthopaedist, ophthalmologist (for preliminary results of MRI and CT, PET-CT, pre-operative tests ) | 10 May 2016 |
| 8. | Submitting reports from reviewers | 12 May 2016 |
| 9. | Completing report in English version | 20 May 2016 |
| 10. | Completing report in Vietnamese version | 25 May 2016 |
| 11. | Present to the Council | 6-8 June 2016 |

# Appendices

# Appendix 1: List of workshop participants

| | Name | Organization |
|---|---|---|
| **1** | Dr. Tran Thi Mai Oanh | HSPI |
| **2** | Dr. Nguyen Khanh Phuong | HSPI |
| **3** | Dr. Phung Lam Toi | HSPI |
| **4** | Dr. Ong The Due | HSPI |
| **5** | Ms. Do Tra My | HSPI |
| **6** | Mr. Nguyen Tuan Viet | HSPI |
| **7** | Mr. Pham Van Hien | HSPI |
| **8** | Dr. Nguyen Quynh Ahn | HSPH |
| **9** | Ms. Nguyen Thu Ha | HSPH |
| **10** | Ms. Ta Thanh Binh | HSPH |
| **11** | Dr. Yot Teerawattananon | HITAP |
| **12** | Ms. Waranya Rattanavipapong | HITAP |
| **13** | Mr. Kittiphong Thiboonboon | HITAP |
| **14** | Ms. Thanaporn Bussabawalai | HITAP |
| **15** | Ms. Thanthima Suwanthawornkul | HITAP |
| **16** | Ms. Benjarin Santatiwongchai | HITAP |

# Appendix 2: Agenda of the visit

| Date and Time | Activities |
|---|---|
| **19 April 2016** | |
| **9.30-10.00** | Recap and feedback from reviewers |
| **10.00-12.00** | Presentation to update on the progress of the review |
| **12.00-13.00** | Lunch |
| **13.00-15.00** | Discussion on intervention reprioritisation |
| **15.00-16.30** | Primary and secondary reviewers work to amend the review results |
| **20 April 2016** | |
| **9.30-10.30** | Discussion on the reprioritized list of intervention |
| **10.30-12.00** | Plans for the next steps |
| **12.00-13.00** | Lunch |
| **13.00-15.30** | Demonstration of and discussion on the use of Microsoft Access database |

# Appendix 3 Daily Summaries

## 19 April 2016

The meeting started with a discussion to summarise the current status of the work including any concerns or difficulties faced. Dr.Tran Thi Mai Oanh pointed out that there was a huge concern among primary reviewers on the time constraint. Since the primary reviewers from HSPI need to sit the HSPI recruitment examination which would be happening in early May, they are worried about their preparation for the examination and are doubt whether the deadline can be met. With these and time constraint, Dr.Oanh suggested that there might need to be a prioritisation of the interventions currently on the list for review. Moreover, since this research would be to inform policy, the result should be policy-relevant in the context of Vietnam. Currently, the Vietnamese team perceived that the result, which employed international experiences and studies, may have limited application in Vietnamese context. Therefore, real world data from Vietnam may need to be applied. Examples of the data that should be used included hospital data from 6 provinces in Vietnam of which the Department of Finance and Planning was analysing; claim data from VSS; data derived from a survey which might be done specifically for this review; and expert opinion which may derive from the survey or during an expert consultation meeting. International evidences would then be compared with information from Vietnamese context. However, the use of international evidences and experience is unavoidable since most of the studies are conducted in international contexts. Furthermore, the current focus of the review is on clinical efficacy/effectiveness of the interventions for certain indication to rationalise their uses. However, there might need to be a consideration on intervention exclusion, which emphasised the need of cost-effectiveness evidences.

After the discussion, the Vietnamese team shared with HITAP team the progress, result and difficulties and obstacles found from the review and HITAP team gave some feedback and comments, as can be found in the table below.

| No. | Interventions and Presenters | Status | Problems Found | Comments |
|---|---|---|---|---|
| 1 | Preoperative tests for elective surgery<br><br>*By Phung Lam Toi* | Completed with report | - In Vietnam, there are no guidelines for preoperative tests, so the application of the result in policy-making may be limited | - Some included test may not be relevant to elective surgery.<br><br>- There should be more details provided for each test in order to make it more applicable. For example, some tests may be recommended for some specific groups. This should also be specified.<br><br>- The reviewer may formulate the policy recommendation in the form of 'standing order', which are the tests that will be done preoperative regardless of the characteristics of patients, for some of the most common elective surgery in Vietnam of which the information can be retrieved from nurses or physicians in hospitals. |
| 2 | Factor VIII<br><br>*By Phung Lam Toi* | Ongoing | - The lack of incidence and prevalence data<br><br>- There are some indications for which supporting evidences are completely lacking | - Prevalence and incidence information can be derived from expert meeting.<br>- For the indications without evidences, the reviewers may ask the experts during expert consultation meeting whether there are existing evidences that have not |

