# REPORT

# EVALUATION SUSTAINABILITY OF PEPFAR SUPPORTED PROGRAMS POST TRANSITION IN VIETNAM: EFFECTS OF PEPFAR TRANSITION (2017-2019)

Hanoi - 2019

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# EVALUATION OF THE SUSTAINABILITY OF PEPFAR SUPPORTED PROGRAMS POST TRANSITION IN VIETNAM: EFFECTS OF PEPFAR TRANSITION (2017-2019)


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Hanoi - 2019

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- *Hanoi University of Public Health: Conducting the assessment*

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# ABBREVIATION

| | |
|---|---|
| CDC | Centers for Disease Control and Prevention |
| FGD | Focus group discussion |
| HIV/AIDS | Human immunodeficiency virus/acquired immunodeficiency syndrome |
| HW | Health worker |
| HCW | Health care worker |
| IDI | Indepth Interview |
| N/A | No data available |
| OIs | Opportunistic infections |
| VAAC | Vietnam Authority for HIV/AIDS Control |

# ABSTRACTS


*Objectives*

This assessment was conducted with three objectives: (i) To assess the appropriateness of HIV/AIDS treatment and care provision, use, service coverage, and patient outcomes during and after treatment post-transfer; (ii) Describe the contextual factors that facilitate the successful delivery of PEPFAR-funded HIV/AIDS care and treatment services to the Vietnamese government; (iii) Analyze the barriers and factors that facilitate the sustainability of the PEPFAR program delivery in Vietnam.

*Methodology*

The assessment applies both quantitative method (questionnaire survey with patients from 18 years old) and qualitative method (indepth interview with health workers and group discussion with patients) in 3 years from 2017-2019 at 22 clinics in 9 provinces Bac Ninh, Vinh Long, Binh Duong (only in 2017), An Giang, Soc Trang, hoa Binh, Thai Binh, Son La and Thanh Hoa. The sample for quantitative research during each year was: in 2017 (511 patients), in 2018 (742 patients), in 2019 (750 patients). The sample for qualitative research during each year was: 2017 (12 IDIs + 7 FGDs), 2018 (24 IDIs + 13 FGDs), 2019 (35 IDIs + 19 FGDs).

*Results*

The rate from the evaluation of the changes in service delivery and doctors' as well as health workers' (HW) behaviours have changed to a better direction in comparision to the previous year, with a low percentage in 2017, gradually increased throughout 2018, and slightly decreased in 2019. The average satisfaction score of patients regarding services in general and in each area (HW's behavior, information security, waiting time) tended to be the highest in 2018, then decreased at district level in 2019.

There is no difference between risk groups in accessing and using HIV/AIDS treatment and care services. However, the results of qualitative research show that regarding the admission of patients at the provincial level, there are some groups being prioritized, particularly the seriously ill, new patients are prioritized for treatment at the provincial hospital (in 2017, 2018), and some occupational groups (officers, teachers, students) could be more prioritized in 2019.

During the transition period, patients were able to use services, paraclinical techniques, and routine tests rather more fully than before. The percentage of patients with health insurance was very high, including health insurance for poor households (supported by the Government), health insurance for HIV patients (supported by local authority), compulsory health insurance, and voluntary health insurance. However, patients expressed concerns regarding the local process of providing health insurance for HIV patients and using compulsory health insurance (issued by companies/agencies) may increase the risk of information being disclosed. However, due to changes in finance and insurance regulations, some testing services are not covered by insurance (such as CD4, viral load, hepatitis C, etc…). Patients either do not get tested, or have to wait for donations, therefore wouldn't make it in time, or have to pay out of pocket if

necessary. Patients still received free ARV drugs from the sponsored project for 2 years 2017-2018, and by 2019, after ARV drugs switch to insurance payment, patients will still be paid according to health insurance and supported 20% copay by the locality. By the time of assessment, in general, according to the assessment of both HWs and the patients themselves, patients better adhered to regular treatment, managed drugs better, felt secure with treatment results and found it easier to look toward the future.

Contextual factors that facilitate the successful transfer of HIV/AIDS care and treatment services include: (i) A system of documents and policies had been developed to prepare for the transistion, (ii) the project's commitment to funding and coordination with stakeholders, (iii) the operation and commitment of support from local authorities and departments, (iv) financial security in which health insurance promtly pays for services, (v) Stigma and discrimination against HIV/AIDS patients tend to decrease.

Facilitating factors during the transfer process included: (i) The support of hospital's management and leadership to ensure patient-friendly service delivery, (ii) Provincial and regional hospitals district had the capacity and experience to provide HIV/AIDS treatment and care services, (iii) Health care services under health insurance had been operated well and of good quality in the hospital, (iv) Facilities better quality after treatment facilities are integrated into the hospital, (v) Information technology helped support health insurance examination and connection with friendly and convenient service providers for patients.

Difficult factors during the transfer process included: (i) The organizational structure of the clinic is not appropriate, (ii) Some regulations on patient management under health insurance were not compatible with the specific characteristics of HIV/AIDS treatment and care, (iii) Hospital autonomy, financial and human resource constraints, (vi) Difficulties in training and developing human resources for HIV/AIDS prevention and control, (vii) Difficulties related to receipt, purchase, use, and payment of health insurance, (viii) Difficulties in medicine management under health insurance, (ix) Difficulties in machinery and equipment, (x) Communication activities regarding the transfer to patients is not timely, (xi) Stigma and discrimination still exist in the community.

*Recommendations*

From the analysis of the situation and the above advantages and disadvantages, the study has proposed recommendations to the Ministry of Health, the provinces, and donors to create a favorable environment as well as beneficial impacts, helping HIV/AIDS care and treatment become sustainable after the transition period and patients could access and use friendly and convenient services that meet their needs, aiming towards improving their physical and mental mental health and better quality of life. Specifically, the Ministry of Health needs to continue to improve their regulations and guidelines to assist in solving the difficulties related to the integrated structure of clinics in hospitals, as well as the payment and settlement of health insurance; strengthen monitoring and supporting activities to improve the quality of health services, focusing on the quality of medical services; and continue to improve the information system of HIV/AIDS. Regarding the provinces, they should continue to support patients in

accessing health insurance; strengthen monitoring and supervision at district hospitals (especially newly opened clinics in mountainous areas) to improve the quality of health services; local hospitals also need to strengthen supervision of service delivery activities and focus on developing human resources and creating motivation in HIV/AIDS care and treatment. For donors, it is necessary to continue to support post-transfer care and treatment activities to priority areas and pay special attention to technical support and human resource development.

# BACKGROUND

Over the past 30 years of implementing HIV/AIDS prevention and control, Vietnam has made important achievements. 2018 is the 10th year in a row, the HIV/AIDS epidemic in Vietnam reduces all three criteria: Reducing the number of new infections, reducing the number of people transitioning to AIDS, and reducing the number of people dying of AIDS. Along with the progress in HIV prevention, expanding ARV antiretroviral treatment is one of the most important solutions for HIV/AIDS prevention and control. ARV treatment improves health, reduces mortality for HIV-infected people, reduces HIV transmission, and brings economic benefits to both the patient, the family, and the society. Currently, Vietnam has more than 140,000 HIV-infected people receiving ARV treatment, about 70% of people infected with HIV have been detected. Among them, the proportion of patients with virus load below the inhibitory threshold and almost unable to infect others through sexual ways is up to more than 95% (Bộ Y tế, 2019).

These achievements are due to the recent attention and investment from the State, effective multidisciplinary coordination, and the mobilization of the participation of the community and social and special organizations. especially with the assistance of the Large Financial and Technical Ratio of international partners for HIV/AIDS prevention and control in Vietnam, mainly from the source of the Emergency Relief Plan of President Hoa Period on HIV / AIDS Prevention and Control (PEPFAR) and Global Fund (Amfar, 2015; Chính phủ Việt Nam – Cục Phòng chống HIV/AIDS, 2014; Todini, Hammett, Fryatt, & Reform, 2018). However, HIV / AIDS remains an important health problem and one of the leading causes of premature death. At the same time, Vietnam is facing enormous challenges in the sustainability of the HIV / AIDS prevention and control program. Donors have been cutting and reducing support resources, while domestic resources are still limited (Bộ Y tế, 2014). Despite many difficulties, Vietnam is still committed and determined to achieve the goals of the National Strategy on HIV / AIDS Prevention to 2020 and Vision to 2030. Vietnam is also the first country. In Southeast Asia through the 90-90-90 targets of UNAIDS, whereby 90% of people living with HIV in the community know their HIV status; 90% of HIV infected people are diagnosed with ARV treatment; 90% of people receiving ARV treatment have a stable, low viral load, are less likely to transmit HIV to others, thereby moving towards the global goal, which is “End AIDS in the year 2030”(USAID & PEPFAR, 2016).

In order to achieve the above targets while international support funding is being cut, Vietnam is implementing many initiatives, solutions, and changing mechanisms to ensure the sustainability of HIV/ AIDS prevention and control activities. is based on lessons learned from many countries around the world (Flanagan et al., 2018) apply appropriately in the Vietnamese context. In this situation, the Center for Disease Control and Prevention (CDC) in collaboration with the Vietnam Administration of HIV/AIDS Control, Ministry of Health has carried out many transition planning activities to ensure the sustainability of the chapter. HIV / AIDS prevention program, including implementing priority area selection, providing a transfer roadmap for project-supported provinces, such as 29 provinces supported by CDC-PEPFAR, etc.

As defined by the international community, the transition to ensure sustainability from international donor support to mainly reliance on financial resources and domestic management leadership does not happen in one place. timing is a process that includes

planning, implementation, monitoring, and evaluation. This process usually takes place over a few years and varies depending on the context of each country (USAID, 2016). In Vietnam, the Prime Minister's Decision No. 1899 / QD-TTg dated October 16, 2013 approving the project on Selecting Sustainable Finance for HIV/AIDS Prevention and Control for the period 2013-2020 clearly defines Funding for HIV/AIDS services through the Social Health Insurance (SHI) is one of the key strategies to ensure the long-term sustainability of HIV/AIDS services in the context of will gradually decrease and eventually end supportive sources of HIV/AIDS treatment by the end of 2018.

In recent years, development partners together with the Government of Vietnam have achieved considerable success in advocating for increased domestic funding sources for HIV/AIDS prevention and treatment. However, this does not mean that maintaining HIV services in Vietnam can be easily achieved. Much work remains to be done ahead, for example expanding coverage of health insurance and access to services for people living with HIV, especially target groups (drug users, sex workers, homosexuals) quite challenging (Howard, Dinh, Vu, Duy, & International, 2015; Todini et al., 2018).

Therefore, continuous monitoring of progress and results after handover should always be a priority to provide timely evidence for adapting systematic solutions to maintain sustainability. to achieve the goals of HIV/AIDS prevention committed by the Government. For that purpose, CDC (the representative office in Vietnam) and the Vietnam Administration of HIV/AIDS Control, the Ministry of Health sponsored and coordinated with the University of Public Health to implement this study with the desire to evaluate the dynamics of handover for people with HIV. Specifically, consider HIV service delivery and use, coverage, and health status of HIV patients, and examine the factors that influence transmission in order to ensure the sustainability of HIV patients. HIV/AIDS service provision activities.

# GOAL AND OBJECTIVES

## Goal

The goal of this evaluation is to describe and contextualize changes in the Vietnam HIV response during and after the transition of donor supported HIV services to the government of Vietnam.

## Objectives

1. To assess the adequacy of HIV service provision, service utilization, coverage and patient level health outcomes during and after transition.
2. To describe the contextual factors surrounding the successful transition of PEPFAR funded HIV services to Vietnam government.
3. To determine barriers and facilitators for the transition of PEPFAR program in Vietnam.

## The scope of assessment

This study defines the scope of the assessment not to include all PEPFAR-funded programs but focuses on assessing HIV/AIDS care and treatment in public health service settings during and after the transitional period.

Transition is understood as the process by which provinces/cities begin to no longer receive funding from PEPFAR and shift most HIV/AIDS care and treatment activities under health insurance. This process does not take place at a time across all grantee provinces, but takes place over three years (2017-2019) respectively. Accordingly, there are 3 groups of provinces transferring the project and implementing the transfer, that is: the province transferred in 2017, the province transferred in 2018, and the province transferred in 2019.

The concept of “during and after a transition period” in this assessment is understood as a process in which the provinces/cities have made the transfer (1 year or 2 years ago) while the other Transfer begins in the first year. Therefore, in this assessment study, it will be emphasized to compare the transfer performance between these groups of provinces to see how the changes and differences during and after the transition process.

# METHODOLOGY

## 1. Method

The evaluation study applied research methods combining qualitative and quantitative research, conducted simultaneously at a time and carried out three data collection times over a 3-year period (2017-2019).

Quantitative research methodology (including secondary data collection and questionnaire survey) was conducted to answer research questions about service delivery, service use, coverage, and the patient's treatment results. Qualitative research methods including in-depth interviews (IDI) and group discussions (FGD) were conducted to further describe the assessments of changes in service delivery, patient satisfaction, and patient experiences about the results of their treatment; Analyze the advantages and disadvantages of the transfer process, the factors affecting the sustainability after the transfer of the project.

## 2. Survey subbject

### 2.1. Quantitative subject

Quantitative study subjects are patients receiving ARV treatment in clinics.

#### Selection criteria:

- The patient is on ARV treatment at the clinic;
- Have been on ART for at least 12 months;
- ≥ 18 years old.

#### Exclusion criteria:

- The duration of ART is less than 12 months;
- Under 18 years old;
- Refuse to participate in interviews or inability to communicate due to health situation.

### 2.2. Qualitative subject

Qualitative study subjects were patients receiving ARV treatment in clinics and health workers of the clinic, including the head of the clinic, the treating doctor, the nurse, and the pharmacy staff.

#### Selection criteria

Patients: Having been on ART for more than 12 months and from 18 years of age. May have participated in the survey by questionnaire.

Health care worker: Providing care and treatment services to the patient and is ready to provide information.

#### Exclusion criteria

Patients: Having ART treatment under 12 months and under 18 years old.

HCW: No longer participates in providing care and treatment services for patients.

Qualitative research was done through FGD and IDI information collection methods. FGD is conducted with patients being treated with ARV in the clinic. IDI is performed with the health worker in the clinic.

# 3. Research time and place

## 3.1. Research time

The study is conducted over a period of 2 years from 03/2017-12/2019.

## 3.2. Research place

The study was conducted in 9 provinces including Bac Ninh, Hoa Binh, Thai Binh, Thanh Hoa, Son La, Vinh Long, Binh Duong, An Giang, Soc Trang.

# 4. Sample size and sampling

## 4.1. Selection of Provinces

There were three groups of provinces and PEPFAR was transition out of these three focus groups during three different time periods from 2017 to 2019. Each year we collected data among a selected number of provinces, and there were three data points for each group of provinces beginning 2017. That meant the provinces that was selected in 2017; data was collected from these provinces in 2017, 2018 and in 2019. For the provinces selected in 2018, data was collected between 2018 and 2019. Data was only collected once for selected provinces in 2019 (Error! Reference source not found.).

In this study, we focused on provinces with CDC support for comprehensive services that include peer education, HIV testing and counseling, and HIV treatment. The following criterion has been used to select the provinces for data collection: coverage, i.e., number of patients; geographic distribution; and the extent of PEPFAR support. In year one (2017), we selected three out of seven provinces for data collection. In year two (2018), we selected an additional four or five out of 11 provinces. And in year three (2019), we selected another set of two out of five provinces for data collection.

Specifically, in order to select the provinces for the sample, the research team conducted the following two stages:

Stage 1: establishing sampling frame

In 2017, sampling frame contains seven CDC-PEPFAR project-provinces which was expected to have project end in the period of 2016-DEC 2017. These provinces were Bac Ninh (with 469 patients), Quang Nam (309), Binh Duong (1400), Ba Ria-Vung Tau (1500), Can Tho (647), Long An (607), and Vinh Long (894). Based on the nature of this study, these seven provinces were divided into three subgroups: (i) group 1 includes two provinces (Ba Ria-Vung Tau, Binh Duong) which have the maximum number of patients, (ii) group 2 contains one city and two provinces (Can Tho, Vinh Long, and Long An) with average number of patients, and (iii) in group 3 was Quang Nam and Bac Ninh representing the lowest number of patients in comparison to others.

Stage 2: purposive selection of three provinces

Due to the limitation of time frame, human resources, and financial sources, we purposively selected a total three provinces, one each from each group. The criteria for selection of

provinces was based on the number of clinic patients, geographic characteristics (north v.s south); and the support level (received much or less support from PEPFAR project). As a result, three provinces were purposively selected including: Binh Duong (locating in the South with the largest coverage of patients, receiving much support), Bac Ninh (in the North, the smallest coverage and Vinh Long (in the South, medium coverage, and less support).

Similar to the above, CDC has coordinated with the research team to select provinces for the period of 2018 and 2019 according to the summary table below. Binh Duong province only collected information in 2017 due to a change in the transfer plan for this province in the following year.

Table 1: Summary of provinces selected for evaluation study

| Province | 2017 | 2018 | 2019 |
|---|---|---|---|
| Bac Ninh | X | X | X |
| Vinh Long | X | X | X |
| Binh Duong | X | - | - |
| An Giang | | X | X |
| Soc Trng | | X | X |
| Hoa Binh | | X | X |
| Thai Binh | | X | X |
| Son La | | | X |
| Thanh Hoa | | | X |
| Total | 3 provinces | 6 provinces | 8 provinces |

## 4.2. How to choose clinics

In the provinces, HIV/AIDS treatment and care services was provided at district clinics. However, not all districts had outpatient clinics that provide HIV/AIDS treatment and care services. The decision to provide HIV/AIDS treatment and care services in a particular district was based on the number of people planning to live with HIV. For example, in a particular province, clinics could be located on only three out of 12 districts in that province. For each selected province, the research team first makes a list of the districts with a HIV/AIDS care and treatment service room, and then purposefully selects one/several districts in the the list was based on geographical distribution (urban, rural, mountainous) and the number of patients (per 100 people). If the selected district had more than one clinic, we choosed the clinic with the largest number of patients. Error! Reference source not found. presents a list of selected clinics in this study.

## 3.3. Sampling

### 3.3.1. Sample size for quantitative survey

There were three indicators used to calculate the sample size: the patient satisfaction, patient retention in treatment (95%), and viral load suppression (95%). The rate of patient satisfaction could be used was 42.4%. This was the figure for patient satisfaction with overall service quality among patients in a study in OPC clinics in Hanoi, Hai Phong and Ho Chi Minh city in 2012 among 1016 patients. The viral load suppression and patient retention were 95% each.

Applying the formula for the following sample calculation, with p = 0.42, d = 0.06, z = 1.96

$$n = \frac{z^2_{(1-\frac{\alpha}{2})} p(1-p)}{d^2}$$

From the formula for calculating the number of samples above, the minimum number of patients required for quantitative research was 233 patients. With a design effect of = 2, and an additional 10% (rate of rejection), the team determined a total of 513 patients needed to be investigated. The number of patients per province was calculated using the PPS method. Accordingly, the number of patients in Bac Ninh, Binh Duong and Vinh Long is 66, 304, and 142. The number of patients in each clinic is also calculated by PPS method.

The sample size for the study in 2018 and 2019 was calculated on the above formula with the adjustment of d = 0.04 to achieve a higher sample size due to the increased number of provinces compared to 2017. With design effect = 2, and 10% more (refusal rate), the team determined a total of 738 patients to be investigated. The number of patients participating in the survey for each province was calculated using the PPS method. The number of patients surveyed in each clinic is also calculated using PPS method on the total number of patients needed in each province.

Based on the list of patients in each clinic, the research team randomly selected enough patients from this list based on the sample size for quantitative investigation. Details of the number of questionnaires per clinic are presented in the summary table below.

Table 2: Sample and sample size for quantitative research in the provinces over the years of the survey 2017-2019

| Province | OPCs | Level | Number of patient N (%) | | |
|---|---|---|---|---|---|
| | | | 2017 | 2018 | 2019 |
| Bac Ninh | OPC BN01 | Province | 59 (11.5) | 41 (5.5) | 22 (2.9) |
| Binh Duong | OPC BD01 | Province | 107 (20.9) | - | - |
| | OPC BD02 | District | 85 (16.6) | - | - |

| Province | OPCs | Level | Number of patient N (%) | | |
|---|---|---|---|---|---|
| | | | 2017 | 2018 | 2019 |
| | OPC BD03 | District | 68 (13.3) | - | - |
| | OPC BD04 | District | 48 (9.4) | - | - |
| Vinh Long | OPC VL01 | Province | 144 (28.2) | 80 (10.8) | 43 (5.7) |
| | OPC VL02 | District | - | 17 (2.3) | 8 (1.1) |
| An Giang | OPC AG01 | Province | - | 237 (31.9) | 132 (17.6) |
| | OPC AG02 | District | - | 59 (8.0) | 29 (3.9) |
| | OPC AG03 | District | - | 54 (7.3) | 28 (3.7) |
| Soc Trang | OPC ST01 | Province | - | 78 (10.5) | 42 (5.6) |
| | OPC ST02 | District | - | 13 (1.8) | 5 (0.7) |
| Thai Binh | OPC TB01 | Province/City | - | 68 (9.2) | - |
| | OPC TB02 | Province/City | - | - | 23 (3.1) |
| | OPC TB03 | District | - | 25 (3.4) | 25 (3.3) |
| Hoa Binh | OPC HB01 | Province | - | 55 (7.4) | 32 (4.3) |
| | OPC HB02 | District | - | 15 (2.0) | 8 (1.1) |
| Son La | OPC SL01 | Province | - | - | 91 (12.1) |
| | OPC SL02 | District | - | - | 89 (11.9) |
| Thanh Hoa | OPC TH01 | Province | - | - | 80 (10.7) |
| | OPC TH02 | District | - | - | 36 (4.8) |
| | OPC TH03 | District | - | - | 57 (7.6) |
| 9 | 22 | | 511 (100) | 742 (100) | 750 (100) |

### 3.3.2. Sample size for qualitative research

The number of IDI and FGD performed in each province included 04 IDIs with HCWs and 2-3 FGDs with patients depending on the number of clinics selected for each surveyed province.

Information on sample sizes of the quantitative study for 3 years was presented in the summary table below.

Table 3: The number of IDIs and FGDs in each surveyed province over the years

| Tỉnh | 2017 | | 2018 | | 2019 | |
|---|---|---|---|---|---|---|
| | HCW IDI | Patients FDG | HCW IDI | Patients FDG | HCW IDI | Patients FDG |
| Bac Ninh | 4 | 2 | 4 | 2 | 4 | 2 |
| Binh Duong | 4 | 3 | N/A | N/A | N/A | N/A |
| Vinh Long | 4 | 2 | 4 | 2 | 4 | 2 |
| An Giang | N/A | N/A | 4 | 3 | 5 | 3 |
| Soc Trang | N/A | N/A | 4 | 2 | 5 | 2 |
| Thai Binh | N/A | N/A | 4 | 2 | 4 | 2 |
| Hoa Binh | N/A | N/A | 4 | 2 | 4 | 2 |
| Son La | N/A | N/A | N/A | N/A | 5 | 3 |
| Thanh Hoa | N/A | N/A | N/A | N/A | 4 | 3 |
| **Total** | **12** | **7** | **24** | **13** | **35** | **19** |

## 4. Content of evaluation

| Content | Quantitative indicators / qualitative themes | Measurement | Information sources |
|---|---|---|---|
| **Objective 1. To assess the adequacy of HIV service provision, service utilization, coverage and patient level health outcomes during and after transition** | | | |
| **Assessment of changes in service delivery** | Change in service delivery | The patient's perception of the change in service provision compared to the previous year<br>4-level scale: 1 (with a lot of variation) to 4 (No change) | Patient Survey |
| | Trend of change | Perceptions of patients about the trend of change in service provision compared to before | Patient Survey |

| Content | Quantitative indicators / qualitative themes | Measurement | Information sources |
|---|---|---|---|
| | | 4-scale scale: 1 (much better) to 4 (very bad compared to before) | |
| | Reasons for the degree and trend of change | Stakeholders' perspectives (HCWs and patients) on changes and trends in service delivery | IDI with patient<br>FGD of patients<br>IDI with health workers |
| | Change in treatment of health workers (doctors, nurses, other health workers) towards patients | The patient's perception of the change in service provision compared to the previous year<br>4-level scale: 1 (with a lot of variation) to 4 (No change) | Patient Survey |
| | Trend of change | Perceptions of patients about the trend of change in service provision compared to before<br>4-scale scale: 1 (much better) to 4 (very bad compared to before) | Patient Survey |
| | Reasons for the degree and trend of change | Stakeholders' perspectives (HCWs and patients) on changes and trends in service delivery | IDI with patient<br>FGD of patients<br>IDI with health workers |
| **Assessment of service use:** Patient satisfaction | General satisfaction with the services provided | Patient's perception of satisfaction with services in general<br>The scale of 5 ranges from 1 (extremely dissatisfied) to 5 (extremely satisfied)<br>Compare the average satisfaction score with 3 = satisfied. | Patient Survey |
| | Satisfaction with counseling of health workers (doctors, nurses, other health workers) | Perceptions of patients about counseling from doctors, nurses and other health workers<br>The scale of 5 ranges from 1 (extremely dissatisfied) to 5 (extremely satisfied)<br>Compare the average satisfaction score with 3 = satisfied. | Patient Survey |

| Content | Quantitative indicators / qualitative themes | Measurement | Information sources |
|---|---|---|---|
| | The health workers that patients want to see most | List of health workers in the clinic: Doctors, Nurses, Counselors<br>2-value scale: Like, Dislike | Patient Survey |
| | Reasons for satisfaction / dissatisfaction with the counseling of the health worker | Stakeholders' perspectives (HCWs and patients) on counseling from health workers in clinics | IDI with patient<br>FGD of patients<br>IDI with health workers |
| | Satisfaction about information security at the clinic | The patient's perception of information confidentiality at the clinic<br>The scale of 5 ranges from 1 (extremely dissatisfied) to 5 (extremely satisfied)<br>Compare the average satisfaction score with 3 = satisfied. | Patient Survey |
| | Reason for satisfaction / Dissatisfaction with information confidentiality at the clinic | Stakeholders' perspectives (HCWs and patients) on information confidentiality at clinics | IDI with patient<br>FGD of patients<br>IDI with health workers |
| | Appointment scheduling, waiting time, satisfaction on waiting time | Appointment schedule: The schedule was made in advance, must make an appointment before going to the exam | Patient Survey |
| | | Perceptions of patients about waiting time for examination<br>A scale of 4 levels 1 (very long) to 4 (not long) | Patient Survey |
| | | Patient's perception of satisfaction with the waiting time for examination<br>The scale of 5 ranges from 1 (extremely dissatisfied) to 5 (extremely satisfied)<br>Compare the average satisfaction score with 3 = satisfied. | Patient Survey |