| No. | Interventions and Presenters | Status | Problems Found | Comments |
|---|---|---|---|---|
| | | | | been identified and revise the report accordingly. |
| 3 | Meropenem<br><br>*By Ong The Due* | Completed | - The lack of incidence and prevalence data<br><br>- The lack of information on utilisation of the medicine in Vietnam | - Prevalence and utilisation data can be derived from the data from 6 provinces or through consultation during the expert meeting<br><br>- Budget impact can be estimated by using the hospitals cost of purchasing meropenem. If there is a huge gap in the purchasing prices, some approach to standardise them might be needed. An analysis on budget savings resulting from standardising prices will be useful.<br><br>- For severe infection, of which there is no supporting clinical evidences but supportive cost-effectiveness evidences are available, further investigation should be explored. |
| 4 | Screening for cervical cancer<br><br>*By Nguyen Tuan Viet* | Ongoing | N/A | - An article in Lancet journal on early stage cervical cancer detection should be included.<br><br>- Starting age and frequency of the screening should be explored and recommended. |

| No. | Interventions and Presenters | Status | Problems Found | Comments |
|---|---|---|---|---|
| | | | | - Feasibility of the implementation of the intervention, e.g. for staff training, may be considered since this will be crucial for policy implication. Data on costing may be borrowed from Thailand. |
| 5 | Albumin<br><br>*By Do Tra My* | Finished with report | N/A | Experts should be consulted during the consultation meeting on other existing evidences which may be missed, feasibility practicality, and acceptability of the application of the recommendations. |
| 6 | PET-CT<br><br>*By Do Tra My* | Finished with report | - The lack of incidence and prevalence data | - Different groups of clinicians will be needed in the expert meeting due to a variety of use of PET/CT.<br><br>- The use of PET-CT in cardiology and neurology may not be applicable in Vietnam, i.e. not done in real practice. Experts should be consult whether only cancer should be the focus.<br><br>- The current reimbursed expenditure of PET-CT is lower than the estimated budget implication. This may be due to limited access to PET-CT. |

| No. | Interventions and Presenters | Status | Problems Found | Comments |
|---|---|---|---|---|
| 7 | Rituximab<br><br>*By Pham Van Hien* | Ongoing | - The lack of incidence and prevalence data | - The presentation of the result in the summary table should be simplified.<br><br>- Potential population for the recommended indications should be identified |
| 8 | Imatinib<br><br>*By Pham Van Hien* | Ongoing | N/A | - Some included dosages may be used only in trials and are not therapeutic doses. In this case, only dosages that recommended by FDA (i.e. US FDA) should be included. |
| 9 | Oxaliplatin<br><br>*By HSPH (represented by Nguyen Thu Ha)* | Completed | - The lack of incidence and prevalence data<br>- A big variation of price between generic and originator. | - Evidences on incidence and prevalence of the diseases in Thailand can be applied. |
| 10 | Capecitabine<br><br>*By HSPH (represented by Nguyen Thu Ha)* | Ongoing | N/A | N/A |
| 11 | Cilastatin/imipenem<br><br>*By HSPH (represented by Nguyen Thu Ha)* | Ongoing | - There are too few studies identified when search for the medicines combination. The search of each drug separately might help.<br><br>- There is an issue in the difference between International | N/A |

| No. | Interventions and Presenters | Status | Problems Found | Comments |
|---|---|---|---|---|
| | | | recommendation, which recommend the medicines only for hospital-based infection, and the indication of the drug in VN, which also recommends the medicines for non-hospital based infection) | |

The discussion on prioritising the interventions to be review were brought up and prioritisation were done by primary reviewers and HITAP team. There were some services which should be of priority and of which the review should be finished by the end of April or May. For example, CT, MRI, diabetes mellitus (DM) screening, hypertension screening, and breast cancer screening. The list of the prioritised interventions can be found below.

| No. | Topics |
|---|---|
| 1. | Albumin |
| 2. | Oxaliplatin |
| 3. | Preoperative tests for elective surgery |
| 4. | Screening for cervical cancer |
| 5. | Cilastatin, Imipenem |
| 6. | CT |
| 7. | Factor VIII |
| 8. | Imatinib |
| 9. | Meropenem |
| 10. | MRI |
| 11. | Paclitaxel |
| 12. | PET-CT |
| 13. | Rituximab |
| 14. | Erlotinib |
| 15. | Screening for breast cancer |
| 16. | Sorafenib |

| | |
|---|---|
| 17. | Esomeprazole |
| 18. | Capecitabine |
| 19. | Docetaxel |
| 20. | Gefitinib |
| 21. | Screening for DM |
| 22. | Screening for hypertension |