| Content | Quantitative indicators / qualitative themes | Measurement | Information sources |
|---|---|---|---|
| | | Stakeholders' perspectives (HCWs and patients) on satisfaction with waiting time at the clinic. | IDI with patient<br>FGD of patients<br>IDI with health workers |
| Evaluation of coverage | Coverage of patients | Number of people living with HIV and currently on ART (by province) | Secondary data |
| | Service coverage | Percentage of patients tested for viral load after 6 months of starting ART | Secondary data |
| | | Percentage of patients on antiretroviral therapy for at least 12 months who have had viral load testing at least once in the past 12 months | Secondary data |
| | | Percentage of patients receiving adequate drugs at the clinic | Patient Survey |
| | Financial coverage: Participate in health insurance | Percentage of patients with health insurance cards and duration of participation in health insurance | Patient Survey |
| | Financial mobilization | Stakeholders' perspectives (HCWs and patients) on financial mobilization in health care service delivery and patient access to and use during and after transition | IDI with patient<br>FGD of patients<br>IDI with health workers |
| Results/health status of the patient | Indicator of new tuberculosis and co-infection | The proportion of newly infected and recurrent TB co-infections | Secondary data |
| | Indicator of virology | Test results have a viral load below 1000 copies/ml | Secondary data |
| | Experience/feel about the | The patient had self-assessment the health status | IDI with patient<br>FGD of patients |

| Content | Quantitative indicators / qualitative themes | Measurement | Information sources |
|---|---|---|---|
| | health of the patient | | |
| Objective 2. 2. To describe the contextual factors surrounding the successful transition of PEPFAR funded HIV services to Vietnam government | | | |
| Factors about: policy; commitment; operating; financial guarantee; and stigma and discrimination | System of policy documents | | Qualitative |
| | The project's commitment to sponsorship and coordination with stakeholders in the transfer process | | |
| | Governance by local authorities and departments in the transfer process | | |
| | Financial security in HIV / AIDS treatment and care | | |
| | Stigma and discrimination | | |
| Objective 3. To determine barriers and facilitators for the transition of PEPFAR program in Vietnam | | | |
| Favorable factors | Management of hospital leaders | | Qualitative |
| | Health facilities' service delivery capacity | | |
| | Manage and operate medical examination and treatment under health insurance | | |
| | Facilities, equipment and information technology to serve the transfer | | |
| Barrier factors | Organizational structure, integration and operation of clinics | | |
| | Management of patients according to medical examination and treatment covered by health insurance | | |
| | Difficulties arise in implementing hospital autonomy | | |
| | Training and developing human resources for health to prevent HIV/AIDS | | |
| | Receive, purchase, use and pay health insurance | | |
| | Pharmaceutical management | | |
| | Equipment and information technology | | |
| | Communication activities in transition | | |
| | Stigma and discrimination | | |

# 6. Data Collection

## 6.1. Data Collection of quantitative survey

The survey focused on the following: demographic characteristics, duration of ARV treatment, access to and use of different services, access to health insurance, and satisfaction with services provided by doctors. doctors, nurses, and other health professionals provided in the clinic. In addition, information was collected on waiting times, times with doctors, nurses or counselors (see Appendix 6). All patient interviews using survey questionnaires were conducted by trained investigators. In addition to the quantitative survey, some health information was collected from secondary data at the clinic (see Appendix 4, Appendix 5).

Researchers come to the clinic on the day the patient arrives to receive the medication and reach out to the patient during the examination and reception of the drug. Researcher conducts screening, selects patients who have been on ARV for at least 12 months and invites them to participate in the study.

The patient was interviewed in a separate room with the interviewer trained in interviewing skills as well as the content to be asked. Before starting the interview, the interviewer provides the patient with research-related information such as the purpose and content of the study and its use in supporting the Ministry of Health and Relevant agencies receive the CDC-PEPFAR program. Before conducting the interview, the patient signed the consent to participate in the study if they were willing to volunteer to provide information after understanding the study. Interviewers began to interview patients based on the content of quantitative questionnaires that were prepared. On average, each interview lasted 15-20 minutes. At the end of the interview, the patient was received a remuneration (50,000 VND) to support travel expenses and the provision of information. The researcher also informed the patient that they can stop the interview at any time if they did not want to continue participating and still received the agreed payment.

## 6.2. Data collection of qualitative survey

### 6.2.1 Clinic patient focus group discussions

FGD was performed with groups of patients being treated at survey clinics. Based on a list of patients receiving ART for over 12 months, the research team approached and randomly selected these patients and invited them to join the FGD. In addition to these patients, there were a number of patients who have participated in quantitative research and are invited to participate in FGD if they voluntarily agree to participate and willing to share insights about knowledge and experience. experience in ART treatment. FGD was conducted with the participation of 6 to 8 patients and led and managed by experienced researchers from the research team with the assistance of a research assistant as FGD secretary to take notes. Information of the participants in the discussion.

Prior to the group discussions, the patients were provided with information about the study. Then, the patient signs the consent form if they were willing to volunteer to provide information after understanding the study. Personal information of the patients to join the list of the user cache list. During group discussions, the clerk was the person who recorded the basic contents of the exchange between the patients, however in order to avoid insufficient

recording, the team research recorded the discussion with the consent of participants in the group discussion.

### 6.2.2. Indepth interview

IDI method was performed with health-care workers serving the clinic. At each clinic, the research team had purposefully selected 4 health workers/staff including clinic manager, doctor, nurse and pharmacist to conduct semi-structured IDI. These health workers/workers were ready to participate in the semi-structured interview to share their knowledge and experiences about activities related to the CDC-PEPFAR program during the transfer process after providing Vouchers. Attend to participate in research. IDI sells the structure by an experienced researcher. IDI participant information was semi-structured anonymously.

## 7. Analysis and Data management

### 7.1. Data management

HUPH is the research agency responsible for the collection and management of technical assistance activities of CDC-Vietnam and VAAC. Researchers were trained on the process of conducting research, the process of collecting information, managing the collected information, issues related to research ethics and information security. The research team of HUPH has responsible for monitoring and checking the information gathering process in the selected provinces into the sample research. Information collected in the field was transferred to the HUPH for processing, analysis and storage in accordance with the process of preservation and data storage of the university.

In this survey, the information collected was divided into three groups:

*Group 1, secondary information* was collected based on monitoring activities after transition. Those data were collected for all CDC supported provinces. These data were collected using excel template and backed in each province. VAAC's monitoring and evaluation department will back up this information quarterly and store it with the technical support of the CDC expert. Data was then be shared to research team to effectuate in-depth analysis for the evaluation of the transition.

*Group 2, quantitative interview information*. The research team of the University of Public Health used paper questionnaires to collect information from patients. Information was cleaned and two independent research assistants entered two separate times using EPI DATA application. Both paper-based questionnaire and an electronic version will be kept for at least 3 years after completion of the study. Only the research participants have access to the database.

*Group 3, qualitative interview information.* In-depth interviews of health care workers and focus group discussions with patients, information was synthesized based on analytical topics developed by the research team. Information about the participants in the in-depth interview and the focus groups discussions were coded to ensure anonymity. All data will be kept securely at HUPH for at least 3 years after evaluation. Only research team members will have access to the information.

As no identifying information was collected, any IDs assigned to any of the participants or to the clinic was only be used for data management so that corrections to the data can be making if any errors was identified.

As the study sponsor, the CDC may conduct monitoring or auditing of study activities to ensure the scientific integrity of the study and to ensure the rights and protection of study participants. Monitoring and auditing activities may be conducted byi: (i) CDC staff ("internal"); (ii) Authorized representatives of CDC (e.g., a contracted party considered to be "external"); and (iii) Both internal and external parties. Monitoring or auditing may be performed by means of on-site visits to the Investigator's facilities or through other communications such as telephone calls or written correspondence.

## 7.2. Data analysis

### 7.2.1. Secondary data analysis

Secondary data collected at the provincial level related to infection rates, reporting data on HIV patients receiving ART were aggregated by the research team to develop a common understanding of the distribution of outbreaks in the provinces in the sample survey. In addition to the information on estimating the group of ART-infected patients, quarterly data collection on treatment programs in each province was also compiled by the research team to evaluate the change over time based on a number of indicators of the treatment program. Secondary information helped the research team the quality of treatment in each province and the treatment involvement of ART patients.

### 7.2.2. Quantitative data analysis

Patient questionnaire survey information was cleaned and analyzed using SPSS 20.0 and STATA 11.0 programs. During this period, the research team used basic statistical techniques to describe the demographic characteristics of participants in quantitative research, their satisfaction with the quality of services at medical facilities. experience, including experiences with the health worker. The Peasons and Fisher's exact tests was used to compare the difference between two ratios and the Bartlett test is used to compare the difference between two averages.

### 7.2.3. Qualitative information analysis

The researcher with experience in qualitative information analysis performed the analysis of information from IDI selling staff structure/health workers and information from FGD to patients. Qualitative information was analyzed based on background theory. Recorded information from FGD and IDI was taped and stored as Microsoft Word documents. Based on the research questions and content collected through FGD and IDI, the research team had carefully read the tape to build encoding tables to analyze qualitative information.

The research team used qualitative analysis software NVIVO 11.0 and NVIVO 12.0 to encode and analyze FGD and IDI information. NVIVO software helped the research team manage the coded content, analyze information by topic.

# 8. Research ethics

The study protocol was reviewed by: Centers for Global Health, U.S. Centers for Disease Control and Prevention (CDC), Atlanta Associate Director for Science (ADS) and Hanoi University of

Public Health Ethical Committee approved the ethics file (Decision No. 383/2017/YTCC-HD3 at 7/12/2017; Decision No.383/2018/YTCC-HD3 at 28/06/2018; and Decision No. 335/2019/YTCC-HD3 at 17/06/2019).

The study was conducted in accordance with the Code of Federal Regulations, Title 45, Part 46, the Declaration of Helsinki and local ethical and legal in Viet Nam.

# RESEARCH RESULTS AND DISCUSSION

## 1. Characteristics of research subjects

### 1.1. Characteristics of Demographic and Social

Quantitative research results were analyzed based on survey data with patients being treated in clinics for 3 years 2017-2019. The sample for each year is as follows: 511 patients (2017), 742 patients (2018), and 750 patients (2019). The results table below excludes missing cases in each variable, so the total sample in each variable may not be the same and do not include the entire survey sample of each year.

Table 4 shows that patients who participated in the survey in 2017-2019 were mostly aged 30-49 years (the average age was between 37-39 years). The proportion of patients who are men is higher than women, but the proportion of patients participating in the survey increases gradually over the years. The majority of participants were Kinh people, but the proportion of other ethnic patients significantly increased in the 2019 survey sample.

Table 4: Demographic characteristics of patients participating in the survey over the years

| | | Year n (%) | | |
|---|---|---|---|---|
| **Variable** | | **2017** | **2018** | **2019** |
| **Age** | 18 - 29 years old | 72 (14.1) | 67 (9.0) | 47 (6.3) |
| | 30 – 39 years old | 277 (54.2) | 327 (44.1) | 337 (44.9) |
| | 40 – 49 years old | 118 (23.1) | 289 (38.9) | 299 (39.9) |
| | >=50 years old | 44 (8.6) | 59 (8.0) | 67 (8.9) |
| | **Total** | **511 (100)** | **742 (100)** | **750 (100)** |
| **Average age (approximately)** | | 37.4 (19; 72) | 39.1 (18; 69) | 39.8 (18; 69) |
| **Gender** | Male | 310 (60.7) | 394 (53.1) | 407 (54.3) |
| | Female | 201 (39.3) | 348 (46.9) | 343 (45.7) |
| | **Total** | **511 (100)** | **742 (100)** | **750 (100)** |
| **Nation** | Kinh | 494 (97.1) | 664 (89.5) | 514 (68.5) |
| | Others | 15 (2.9) | 78 (10.5) | 236 (31.5) |
| | **Total** | **509 (100)** | **742 (100)** | **750 (100)** |

Table 5: Place of examination and treatment by province

| | Year n (%) | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| Yes, the clinic is the province where the patient lives | 475 (93.0) | 711 (95.8) | 733 (97.7) |
| No, the clinic is in a different province | 36 (7.0) | 31 (4.2) | 17 (2.3) |
| **Total N (%)** | **511 (100)** | **742 (100)** | **750 (100)** |

Table 5 shows that the majority of patients surveyed are being examined and treated at the clinics of the province where they live. Only a small percentage of patients come from other localities (mostly nearby) and this rate gradually decreases from 7.0% (in 2017) to 4.2% (2018) and 2.3% (2019). This shows that the trend of patients returning for medical examination and treatment locally is gradually increasing after the transfer period.

Table 6: Educational qualifications of patients

| Educational qualifications | Year n (%) | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| Unlettered | 11 (2.2) | 55 (7.4) | 54 (7.2) |
| Primary School (Grades 1-5) | 99 (19.4) | 211 (28.4) | 208 (27.8) |
| Secondary school (Grades 6-9) | 227 (44.5) | 298 (40.2) | 267 (35.6) |
| High school (Grades 10-12) | 125 (24.5) | 140 (18.9) | 191 (25.5) |
| Intermediate, College, University | 48 (9.4) | 37 (5.0) | 29 (3.9) |
| **Total N (%)** | **510 (100)** | **741 (100)** | **749 (100)** |

**Error! Reference source not found.** shows that patients who participated in the survey mainly had high school education, in which the proportion of patients with higher education accounted for a high proportion in the 2017 survey sample and This proportion gradually decreases over 2018, and is lowest in 2019. This can be explained by the fact that the 2018 and 2019 survey samples are expanded in the mountainous provinces with a high proportion of ethnic minorities (Thanh Hoa, Son La, Hoa Binh, Soc Trang, An Giang) so the proportion of patients with lower education increased in 2018 and 2019.

Table 7: Marital status of patients

| Marital status | Year n (%) | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| Unmarried | 111 (21.8) | 107 (14.4) | 102 (13.7) |
| Married | 289 (56.7) | 426 (57.4) | 410 (55.1) |
| Separated | 8 (1.6) | 16 (2.2) | 17 (2.3) |
| Divorce | 37 (7.3) | 61 (8.2) | 63 (8.5) |
| Widowed | 55 (10.8) | 126 (17.0) | 150 (20.2) |
| Living together but not getting married | 10 (2.0) | 6 (0.8) | 2 (0.3) |
| **Total N (%)** | **510 (100)** | **742 (100)** | **744 (100)** |

The proportion of patients being married is equivalent, accounting for about 55% -57% in the survey sample of all 3 years; Divorce and separation rates were equivalent in the 3 years of the survey (ranging from around 10%. The highest proportion of unmarried patients participating in the survey in the 2017 sample (21.8%) and This is lower in 2017 (14.4%) and in 2019 (13.7%). In contrast, the proportion of widowed patients increases over the years from 10.8% (2017) to 17, 0% (2018) and 20.2% (2019) (Table 7).

Table 8 shows that patients who participated in the survey in 2017 had jobs higher than patients in 2018 and 2019. Specifically, the proportion of patients doing business / trafficking, workers and officials in 2017 accounted for 47.2 %, 2018 is 26.2%, 2019 is 28.8%. Patients are farmers, accounting for the highest proportion in 2019 (24.8%). The proportion of ill-employed or unemployed workers in 2017 accounted for 47%, 60.7% in 2018, and 46.4% in 2019. The majority of patients self-rated their economic status to be normally 50-60% or much poorer / much poorer than other families in the community, accounting for about 30% (Table 9).

Table 8: Occupation of patient

| Occupation of patient | | Year n (%) | | |
|---|---|---|---|---|
| | | 2017 | 2018 | 2019 |
| **Main job** | Business | 100 (19.6) | 118 (15.9) | 118 (15.7) |
| | Worker | 103 (20.2) | 40 (5.4) | 59 (7.9) |
| | Farmer | 30 (5.9) | 97 (13.1) | 186 (24.8) |

| Occupation of patient | | Year n (%) | | |
|---|---|---|---|---|
| | | 2017 | 2018 | 2019 |
| | Officer/Administrative staff | 38 (7.4) | 36 (4.9) | 39 (5.2) |
| | Self-employed/Hired | 166 (32.5) | 220 (29.6) | 157 (20.9) |
| | Jobless | 74 (14.5) | 231 (31.1) | 189 (25.5) |
| | **Total N (%)** | **511 (100)** | **742 (100)** | **750 (100)** |
| **Secondary Job** | Business | 7 (1.4) | 18 (2.4) | 17 (2.4) |
| | Worker | 3 (0.6) | 2 (0.3) | 4 (0.6) |
| | Farmer | 12 (2.3) | 26 (3.5) | 23 (3.2) |
| | Self-employed/Hired | 28 (5.5) | 53 (7.1) | 36 (5.0) |
| | Jobless | 461 (90.2) | 643 (86.7) | 634 (88.8) |
| | **Total N (%)** | **511 (100)** | **742 (100)** | **714 (100)** |

Table 9: Self-assessment of family economic conditions compared to other families in the community

| Economic conditions | Year n (%) | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| Well richer | 4 (0.8) | 1 (0.1) | 0 (0) |
| Better off | 18 (3.6) | 26 (3.5) | 26 (3.5) |
| Normal | 333 (66.3) | 412 (55.8) | 441 (58.9) |
| Poorer | 121 (24.1) | 228 (30.9) | 222 (29.6) |
| Much poorer | 26 (5.2) | 72 (9.7) | 60 (8.0) |
| **Total N (%)** | **502 (100)** | **739 (100)** | **749 (100)** |

## 1.2. Duration of ARV treatment of patients

The total duration of treatment of patients participating in the survey increased over the years. Patients participating in the 2019 survey have the longest total duration of treatment. Specifically, in 2017, the proportion of patients with a total treatment period of less than 3 years accounted for 30.3%, this rate decreased to 22% (in 2018) and only accounted for 12%

(2019). Similarly, the proportion of patients with 3-5 years of treatment time decreased from 24.5% (2017) to 16.2% and 16.5% in 2018 and 2019. In contrast, the proportion of patients with the treatment period from over 10 years significantly increased from 10.2% (2017) to 24.1% (2018) and 32.1% (2019) (**Error! Reference source not found.**).

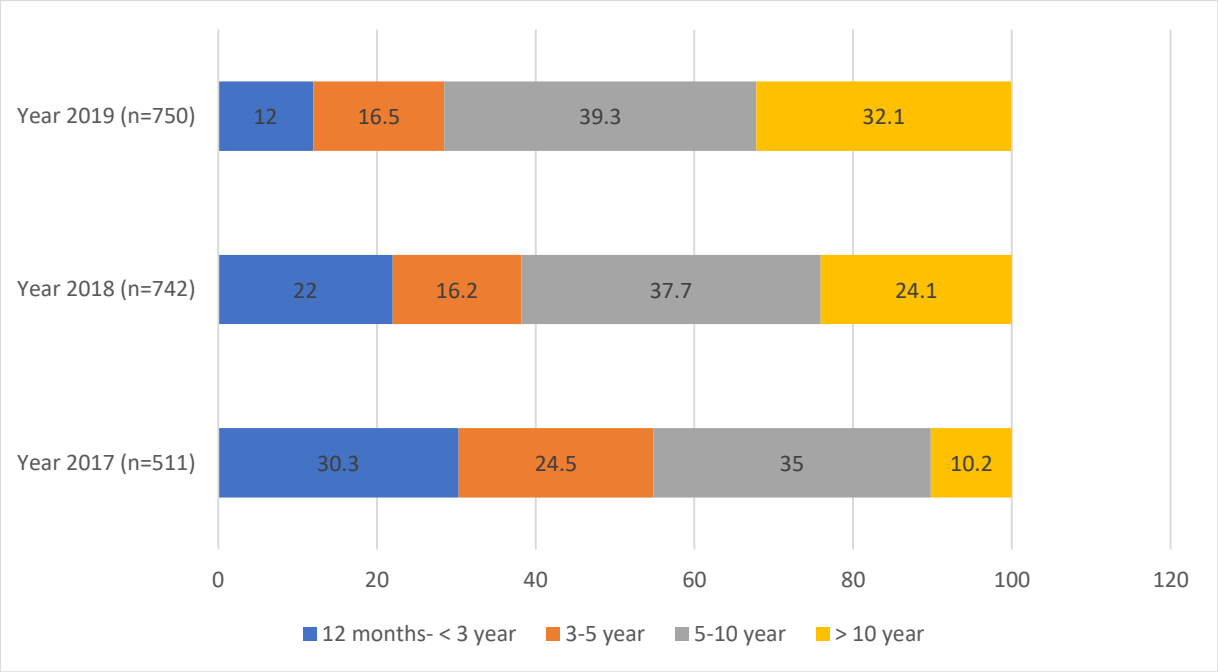



Figure 1: Total duration of ARV treatment for patients

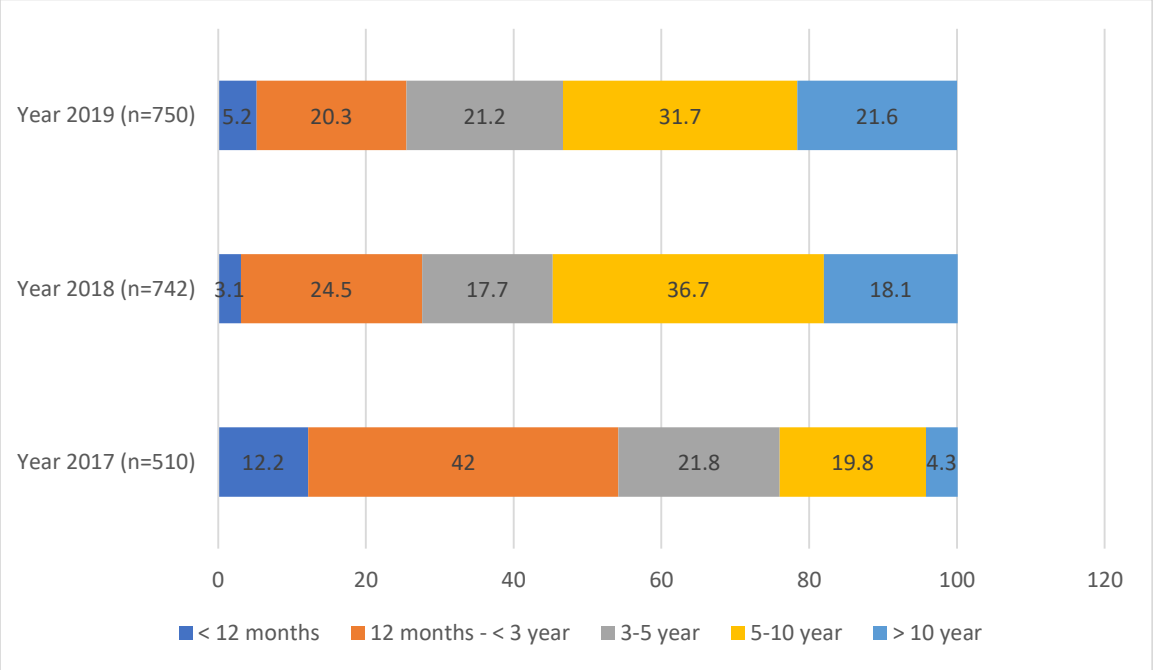



Figure 2: Duration of of ARV treatment for patients at the current clinic

Patients who participated in the survey in 2018 and 2019 had longer treatment time in the survey clinic than the patients in the 2017 survey sample. The proportion of patients having a clinic treatment period of 5 years or more of the year 2017 accounted for 45.2%, 2018

accounted for 61.8%, in 2019 accounted for 71.4%. This indicates that the proportion of patients in the newly surveyed provinces in 2018 and 2019 accounted for the majority of those who had a long stay at the survey clinic rather than newly transferred patients (Figure 2).

## 2. Objectives 1. To assess the changes in HIV/AIDS treatment and care service provision, using service, coverage, and health status of patients

Information to assess changes in HIV/AIDS treatment and care service delivery, using service, coverage, and health status of patients is based on secondary data collected from HIV/AIDS treatment clinics in the surveyed provinces; Survey data with the patient questionnaire, and qualitative information collected from PVS medical staff (HCWs) and FGDs with patients at clinics during the 3 years 2017-2019.

### 2.1. Changes in HIV/AIDS treatment and care service provision

#### 2.1.1. Changes in HIV/AIDS care and treatment service delivery

One of the issues that need to be addressed is that the transition process can lead to changes in HIV/AIDS care and treatment service provision for patients at clinics. Evaluation of this change was done through the survey by questionnaires for patients and FGDs with patients and PVS with HCWs at clinics.

Table 10: Patients assessed the change in service delivery over the previous year

| Group of provinces | Change in service n (%) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Transition in 2017 | 330 (65.2) | 36 (27.3) | 15 (21.7) |
| Transition in 2018 | | 206 (33.8) | 133 (40.5) |
| Transition in 2019 | | | 119 (33.7) |
| **Total N(%)** | **330 (65.2)** | **242 (32.6)** | **267 (35.6)** |

*Note: Compare rate differences using the Pearson statistical test*

Table 10 presents results of patients assessing changes in HIV care and treatment service delivery in the clinic compared to the previous year. Comparing the assessment results between the 3 years of survey shows that, the percentage of patients evaluating a change in service delivery in 2017 is the highest (accounting for 65.2%). The survey results in the next two years showed more stability with a significant decrease in the proportion of patients who assessed the change from the previous year, specifically 32.6% in 2018 and 35.6% in 2019. The difference is statistically significant with $p < 0.001$.

Comparing the results of the first-year handover between the 3 groups of provinces shows that the group of provinces implementing the transfer in 2017 has more changes in the first year than the group of provinces transferring in 2018 ($p < 0.001$) and 2019. ($p < 0.001$). There was no difference in change in the first year between the transitional province 2018 and 2019 ($p > 0.05$). Thus, although it is the first year of transfer, the group of transfer provinces in 2018 and

2019 seems to have a longer preparation period, which has avoided sudden changes in service delivery in the clinics compared to the group of provinces transferred in 2017.

A comparison of the 3-year assessment results of the group of transitional provinces in 2017 shows that, despite many changes in service provision in the first year (the proportion of assessments with change accounts for 65.2%) but gradually became more stable in-service provision in year 2 (27.3%) and 3rd year (21.7%) after transfer ($p < 0.05$).

The results of the qualitative research also show that the confusion mainly happened in the first year of the provinces whose's project ended in 2017, and by the second and third years, both health workers and patients at these areas shared that they had gradually adapted to the medical care regulations by insurance. It is worth noting that even in the provinces that started the transfer in 2018 and 2019, it showed that these areas had had a longer preparation time (some provinces even prepared before 2017 like An Giang), leading to all activities had been applied smoothly, almost without disturbance at the hospitals or affecting health workers and patients. In some provinces (such as An Giang), patients had been exchanged so that they can be transferred to the district level right from the first days when the district clinics were newly established, so they weren't transferred in mass down to lower level, which may confuse the patients. This could explain the results of the quantitative survey on assessing the change and the direction of change in service delivery over three years from 2017-2019 when the data shows that the percentage of patients who thought there were changes accounted for the highest proportion in 2017 (65.2%) and tended to decrease and stabilize in 2018 (32.6%) and 2019 (35.6%).