The interventions that were given low priority were c-section, ciprofloxacin, insulin, erythropoietin, zoledronic acid and screening for cardiovascular disease. Whether to include acid amin and liquid concentrate as priority interventions was to be discussed since the information of the intervention provided in the list and reimbursement data was too limited. Afterwards, the Vietnamese team was asked to consider for expert consultation meeting preparation for the topics that are aimed to be finished. Tentatively, there should be a meeting with oncologists, a meeting with internists. In addition, there may be 2 meetings to present about the PET-CT, MRI and CT (a meeting with cancer groups on cancer indications and the other with other experts). The primary and secondary reviewers also worked together to adjust the findings and result presentation according to comments.

## 20 April 2016

The progress of the review were summarized and presented again by Nguyen Tuan Viet. At the moment, there were 11 of which the reviews have already finished or ongoing. The reviews of other interventions are planned to be initiated soon. Since Dr.Nguyen Khanh Phuong who are leading the work was not able to join on the previous day, the prioritised list were presented are reviewed to reach consensus. A concern was raised by Dr.Nguyen Khanh Phuong that for the review of medicines, priority should be given to medicines with top 10 highest budget reimbursed from VSS. Also, there are guidelines for screening of DM and hypertension issued by the Ministry of Health of Vietnam. Therefore, those guidelines could be adopted as the source for information for policy recommendation and the review of the two screening services could be given lower priority. Liquid concentrate was agreed to be taken out from the list since its use is too general. In addition, screening of hypertension and DM were also taken out since there had been reviews on these conducted elsewhere. The review of C-section was also not considered as a priority given there tends to be limited irrational use of the intervention, and its used can be

controlled through another mechanism, e.g. payment mechanism. On the other hand, acid amin was clarified that it is IV amino acid and was included since it is an interesting issues given that not many countries consider this as a medicine, let alone of including it in the reimbursement list. In conclusion, another 6 interventions were excluded from the list while IV amino acid was added, resulting in 17 interventions in total to be review. The final list can be found below.

| No. | Topics |
|---|---|
| 1. | Albumin |
| 2. | Oxaliplatin |
| 3. | Preoperative tests for elective surgery |
| 4. | Screening for cervical cancer |
| 5. | Cilastatin, Imipenem |
| 6. | CT |
| 7. | Factor VIII |
| 8. | Imatinib |
| 9. | Meropenem |
| 10. | MRI |
| 11. | Paclitaxel |
| 12. | Positron Emission Tomography-Computed Tomography (PET-CT) |
| 13. | Rituximab |
| 14. | Erlotinib |
| 15. | Screening for breast cancer |
| 16. | Sorafenib |
| 17. | IV amino acid |

| | |
|---|---|

Afterwards, Ong The Due presented the plan for expert consultation meeting. There planned to be 3 meetings with 3 groups of experts, namely, internists, oncologists, and surgeons. There were suggestions from the floor to add some groups of experts, e.g. ophthalmologist for preoperative test for elective surgery for the case of cataract surgery.

Furthermore, the plan for the next steps were also discussed. Since the report and the result of the review was planned to be submitted to the Council in late May, the pilot test could be done in June as planned, the deadline of the report and result preparation should be 20th May. HITAP agreed to assist in producing final English report, which will be no more than 30-page long and which will be subsequently translated to Vietnamese, by 15th May. As a result the preliminary review result by primary reviewers should be available for the secondary reviewers to cross-check and ensure quality by 5th May and the secondary reviewers will respond to all the preliminary results by 8th May. During the expert meeting, the reviewers would have the result presented in traffic light system already and should have calculated the budget impact so they can consult whether the experts agree before producing the reports. However, this was not the case for CT and MRI since the expert meeting for these medical devices was held not to consult experts on preliminary result but on the indications of the devices that should be reviewed to guide the review which was then facing difficulties due to the too broad indications of the devices.

Lastly, HITAP demonstrated the use of the Microsoft Access database that had been developed and discussed with the primary reviewers whether the database should be used in this phase of the review. Although the database was perceived as very useful, it would take time to fill in the database and should be used when there was less time constraint. As a result, it was agreed that the database would be employed as a tool for data extraction in the next phase where more interventions would be included for review to further inform the BHSP.