> The preparation of information matching is done early, so the transfer does not cause any difficulties.
>
> V2_IDI9_ HW_ĐT_Province 07

> The process here í reasssusing because it há been prepared for 1 year now, there were many seminars… In my area, up there, I attended a few seminars at the central level about preparing for this, down here too, last month 2 consecutive seminars on transferrig patients like this.
>
> V2_IDI5_HW_ĐT_Province 05

### 2.1.2. The trend of change in HIV/AIDS treatment and care delivery

Table 11: Assessment of change in service delivery compared to the previous year

| Group of provinces | Change in service n (%) | | |
|---|---|---|---|
| | Year 2017 | Năm 2018 | Year 2019 |
| Transition in 2017 | 182 (58.1) | 17 (68.0) | 14 (93.3) |
| Transition in 2018 | | 137 (68.8) | 105 (79.5) |
| Transition in 2019 | | | 82 (70.1) |
| **Total N (%)** | **182 (58.1)** | **154 (68.7)** | **201 (76.1)** |

*Note: Compare rate differences using the Pearson statistical test*

Comparing the results from the 3 years of the survey shows that the percentage of patients evaluating the change in the positive direction of 2018 (68.8%) is higher than in 2017 (58.1%) with p <0, 05; 2019 (76.1%) is higher than 2017 with p <0.001. There is no difference between 2018 and 2019 (p> 0.05).

A comparison of the results of the transfer implementation in the first year between the three groups of provinces shows that the group of provinces that transferred in 2017 had a lower rate of positive change assessment (58.1%) compared to the group of transfering provinces in 2018 (68.8%) with p <0.05 and 2019 (70.1%) with p <0.05. There is no difference in the trend of change in service provision between the transfer provinces in 2018 and 2019.

A comparison of the 3-year results of the group of transitional provinces in 2017 shows that the rate of evaluating change is better increased gradually over the 3 rounds of the survey, namely 2017 (58.1%), 2018 (68.0 %), 2019 (93.3%). The difference is statistically significant with p <0.05. Comparing the results of the 3 groups of provinces in the survey year 2019 shows that there is no difference in the trend of change in service provision (p> 0.05).

Thus, the group of provinces implementing the transfer in 2017 had a higher rate of change and the rate of assessment that the change in service delivery was positive in the first year was lower than that in the first year. of the two groups of provinces transferred in 2018 and 2019. However, the provinces transferred in 2017 stabilized and gradually improved the quality of service in 2018 and achieved a high rate in 2019.

Qualitative information helps to explain in more detail and specific the changes in service delivery and the direction of these changes.

- *HIV examination and treatment according to the hospital's general medical procedure helps to make the examination and treatment more orderly, but it also creates difficulties for both health workers and patients during the early transition*

Qualitative information in 2017 shows that one of the most mentioned topics by research subjects is changes in the examination and treatment process for HIV patients at clinics. During the transition period, management of HIV prevention and treatment activities was transferred from the project program to examination and treatment under health insurance. Accordingly, patients will have to register, wait for their turn, examine and receive medicine, then come back to sign the insurance certificate, instead of going straight to the clinic for examination and receiving medicine, and then return as before.

According to the assessment of health workers, following such strict medical procedures helps to manage books and medical records more orderly than before. Personal information and medical records are kept and updated regularly to ensure regulations related to insurance payment and settlement. Some health workers also believe that the transfer of examination and treatment activities under health insurance helped patients to be tested more fully, treating doctors also have a basis to better monitor the patient's progress.

Some patients also think that having to follow the medical care regulations under the hospital's health insurance makes them have a better sense of treatment adherence, such as having to pay attention to the appointment schedule to pick up the medicine on the right day because failing to keep the appointment would lead to unable to take medicine or being scoled by

doctors, or even asked to do the tests again, coming early to do the tests, have a better sense of drug management, not dare to lend medicine to others like before as they fear of not having medicine to take themselves.

> Sometimes when the day I can't come, 2 to 3 days late, the doctor will ask me about 2-3 days where to take the medicine. Because this is a lifelong pill, I have to take it everyday. Granted, I was delayed for 2-3 days I did not take the medicine but I had to reserve another bottle. Usually, one bottle can be delayed for 1 month. But within 2-3 days of coming here, the doctor had to make the viral load and then roll back from the beginning.
>
> V1_FGD2_Patient_ĐT_Province 01

However, to prepare for the transfer of HIV/AIDS treatment and care under health insurance, the health workers of the department/clinic had to work hard to complete the medical records and related documents at the end of last year to be able to start the next year according to the provisions of health insurance examination. Actions that need to be performed include comparing the patient's personal information on the old medical record (which is managed under the project program, which is not required to be complete and accurate in terms of personal information of patients) with the patient's personal information on the health insurance card, identity card, etc.... This work requires health workers to focus on the first stage of the transfer, and also causes them certain work pressures, especially for provinces that carry out the transfer in the first year (2017).

> Previously, medical records under project management could be used for many years... but now according to insurance regulations, a new medical record must be created every year... The initial stage will be more difficult due to the need to update and compare the information between the old medical record and the patient's information according to the insurance record.
>
> V1_IDI4_HW_ĐT_Province 01

> So as we did, the first phase was just to check how many three hundred sick people had this disease, how much of the sickness had insurance, how many patients had no insurance, the insurance they registered. Where is the advantage or not?
>
> V1_IDI1_ HW_ĐT_Province 01

Information from FGD with patients also shows that, in addition to the positive effects on patients' awareness and practice of medical examination and treatment, at the initial stage of the transfer, they also have to perform a lot of complicated administrative procedures, making it difficult for them. This is especially difficult for patients who have just transferred to the district level because they feel confused by the new clinic and new hospital. According to the patient's comments, during this early stage they have to carry out a lot of procedures such as preparing documents to buy/issue health insurance cards; having to go back and forth many times to submit and compare medical record information; carrying out procedures related to referral (go to the district hospital to apply for a referral, photocopy the referral document for the whole year...); have to travel through many departments to submit documents and sign certifications; taking tests and/or getting medication etc... Some patients find many procedures

difficult to remember; afraid to read a lot of information; losing time to travelling, waiting; and afraid to meet many people etc.

> PATIENT 2: If there are dozens of people in the morning, you have to wait from morning to noon to get the medicine.
>
> PATIENT 1: But sometimes you have to wait until the afternoon… it's very cumbersome… have to run back and forth and ask for this paper and that.
>
> PATIENT 3: Many papers and procedures having to read. Just now there are only papers, and we keep messing up. Before, when coming down, we just had to bring the book down and our records were already available, we just have to make an appointment and bring thebook down to get the medicine. But now, we have to go through all the insurance then insurance assessment… Just a lot of papers, and then having to sign them. Reporter: So how do you find it making things difficult for you? Patient 3: It's not much problem to healthy people, but we are sick, it would be hard and tiring.
>
> V1_FGD2_PATIENT_ĐT_Province 01

> From the last 2 years, I have to go to the clinic to get the number like a normal patient. I have to go to the clinic to take the medicine, after waiting, I sign the paper, get the appointment, get the insurance certificate, then it will take a bit longer.
>
> V2_FGD4_ PATIENT_ĐT_Province 05

- *Changing the way services are provided under health insurance to reduce costs for patients but also take longer waiting time for patients*

Qualitative information also helps to explain why a proportion of patients think that the total time to visit the doctor is longer than before. The extended time, according to them, may be due to the patient having to do more tests at each visit than before, plus having to carry out medical examination and treatment procedures under health insurance. IDI information with health workers shows that in some areas due to the regulations of insurance payment, treating doctors have limited a number of paraclinical techniques (testing, ultrasound, x-ray...) in each visit to reduce costs for the patient. This may lead to the patient having to perform more tests, scans, and ultrasounds during medical visits. Some administrative procedures of health insurance examination are more complicated than before, which also makes patients find it more time consuming. For example, in the past, blood was drawn at the clinic, but now patients in some places have to go to the testing department to have their blood samples taken and wait for the results there etc., which leads to longer time for examination and waiting for results.

> Then maybe this month we have a blood test, next month we can have an ultrasound, a lung scan. There are tests when people come for an examination. It is also suitable for insurance as the first ... So often the ill person comes for a revolving test. It is possible that this month blood is taken, the next month is an ultrasound, the next month is a chest scan. The tests are minimal, not rampant.
>
> V1_IDI1_HW_ĐT_Province 01

This change in the method of providing services to suit this health insurance payment condition has made it difficult for patients with weak health conditions or having to rush home to go to

work or take care of children and family. Some patients do not want to stay in the clinic for a long time because they are afraid of seeing acquaintances.

> PATIENT 1: Generally, it should be fast. Of course, it's good for me to check everything, but it should be a little sparse. We wouldn't want to go every month to check on things.
>
> PATIENT 2: That's right, every 2 months or 2 to 3 months, you can check every time, you can take the whole session, but you can take 2-3 tests once. A year is divided into 3-4 periods or something. If they go to the emergency room, they won't say it, but if they don't do it, then they can go home quickly. The first is work. The second is ... unfortunately met neighbors, acquaintances here people ask what they came here to do. ... have to do 3 tests like tests ... then wait at least 3 hours to complete, very tired.
>
> V1_FGD2_ PATIENT_ĐT_Province 01

- ***Stricter drug dispensing conditions help patients have a better sense of treatment adherence, but it also creates difficulties for patients who work far away and medical facilities cannot properly comply with regulations in dispensing drugs to patients in prison***

Different from the project-based management mechanism, which is more flexible to maximize patient access, use of services and adherence to treatment; The management of drug dispensing activities for HIV patients is now being carried out more closely than in time under the project management. Before, depending on the characteristics of each patient (traveling far away, having difficulty to travel, the patient's treatment is stable, good adherence to treatment, etc.) HW may allow family members to receive medicine on behalf of the patient or give medicine to the patient every 2-3 months. According to the regulations of the insurance examination, the patient must go directly to the hospital to examine, receive medicine, and sign the insurance confirmation, etc... The stricter regulation is due to the regulation of medical examination and treatment by insurance and also helps patients to have a greater sense of treatment adherence as described above, but also causes certain difficulties for patients, especially to patients who go to work far away, which isn't easy to leave work to return to the are for examination and receive medicine on the correct day. Patients who have to work far away just hope that their family members are allowed to take medicine on their behalf to reduce travel difficulties and refrain from asking for leave from their jobs.

> I still hide ... like taking medicine, I have to hide it. If you go to the doctor to take medicine like this, you have to quit your job The lie is to ask for a vacation at the company, not the company here. After I checked here, I had to go to the insured place of insurance company to get sick leave.
>
> V1_ FGD1_ PATIENT_ĐT_Province 01
>
> In addition, to outpatient medicine supply, before the patient was stable, the policy of the program is that if the patient is stable, he can give the drug 3 months to the patient to work, back to the doctor but now Now, the time to switch to health insurance is the one that is supposed to be issued on January 1, but the patient must directly sign and receive the medicine.
>
> V2_IDI5_HW_ĐT_Province 05

> It's also very difficult for me... to work far away... but every time I calculate the cost of it, it is very expensive, now that my family isn't allowed to, I have to go home myself and ask to have a day off, which is very difficult.
>
> V2_FGD6_PATIENT_NT_Province 07

> In general, how to create favorable conditions for him to go smoothly because of the rural landscape, sometimes when his work is also busy, you may be able to help the couple get married instead of their wives. You can also help with the work at home.
>
> V3_FGD4_PATIENT_NT_Province 04

A good sign from the qualitative information in 2019 shows that it seems patients are familiar with and accept the regulations on medical care by insurance as well as the requirements to go on the right date. Some patients think that going to the doctor and getting enough tests is good for themselves, helps them know the status and progress of the disease, so they try to do it and feel satisfied with receiving more more comprehensive health care. Some patients believe that those who refuse to follow the rules are the ones who don't take it seriously and don't pay attention to preparing the documents properly (for example, some people forget to photocopy the transfer paper, so they have to ask for a transfer certificate again). However, some other patients still want more convenient services, such as allowing them to ask family members to get the medicines for them in the condition that their health are poor or having to work far away.

In addition, the strict implementation of drug dispensing according to the provisions of the insurance examination also causes certain difficulties in dispensing drugs to patients in local prisons.

> But there are some difficulties that people are rehabilitating in prisons then their family members have to take the drug, we give them medicine but we have the certification of the prison health workers.
>
> V2_IDI23_HW_NT_Province 06

> …when switching to medical treatment, which means that those who are in concentration camps were formerly officials of the medical camp, they will come here to get medicine ... they signed ... and now the insurance treatment is on duty Next, the patient has to sign the prescription ... the direct checkup, the latest insurance accepted ... how is the rehabilitation center .... There is also a report to the district and provincial social insurance agencies, but there are no general guidelines yet. Currently, we are still implicitly right and wrong how now, then give them the medicine out ... ... they took his application back in there for the object they signed the patient. So in front of our eyes, we just know how to fix it. If that insurance sympathy. If not, they will not grant it if this one does not have specific instructions from later on. We are very complicated about payment and even if we do not have specific instructions, we will be against the law.
>
> V3_IDI8_HW_NT_Province 04

Guidelines for dealing with the problem of giving medicines to patients and people in prisons were mentioned and discussed by health workers and patients in IDI and FGD. Accordingly, some issues that need to be considered include issues of monthly or 90-day drug supply? Can

husband or wife get the medicine for the other? Can family members get the medicine instead, in case the patients work far away and is unable to or have difficulties returning every month? If yes, what regulations should be in place to ensure patient management (the patient may die within 90 days of receiving the drug, or die but the family still receives it…)? Who will receive 3-month worth/time, what documents need to be ensured so that the family member can receive medicine for them? Similarly, it is necessary to address problems related to dispensing drugs to patients in prisons, 05/06-centers.

Table 12: Compare the rate of assessment of positive change by clinic level over 3 years of survey

| Year of survey | Change is better n (%) | |
|---|---|---|
| | City / province level | District level |
| Year 2017 | 115 (51.3) | 67 (75.3) |
| Year 2018 | 124 (65.6) | 30 (85.7) |
| Year 2019 | 141 (78.8) | 60 (70.6) |

*Note: Compare las diferencias de tasas con la prueba estadística de Pearson.*

Comparing the service quality assessment results at the clinic level shows that, in 2017 and 2018, the rate of assessment of change was positive at the district level than at the provincial level ($p < 0.05$). Comparing the results between the provincial clinics over the 3 years of the survey shows that the assessment rate of the provincial clinics in 2017 was the lowest and gradually increased over time ($p < 0.05$). There is no statistically significant difference between the district clinics over the years of the survey ($p > 0.05$).

### 2.1.2. Changes in behavior of health worker in clinics

In addition to the overall assessment of changes in the provision of HIV/AIDS treatment and care services, the assessment of changes in medical staff behavior in clinics over the years is also surveyed through the table survey questions for patients at selected clinics.

#### *2.1.2.1. Change and trend of change in doctors' behavior*

Table 13: Assessment of change in doctor's behavior over 3 years of survey

| Group of provinces | Change in doctor's behavior n (%) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Transition in 2017 | 58 (11.6) | 4 (3.0) | 5 (7.2) |
| Transition in 2018 | | 40 (6.7) | 59 (18.0) |
| Transition in 2019 | | | 43 (12.2) |
| **Total N(%)** | **58 (11.5)** | **44 (6.0)** | **107 (14.3)** |

*Note: Compare the difference by the Pearson statistical test between pairs of comparison with ≥ 5 value and Fisher's exact statistical test for comparison pairs with a value less than 5*

Table 13 presents the percentage of patients evaluating the change in doctors' behavior in the clinics compared to the previous year, ranging from 3.0% to 18.0%. Comparing the assessment results between the 3 years of survey shows that the proportion of patients evaluating a change in doctor's behavior in 2018 was the lowest (accounting for 6.0%) compared to 2017 (11, 5%) and 2019 (14.3%) with p <0.0001). There is no difference in rating rates that change between 2017 and 2019.

A comparison of the evaluation results in the first year of transfer among the three groups of provinces shows that the doctors of the provincial group performing the transfer in 2018 (6.7%) had the lowest rate of assessment of changes in patient behavior. compared with doctors in the transfer province group in 2017 (11.5%) and in 2019 (12.2%) with p <0.05. There is no difference in evaluation rates between 2017 and 2019 (p> 0.05).

Comparing the 3-year evaluation results of the transferred provinces in 2017 shows that the percentage of patients who assessed there was a change in the behavior of doctors in clinics in 2017 was higher than in 2018 (p <0.05). There is no difference between year of first handover (2017) and 2019, nor between year 2 of handover (2018) and year 3 (2019) in this group of provinces.

Comparing the survey results of 3 transfering provinces in 2019 shows that the percentage of patients assessing changes in doctor's behavior in the transfer provinces in 2017 (7.2%) is lower than that of the transfer provinces. delivery in 2018 (18.0%) with p <0.05, provinces transferred in 2018 (18.0%) higher than in 2019 (12.2%) with p <0.05. There is no difference between 2017 and 2019. Thus, the group of provinces transferred in 2018 has the most changes in the 2019 survey year.

Table 14 Trend of change: the rate of assessment is better in the behavior of doctors in clinics

| Group of provinces | Change is better n (%) | | |
|---|---|---|---|
| | Year 2017 | Năm 2018 | Year 2019 |
| Transition in 2017 | 49 (90.7) | 2 (50.0) | 5 (100.0) |
| Transition in 2018 | | 42 (100.0) | 52 (91.2) |
| Transition in 2019 | | | 40 (93.0) |
| **Total N (%)** | 49 (90.7) | 44 (95.6) | 97 (92.4) |

*Note: Compare the difference by the Pearson statistical test between pairs of comparison with ≥ 5 value and Fisher's exact statistical test for comparison pairs with a value less than 5*

The survey results of 3 years showed that among patients who assessed there was a change in doctor's behavior, most of them thought that the change was in a better direction than the previous year (reaching over 90% in all 3 years of survey). There is no statistically significant difference between the 3 years of the survey (p> 0.05). A comparison of the results of the first year between the three groups of provinces transferring 2017, 2018 and 2019 shows that there is no difference in the rate of assessing the trend of change in doctors' behavior at clinics in the

first year between three groups of provinces transferred (p> 0.05). Comparing the results of 2017 over the 3 years of the survey shows that there is no statistically significant difference (p> 0.05). Comparing the results between the 3 groups of provinces transferred in the survey in 2019 shows that there is no statistically significant difference (p> 0.05). Thus, the majority of patients believe that the change in doctor's behavior is better and there is no difference between the years of the survey.

#### *2.1.2.2. Change and trend of change in nursing behavior*

Table 15: Assessment of changes in nursing behavior over 3 years of survey

| Group of provinces | Change in nursing behavior n (%) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Năm 2019 |
| Transition in 2017 | 58 (11.6) | 2 (1.5) | 4 (5.8) |
| Transition in 2018 | | 38 (6.3) | 33 (10.1) |
| Transition in 2019 | | | 38 (10.8) |
| **Total N (%)** | 58 (11.6) | 40 (5.5) | 75 (10.0) |

*Note: Compare the difference by the Pearson statistical test between pairs of comparison with ≥ 5 value and Fisher's exact statistical test for comparison pairs with a value less than 5*

Table 15 presents the rate of patients evaluating the change in nursing behavior in clinics in 3 years is from 1.5% to 11.6%. Comparing the evaluation results between the 3 years of survey shows that the percentage of patients evaluating with change in 2018 is the lowest (accounting for 5.5%) compared to 2017 (11.6%) with p < 0.0001 and 2019 (10.0%) with p <0.05. There is no difference between the results of the 2017 and 2019 review.

A comparison of assessment results in the first year of transfer among the three provincial groups shows that the nurses of the provincial group performing the transfer in 2018 (6.3%) had the least change in behavior with the patients compared to the provincial group. transfer in 2017 (11.6%) and 2019 (10.0%) with p <0.05.

A comparison of the assessment results of 2017 over the 3 years of the survey shows that in 2017 there was a higher rate of assessment of change in 2018 (p <0.001). There is no difference between survey results in 2017 and 2019, 2018 and 2019 (p> 0.05).

Comparing the survey results of 3 transferred provinces in 2019 shows that there is no statistically significant difference (p> 0.05).

Table 16: Trend of change: the rate of assessment is better in nursing behavior in clinics

| Group of provinces | Change is better n (%) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Transition in 2017 | 52 (91.2) | 2 (100.0) | 4 (100.0) |
| Transition in 2018 | | 39 (100.0) | 32 (97.0) |
| Transition in 2019 | | | 36 (94.7) |
| **Total N (%)** | 52 (91.2) | 41 (100.0) | 72 (96.0) |

*Note: Compare the difference by the Pearson statistical test between pairs of comparison with ≥ 5 value and Fisher's exact statistical test for comparison pairs with a value less than 5*

Table 16 shows that the majority of patients assess the change in nursing behavior is better (accounting for over 90%). Comparing results between groups did not have a statistically significant difference (p> 0.05).

### *2.1.2.3. Change and trend of change in other health workers' behavior*

Table 17: Assessment of changes in other health workers' behavior over 3 years of survey

| Group of provinces | Change in other health workers' behavior n (%) | | |
|---|---|---|---|
| | Năm 2017 | Năm 2018 | Năm 2019 |
| Transition in 2017 | 51 (10.2) | 2 (1.5) | 5 (7.2) |
| Transition in 2018 | | 35 (5.8) | 35 (10.7) |
| Transition in 2019 | | | 32 (9.1) |
| **Total N (%)** | 51 (10.2) | 37 (5.1) | 72 (9.6) |

*Note: Compare the difference by the Pearson statistical test between pairs of comparison with ≥ 5 value and Fisher's exact statistical test for comparison pairs with a value less than 5*

Table 17 presents the results of assessing the changes in the behavior of other health workers (pharmacists, counselors ...) in the 3 years of the survey. In general, the rate of assessment with change has a relatively high difference between groups (from 1.5% to 10.7%). A general comparison over the 3 years of the survey shows that 2017 (10.2%) and 2019 (9.6%) had a higher rate of change compared to 2018 (5.1%) with p <0.001. There is no difference between 2017 and 2019.

Comparing the evaluation results in the first year of the three groups of provinces shows that the group of provinces transferring projects in 2017 has a higher rate of change than the group of provinces in 2018 (10.2% versus 5.8%) with p <0.05. There is no difference between the province transferred in 2017 and the province transferred in 2019 (9.6%). There was no difference in the behavior of health workers other than the three transitional provinces 2017, 2018, and 2019 in the 2019 survey year.

Table 18: Trend of change: the rate of assessment is better in other health ư behavior in clinics

| Group of provinces | Change is better n (%) | | |
|---|---|---|---|
| | Year 2017 | Năm 2018 | Year 2019 |
| Transition in 2017 | 45 (95.7) | 2 (100.0) | 5 (100.0) |
| Transition in 2018 | | 34 (97.1) | 35 (100.0) |
| Transition in 2019 | | | 29 (93.5) |

| Group of provinces | Change is better n (%) | | |
|---|---|---|---|
| | Year 2017 | Năm 2018 | Year 2019 |
| Total N (%) | 45 (95.7) | 36 (97.3) | 69 (97.2) |

*Note: Compare the difference by the Pearson statistical test between pairs of comparison with ≥ 5 value and Fisher's exact statistical test for comparison pairs with a value less than 5*

Table 18 shows that the majority of patients rated the change in behavior of other health workers in a better direction (accounting for over 90%). Comparing results between groups did not have a statistically significant difference (p> 0.05).

## 2.2. Patient satisfaction with HIV/AIDS treatment and services delivery

### 2.2.1. Satisfaction with services in general

Table 19: Compare the average score of satisfaction with services in general by province

| Group of provinces | Average score (Standard deviation) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Transition in 2017 | 3.37 (0.70) | 3.60 (0.82) | 3.43 (0.58) |
| Transition in 2018 | | 3.54 (0.66) | 3.46 (0.71) |
| Transition in 2019 | | | 3.26 (0.61) |
| Total | 3.37 (0.70) | 3.55 (0.69) | 3.36 (0.65) |

*Note: Compare the difference between two means by Bartlett's test*

Table 19 presents patient satisfaction in providing general services in clinics over 3 years of survey. In general, patients are rated at satisfaction or higher with GPA ranging from 3.26 to 3.60. A general comparison over the 3 years of the survey shows that the GPA in 2018 (3.55) is higher than that of 2017 (3.37) and 2019 (3.36) with p <0.0001. There is no difference between 2017 and 2019.

A comparison of the average satisfaction score in the first year among provinces shows that the transfer province group 2018 had a higher average satisfaction score than the transfer province group in 2017 and the transfer province group in 2019 with p < 0.001. The average satisfaction score of the province group in 2017 was higher than that of the province group in 2019 (p <0.05).

Comparing the average satisfaction score of the province group in 2017 over the 3 years of the survey shows that patients in these localities are most satisfied in 2018 (p <0.001). There is no difference between 2017 and 2019.

A comparison of the average satisfaction score of the 3 groups of provinces in the survey year 2019 shows that the average satisfaction score of the transferred province group in 2019 is

lower than the transfer province group in 2017 (p <0.05) and the group of transferred provinces Delivery in 2018 (p <0.001)

Qualitative information shows that, during the first year of transfer (2017), the areas had many confusions and changes to medical examination and treatment under health insurance, which may had led to patient satisfaction scores in the first year was the lowest. By the second year (2018), the areas transferred in 2017 became more stable and the provinces transferred in 2018 were more carefully prepared, so the satisfaction average of 2018 was higher.

> Of course, in the beginning, the doctors also had a lot of problems and discomfort because it also had a lot more procedures, a little more travel because previously there was no need for such procedures. I only need to fill in the form and bring the medicine back but now it has to go through many test papers and insurance assessments, many more so it was the first time that people were not used to it, so it was a lot of discomfort.
>
> V1_IDI3_HW_ĐT_Ptovince 01

Table 20: Compare the average score of satisfaction with general services by clinic level

| Year | Average score (Standard deviation) | |
|---|---|---|
| | Province/City level | District level |
| Year 2017 (N=509) | 3.34 (0.69) | 3.40 (0.73) |
| Year 2018 | 3.53 (0.72) | 3.60 (0.60) |
| Year 2019 | 3.45 (3.45) | 3.22 (0.60) |

*Note: Compare the difference between two means by Bartlett's test*

Table 20 presents the results of comparing the average satisfaction score in general service delivery. The comparison results showed that there was no difference between the provincial and district clinics in 2017 and 2018. In 2019, the average satisfaction score at the district level (3.22) was lower than that at the provincial level. (3.45) with p <0.0001 and also got the lowest score compared to the district level in 2017 and 2018. Comparison among district clinics over 3 survey rounds shows that, in 2019 (3.22) have a lower mean of satisfaction score than in 2017 (3.40) with p <0.05 and in 2018 (3.60) with p <0.0001. The average satisfaction score of 2018 was higher than that of 2017 with p <0.05. A comparison between provincial clinics over the 3 survey rounds shows that in 2017, provincial clinics had a lower satisfaction score (3.34) compared to 2018 (3.53) with p <0.001, and year 2019 (3.45) with p <0.05. There is no difference between 2018 and 2019.

Qualitative information helps to better understand patient satisfaction with care and treatment and why patients choose to visit a district or provincial hospital.

- ***Patients were satisfied because they have been selected for examination and treatment at the appropriate clinic***

Qualitative research results show that in general, patients are relatively satisfied with HIV/AIDS treatment and care services at the clinic they were registered. One of the points highly appreciated by patients was that the areas have paid attention to the patient's wishes and met their desire to stay at the provincial clinic or move back to their locality. This can explain the results of the quantitative survey with the general score for all the contents with scores above 3.0 (equivalent to the "satisfied" rating in the scale), with not much differences between

patients' satisfaction regarding care and treatment services between district and provincial levels.

> So if the doctors put up anyone who wants to transfer, then we are the case they want to go, they ask to go, whoever doesn't want to go, we just accept here .... not required ... The decision to leave or not is up to me to choose, not to make me go. Just follow your conscience. If you want to go, go by yourself. If I don't want to go, I would like to stay....
>
> V2_FGD3_PATIENT_ĐT_Province 05

> The doctors and nurses here talk to me as if I was their relatives, unlike between patient and doctor, so even when the doctor advised me to transfer, but I request not to. The doctor also considered letting me stay because when I moved to the hospital, I was too close to my husband's house, and my husband's house was nearby, so I asked the doctor that it would be fine if he sent me to a private clinic, I would buy the medicine myself, the doctor said that the treatment was very expensive, even so I would do it, if I can't buy it anymore, I would quit taking it, but I couldn't go home now. So, the doctor let me stay.
>
> V1_FGD2_PATIENT_ĐT_Province 02

> Because I see that if you take the patient in the right way, you have to follow the patient's wishes. If the patient feels that he needs to go home, let the patient go home, rest assured that there is still enough medicine, and all that. And if the patient did not want then it should not, because there are also some cases when campaigning, the patient agreed to return but after 2 months the patient returned.
>
> V2_IDI10_HW_ĐT_Province 07

Here are some reasons patients consider for choosing to stay at the provincial clinic or move back to the district level.

- *Moving back to the district to be closer to home, less strenuous travel, simpler procedures; In some cases, patients are more satisfied because the district clinic where they are referred has better quality than the old district clinic*

Meanwhile, patients at the district clinic consider the transfer to the district level "normal", "acceptable", "the doctor is also good", "I have not seen anything myself". The reason for the patient's consent to be transferred to the district level is to be close to home, avoid traffic jams/delays like going to the district level, and to have a simpler examination procedure as thay do not have to go to the district hospital to ask for and photocopy the referral form, themselves also feel that their health was stable, and seeing that everyone else has also been transferred to the district hospital, they felt more secure.

> PATIENT 1: The district clinic is more comfortable than here.
>
> Reporter: Is that so? How is it more comfortable, can you share?
>
> PATIENT 1: I still have to sign the insurance here, but there's no insurance down there. After returning to the district, the doctor finished the examination, and in general, I just needed to take the paper and go to the other side to receive the medicine.

PATIENT 3: That's the referal paper.

V1_FGD3_PATIENT_ĐT_Province 02

Patient 2: Walking is less hard. I have transportation.

Patient 6: There are challenges that are found in the province, although it is a bit far. Of course, the provincial treatment is better than the district level. Traveling a little inconvenient.

Interviewer: How do I feel satisfied with the quality of treatment at this district level?

Patient 6: Yes, it still works.

Patient 4: Before, the doctors and doctors said that the transfer is definitely close, the support for walking is standard. There are things about machines, about treatment at the district level is not equal to the province ... if later there is a disease problem, the provincial level is still better than the district level. But later on some people also moved back… well then life and death also have numbers, anyway, they should always move here anyway…. God has suffered from this disease. Nothing has happened yet. If we take this medication, we will not have to cure anything.

V2_FGD12_PATIENT_NT_Province 04

Some patients, when transferring from the district clinic of another province to the district clinic under health insurance, feel more satisfied because they are closer to home, difficult travelling, more convenient to work, and moreover, they find the clinic in the district hospital providing better service than the old clinic.

Patient: I have only been here for 2 months, 2 times for the examination, this is the 2nd time.
Interviewer: So how do you feel?
Patient: Better ... Care more. Recently, I called up to have a blood test and blood test. The other party did not see any call. Here, we do not need to wait. Few days ago, I came and get the medicines first.

V1_FGD5_ PATIENT _NT_ Province 02

- *Patients choose to stay at the provincial clinic because the provincial hospital ensures better quality*

The reason patients want to be examined and treated at the provincial hospital was that the district hospital only provides the ARV drug delivery service, not counseling, guidance, or further examination services for the patient. Doctors at the provincial level are more dedicated and qualified. Besides, patients also think that they are not only on ARV treatment but also other opportunistic infections (OI), so the examination at the province will be more secure and convenient. Specifically, if the patient is examined at the district level when there is a problem, the district hospital would transfer them to the provincial hospital anyway. Hence, visit the province to have the doctor monitor the disease from the beginning.

REPORTER: How good is the service in the province that patients want to stay at the provincial level?

PATIENT 5: Here the doctors pay more attention to me. Down at the district, they don't care that much. The district level only distributes medicine, does not provide care or advice.

PATIENT 2: It's okay when I'm healthy, when I'm weak, they would transfer me to the emergency room right from the beginning.

PATIENT 5: Up here sometimes they even take blood for testing to check how the medicine is taken.

V2_FGD3_PATIENT_DT_Province 05

Patient: When I was there, there was no examination, only medicine.
Interviewer: Which general hospital do you visit?
Patient: At [name of district hospital clinic].
Interviewer: Where is [name of the clinic]?
Patient: In [name of province].
Interviewer: So he only came to get medicine?
Patient: After taking the medicine, the doctor... I don't know anything. I don't know what I do. I don't know CD4, I don't know how to gain weight, I don't know what happens to me but I still take medicine.

V1_FGD5_PATIENT_NT_Province 02

The higher the upline quality the better treatment. Then the consultation is more thorough. I don't just have a disease; it's related to many diseases. Does it treat only HIV disease? As far as I know, taking HIV for a few decades has not affected anything. But I am still treating illnesses.

V1_FGD2_PATIENT_ĐT_ Province 01

The second is whether I can sleep or not, the doctor also measures the results in me, my body finished the doctor gave me another medicine. It is concerned about our health. That's up here. And you don't know what downline is like. It is my appreciation of the doctor here. For example, I took a pill and I felt heavy. I could not eat, could not sleep or my body was hot, the uncomfortable person was a doctor for me. I think there is no convenient medicine like this.

V2_FGD3_PATIENT_ĐT_ Province 05

- *The drug dispensing process at the district hospital is not strict, patients want to participate in checking the medicine before receiving*

Some patients who are being examined and treated at district hospitals think that the drug dispensing process here has not been followed closely. Specifically, the pharmacy staff in some hospitals did not check the drugs before dispensing, the medicine was not kept in their original package. According to the patient, there have been some cases where the wrong medicine or expired medicines were dispensed. Patients are not allowed to participate in checking the medicine before receiving it.

PATIENT 2: For example, the medicine couldn't be given in a whole box, we take individual pills, and then change a lot, maybe expired, which happened before.

PATIENT 4: I have an opinion about medicine. The medicine storage didn't let me see how the medicine was opened in front of me so I could check. I don't know if it's expired or not. That right is nonexistent. I have an opinion that if I receive the medicine, let me check it.

V2_FGD1_PATIENT_Province 03

According to some pharmacy staff at the provincial hospital, the participation of patients in checking medicine is very important, because it is still possible that the doctor prescribes the wrong medicine or the pharmacist dispenses the wrong medicine. IDI information with the pharmacy staffs of a provincial hospital also shows that in 2017, the ARV drugs of the Global Fund were shipped to this hospital more than needed, but the shelf life was short, so there was a risk that the drug will be damaged. The expiry date was in the warehouse, so the possibility of dispensing expired medicine can still happen if the pharmacy staff did not manage the medicine well and perform a thorough check of the drug before giving it to the patient.

A: There is this paper down here, check the medicine carefully, the patient check the medicine, count the medicine after giving it, I tell you guys to count the medicine for me, the first one is like this, the second one is considered This period of medication is similar or not, if it is different then borrow the book so that they can be misused by their doctors. Too crowded disease, the meal was there.

Q: So you're checking back?

A: Checking, why did I give the medicine I know, because I just gave them the spirit, they have a lot of premonitions. Give me the notebook, tell me to give it to the doctor's name, give it to me.

Q: So I'm compared to the previous page?

A: When I opened the book, I considered it TDF FDC, and the doctor said it was AZT FDC, I followed the drug name AZT FDC and I saw the blue pill but the patients they drank they knew they told me they didn't take the pill This color, I asked to bring the book here, so I brought the book to the wrong clinic, so I had to change it for people, that's it.

V1_IDI7_HW_ĐT_Province 02

- *Transferring to the district level, some patients choose to get medicine at the district and sometimes go to the province to check their health and be prescribed more supplements.*

In the context of the transfer, patients are encouraged to be transferred to the district hospital for examination and treatment. While some patients agreed to go to the district because it was close to home, traveling was not expensive and hard, and found that their health was still good without any symptoms; some other patients agreed to go to the district, but inside, they were still not really sure about the quality of medical services at the district level. According to some patients, doctors at district hospitals only prescribe antiretroviral drugs, not other supportive drugs (supplements) to help them gain more resistance. Some of them have chosen to go to the district hospital to receive monthly ARV drugs and sometimes they will go to the provincial level to see the old doctor to check their health and prescribe more supplements for peace of mind.

PATIENT 2: There’s no supplements here

REPORTER: What are these supplements? Can you give an example?

PATIENT 2: Support digestive system, liver.

PATIENT 4: Nutritional medicine.

PATIENT 2: Those things cost me money, but they cost very little. The doctor must always prescribe it in my medical record. I buy a few hundred a month.

REPORTER: Do you mean they don't prescribe those drugs here, but up there do?

PATIENT 2: Not available here, up there the doctor would prescribe anti-aging drugs for liver cells, it is to help cool down, detoxify and lower liver enzymes. Prevent liver’s cells from being destructed, as taking this medicine for a long time might lead to cirrhosis.

REPORTER: What is your solution? Did you go anywhere else?

PATIENT 2: Yes. Sometimes I would go to upper level, the old doctor who used to examine me told me about the situation, then check up on me, for ARV, I could come back here to get, while supplements are sold there. If there’re any problems inside then come there right away, tell the doctor if I couldn’t eat or lost appetize, felt weak, the doctor would give me medicine.

V2_FGD1_PATIENT_NT_Province 03

The fact that patients choose to go to the district hospital to get medicine and go to the provincial hospital for further examination shows the patient's need for high quality health care services. This also reflects those patients were very interested in their own health care and they were actively looking for better quality services. Focusing on improving the quality of health services at the district level plays an important role, helping patients trust and continue to use district health services, avoiding overloading provincial hospitals and causing difficulties, wasting costs for HIV patients when they have to spend effort, time and money to go to the provincial hospital for examination. Therefore, in the context of transfering, improving the quality of district health services and creating patients' trust in district health services is one of the decisive factors for the sustainability of the HIV/AIDS care and treatment program in Vietnam.

- *Massive transfer of patients to the locality may contribute to reduced satisfaction of patients being examined and treated at district hospitals in 2019*

IDI information with treating doctors or head of clinics shows that by 2019, when the transfer activities had gradually stabilized, provincial clinics tend to transfer (new) patients to district level and refuse to accept patients transferred from district level. Some hospitals also transfer all outpatients to the locality, provincial hospitals only provide inpatient treatment services. Some provincial hospitals only give priority to certain groups of patients (teachers, staff, students, etc.) to receive treatment at the provincial level. The change here was that instead of giving the right to decide whether the selected patient will stay in the province or return to the district hospital as before, the provincial hospitals have decided whether to accept the patient or not. As a result, it may lead to patients being reluctant to move to the locality according to the arrangement of the clinic and at the same time also make the number of

patients at the district level become larger, leading to the satisfaction rate of patients at the district clinic in 2019 lower than that at the provincial level, and the lowest in all 3 survey years as the above quantitative results showed.

> …If I was transferred to a different facility, I would have transferred, if I had not been transferred, I had to accept it because I was sick, I had to accept it. Comments are up but not then I have to accept but how.
>
> V2_FGD10_PATIENT_ĐT_Province 01
>
> That's right, people also sympathize for explaining that now that the insurance mechanism and the project will be phased out, you guys understand ... well, people only struggle puffed puffed up a few sentences, nothing is against me or anything very much. But those are cases like where we work for a long time, for example, new clinics that new patients apply immediately have a lot of reactions.
>
> V1_IDI1_HW_ĐT_ Province 01
>
> So, there is no massive transfer here. Which in my opinion is a very dangerous matter; the patient will drop out of treatment and would do anything possible to quit treatment; will have a very negative effect on the patient being treated.
>
> V2_IDI9_HW_ĐT_Province 07
>
> Secondly, my outpatient clinics here give priority to teachers, government officials and students here, and stop accepting district patients who come here when people get sick. If I moved back, I wouldn't accept it anymore, or in the tropics they moved here, but this man in CP should guide them to CP so it has an advantage. And now this outpatient clinic keeps hugging, the more the work is heavy, the more we can not work, too crowded .... I did not accept anymore, I said they understood that I did not accept patients in the district anymore because the district already had a clinic.
>
> V3_IDI22_HW_ĐT_ Province 07

- *Service delivery time at the district level only focuses on a certain time of the week/month, so it is more difficult for some patients to access services if they are forced to transfer to the district level*

Qualitative information shows that in general, patients have a good assessment of the services provided at district clinics. However, there is a notable point mentioned by patients, that is the time of service provision at district clinics. At present, district-level clinics are almost not providing HIV/AIDS treatment and care services to patients during all working hours of the week. Some places limit to only 1-2 days a week, some places limit 1 week in a month. In some provincial hospitals, examination activities mainly take place in the morning, the afternoon time is mainly for health workers to summarize books, report, or advise new patients. Such a time limit also makes it more or less difficult for some patients who have to work far away or are under strict supervision by the organization (for example, workers working for companies, factories, etc.). Patients shared that it was very difficult for them to apply for a trip on the right day and was easily suspicious by their colleagues/bosses, and could not return on time because they were far away.

PATIENT 4: I think that when I go back to my hometown, the conditions here are also good, but the quality of the re-examination doesn't give me a long time, while up there, the doctor works from Monday to Friday

Q: So how many days in the week do they give the service?

PATIENT: I don't know yet when I come here, but there are few patients here, so I only have an appointment at the time of taking medicine.

V2_FGD1_PATIENT_NT_Province 03

The reason for such a limited time frame for providing services to HIV patients is that the departments currently have to be financially self-sufficient, HIV treatment is considered a burden of the faculty, the patients are few and the income is low, not much, mainly from the medical examination fee (about 35-39,000 VND/patient) etc., so the department leader must also consider the personnel and the time of service provision so that the medical staff can participate in other medical examination and treatment of the faculty to increase income.

For example, if we have to pay the 70% allowance of the person being treated for HIV by ourselves, these things find it very difficult because it has to divide the common ground for the entire difficult unit, then it won't be as comfortable as it used to be. It is only reasonable to reduce the positions, it is a traditional difficulty

V3_IDI8_HW_NT_Province 04

In fact, like our provincial hospital, the mechanism is self-accounting ... However, for the three-person system to serve an outpatient clinic, it is not enough to support ... Now a doctor like us is a doctor. value there on average monthly about 10 to 11 million. But if the income from the HIV outpatient clinic is not enough to support one person, let alone three people, the hospital does not have a separate mechanism to support the industry, the project does not have, the most difficult. economics for doctors.

V3_IDI1_HW_ĐT_ Province 01

### 2.2.2. Patient satisfaction on health workers' consultancy

#### 2.2.2.1. *Patient satisfaction with doctor's advice*

Table 21: Compare the average satisfaction score on doctor's consultancy across 3 rounds of investigation

| Group of provinces | Average score (Standard deviation) | | |
|---|---|---|---|
| | Year 2017 | Năm 2018 | Year 2019 |
| Transition in 2017 | 3.59 (0.81) | 3.61 (0.85) | 3.57 (0.63) |
| Transition in 2018 | | 3.81 (0.74) | 3.75 (0.81) |
| Transition in 2019 | | | 3.41 (0.66) |

| Group of provinces | Average score (Standard deviation) | | |
|---|---|---|---|
| | Year 2017 | Năm 2018 | Year 2019 |
| Total | 3.59 (0.81) | 3.78 (0.76) | 3.57 (0.74) |

*Note: Compare the difference between two means by Bartlett's test*

Table 21 presents the results comparing the average satisfaction score of doctor's consultations over 3 rounds of surveys. In general, patients were assessed at satisfaction or higher with average scores ranging from 3.57 to 3.81. A general comparison over the three years of the survey shows that the average score of 2018 (3.78) is higher than that of 2017 (3.37) and 2019 (3.36) with p <0.0001. There is no difference in average satisfaction scores for the 2017 and 2019 survey years.

Comparing the first-year average of satisfaction scores between the transfer provinces shows that the transitional province 2018 has a higher average satisfaction score than the transfer province group in 2017 and the transfer province group in 2019. p <0.001. The average satisfaction score of the province group in 2017 was higher than that of the group in 2019 (p <0.001). Thus, the average score of satisfaction with the consultation of doctors of the transfer province group in 2019 is the lowest.

There is no statistically significant difference in patient satisfaction score in the transitional province group in 2017 over the 3 years of the survey. Thus, the consultation of doctors from the transfer province group in 2017 has maintained patient satisfaction in 3 years of implementation. However, the analytical results show that in 2019, although the average score of patient satisfaction between 3 groups of provinces has a slight difference, the difference is not statistically significant (p> 0.05).

Table 22: Compare the patient's average score of satisfaction with doctor's consultancy by clinic level

| Year | Average score (Standard deviation) | |
|---|---|---|
| | Province/City level | District level |
| Year 2017 (N=509) | 3.59 (0.81) | 3.58 (0.82) |
| Year 2018 | 3.76 (0.78) | 3.85 (0.69) |
| Year 2019 | 3.67 (0.74) | 3.40 (0.72) |

*Note: Compare the difference between two means by Bartlett's test*

Table 22 presents the results of comparing the average satisfaction score of doctor's consultations by clinic level. Analysis results show that, there is no difference between the district and provincial / city clinics in the 2017 and 2018 survey years. However, by 2019, the patient seems to be more satisfied with his consultation. medical doctors at the provincial level (3.67) compared to the district level (3.40) with p <0.0001. A comparison between district clinics over the 3 survey rounds shows that in 2019 (3.40) district clinics had the lowest average satisfaction score compared to the average score of 2017 (3.58) with p <0.05, and in 2018 (3.85) with p <0.0001. At the same time, the average satisfaction score of district clinics in 2018 was higher than in 2017 with p <0.05. A comparison between provincial clinics through the 3 survey

rounds shows that the 2017 survey had a lower average satisfaction score (3.59) compared to 2018 (3.78) with p <0.05. There is no difference between the average satisfaction score of the provincial clinics in the 2017 and 2019 survey years.

Qualitative information helps explain the patient's satisfaction with the doctor's advice

- *Depending on the doctor, some doctors are enthusiastic, but there are also the doctors who just finish examination*

Qualitative information shows that patients have different assessments among physicians in a clinic. According to them, also depending on the doctor, some are enthusiastic, but there are others who just finish examination. This may explain the percentage of patients satisfied with the consultation of doctors without any difference between provincial and district levels in 2017 and 2018. In every clinic, there are doctors who are loved by patients. than other doctors. Therefore, when evaluating the general consultation of a doctor, it is possible that patients will evaluate the satisfaction score based on the feeling for a doctor (s) they feel more satisfied. Assessments of patients with uneven behavior by physicians in the clinic also show that there is a need to monitor the practice of communication standards between doctors and patients in hospitals to limit behaviors. Negative, affecting the psychology of the patient more.

PATIENT 1: Many doctors are also easy going but many difficult people make me talk uncomfortable.

PATIENT 5: Many people on the face of death still confess my eyebrow, if you take the medicine or not, you will come back.

PATIENT 3: I think a horrible male doctor looks down on me, despises people very badly, like I'm a good doctor, that kind of thing.

PATIENT 4: But Doctor T is friendly.

V1_FGD4_ PATIENT _NT_Province 02

PATIENT 1: Doctor C is also so makeshift and that woman is disgusting, usually she does not ask anything... Bullying people like it is not good, bullying many people is not her only.

PATIENT 2: Only Doctor T is the best in this place.

PATIENT 4: T is the best, treatment and very welcoming communication

PATIENT 5: And the other lady never had anything at all.... She just asked, asked how are you, never asked anything else, asked her then she bullied herself.

PATIENT 1: It's like looking down on me. Yes, that's right.

V1_FGD6_PATIENT_ĐT_Province 03

- *Doctors who have worked for a long time in the provincial or district clinics are evaluated as qualified and very enthusiastic and responsible for patients*

Information from FGD with patients shows that doctors with many years of experience and dedication to patients are often loved and appreciated by patients more than new doctors who do not have much experience in HIV treatment area. Doctors with whom patients have known for a long time often receive positive comments from patients such as "enthusiasm", "carefree", "support", "hug", "joke", etc. “easy to call and ask when there is a problem”,

“nothing to be afraid of, if you have any problems, just ask normally”, “don’t be afraid to talk to the doctor, treat them as my own parents” etc. This shows that the doctor and the patient has built a positive relationship, the patient feels that trusting and loving their treating doctors is very important.

> PATIENT 2: If I come to get medicine every month, I have to tell the doctor if anything. During the month, I took medicine, and where did my pain go, how did I go to the clinic.
>
> Q: That means you should always tell the doctor during the medication distribution.
>
> PATIENT 2: I have a phone number for you guys already. If anything, I could ask if I could take this medicine.
>
> Q: So I'll call right away So call the doctor too.
>
> PATIENT 2: The doctors here are like Mr. D, Mr. K, Mr. A, Mr. H, you like the patient. People are very carefree, very precious the sick. Doctors don't need it. I have not gone to see doctors like this department, giving money not to receive it, to give it to me, not to receive gifts. People are also very carefree. Sometimes taking blood for protection, people do not even wear muscle gloves. Still always cuddling and teasing. Like when I went to the room to sign, there were still teases.
>
> V1_FGD2_PATIENT_ĐT_Province 01

> The doctors below do not know if the doctors here, for example, they cannot eat, cannot sleep, take inappropriate drugs, the doctors ask and ask. For example, I took medicine that I didn't fit and asked why I didn't come up to change medicine. It is an important one, that is a doctor's concern.
>
> V2_FGD3_ PATIENT_ĐT_Province 05

> I remember one time, when I just moved from Vĩnh Long here ... I rode my bike, Doctor A was too tired, so tired, he rode a dozen kilometers, Doctor A came out ... I gave him money to ride a pack, right? riding a bicycle, I can't ride it. The doctor gave away the money.
>
> V2_FGD1_ PATIENT_NT_Province 03

> Since the time when the medicine was taken, there was no such thing as a problem. Just until the month to the month, on time, I will pick up the medicine. Here, we have to go through the insurance and through the machine, in general, if we have a lot of people, we have to wait, the doctors are also good, and they do not show any prejudice against patients .... The doctor is good. I suppose now I ask how much my CD4 is, the doctors will be happy to talk.
>
> V2_FGD12_ PATIENT_NT_Province 04

For patients, the doctor's advice and encouragement have great psychological support for them, helping the patient to be more confident, trying to overcome the disease’s difficuties.

> In general, activities talk more with you than on examination. The doctor asked to see in person? If I do not sign up but I still have CD4 then I'm fine, no effect on the medicine. If there are signs of abnormality, being drunk or wrong, the doctor will change the medicine. But once a drug change is an uncomfortable feeling, treatment should be

persistent. In general, I think that the doctor who has such advice would be better psychologically, help me try harder.

V1_FGD3_ PATIENT_ĐT_Province 02

The information from IDI with health worker also shows that doctors and other health workers who have worked with HIV patients for a long time also have feelings and responsibilities for the patient, they are self-conscious about working for the sake of the patient and believe that they need to try to accompany the patient to overcome the disease.

If I just start, I might still be afraid, but after doing it for a long time, when I see the same situation, see more people's suffering, I feel sorry for them, because if here I am still discriminate against the patient, then who else could they turn to.

V2_IDI10_HW_ĐT_Province 07

- *The new doctors at the district level are not specialized in the field, only give a superficial examination, and seem to discriminate against patients more*

Besides the opinion that doctors at the district level are also very enthusiastic with patients, easy to approach and also support patients right away if they have any difficulties, there are still some opinions that doctors at the district level appear to not have much professional experience in the field, so they have less contact with HIV patients, and tend to stigmatize patients more. Patients who make such comments often have had time at the upper level of treatment (eg, in Ho Chi Minh City or the province), who are also knowledgeable about the disease, and recently transferred to the district leve, and clinics at the district level have only been open for a while, or doctors have just moved from another unit without much experience in providing services to HIV patients.

At first, the doctor also consulted enthusiastically but now he does not see him anymore. Now that you have just arrived, you have to ask about it and ask for a rough idea of how you feel.

V1_FGD4_ PATIENT_NT_Province 02

Q: What else does the content and ideas mean at the district level?

PATIENT 2: Doctors are limited, slightly over the speaker.

PATIENT 4: In my opinion, it is not a little bit over-the-top, the doctors here just like coming back, just joined the HIV segment so they are not specialized, do not know much about this side, so they have to go to higher schools.

V2_FGD1_ PATIENT_NT_Province 03

PATIENT 2: Because that's the case. To be honest, last year, he went to the hospital several times and then went to the district general doctors. I only heard the doctors discussing this patient with AIDS, I just listened and felt good.

Q: That means I feel people have a little bit of …

PATIENT 2: Of course, there is. Normally, they only wear 1 glove but now 4 gloves on. The doctors over here see us, they don't need to be too thorough. The doctors still touch normally but not like that.

Qualitative research results show that, doctors do not have the same treatment and counseling with patients. In the same clinic, there may be a doctor who is more enthusiastic and responsible for the patient than other doctors. Old doctors have more experience, longer time with patients, benefit during the project funding phase (training, financial support, recognition ...) so they have sympathy and understand more deeply the psychological and social difficulties of the patient. On the contrary, the new doctors may be those transferred from other fields (psychiatrist, obstetrician, etc.), they have less training, the subsidy from the project is no longer available, they may be reluctant to accept the assignment because the infectious disease field in general, particularly HIV, is more or less stigmatized compared to other specialties in the hospital. Following the trend of 2019, when district clinics are opened, new doctors are transferred, plus patients can be massively transferred to the locality, which can lead to doctors less enthusiastics to patients, and patients were also less satisfied with the new doctor at the new clinic than with the old doctor at the clinic where the patient had received services before. This can explain the trend of patient satisfaction with doctor's advice in particular and services in general at district clinics, which decreased more sharply in 2019 than at the provincial level and in the years before.

#### 2.2.2.2. *Patient satisfaction with nursing advice*

Table 23: Compare the average satisfaction score on nurse's consultancy

| Group of provinces | Average score (Standard deviation) | | |
|---|---|---|---|
| | Year 2017 | Năm 2018 | Year 2019 |
| Transition in 2017 | 3.61 (0.78) | 3.66 (0.86) | 3.57 (0.53) |
| Transition in 2018 | | 3.74 (0.73) | 3.70 (0.82) |
| Transition in 2019 | | | 3.31 (0.64) |
| **Total** | 3.61 (0.78) | 3.73 (0.75) | 3.50 (0.74) |

*Note: Compare the difference between two means by Bartlett's test*

Table 23 presents the average satisfaction score of patients about the nursing consultation, guidance and explanation over the 3 years of survey. In general, the patients were rated satisfied or higher with the average score ranging from 3.31 to 3.74. The general comparison over 3 years of survey shows that the average score of the survey in 2018 (3.73) is higher than that in 2017 (3.61) with $p<0.05$ and in 2019 (3.50) with $p<0.001$. The average satisfaction score in the survey in 2019 was lower than that in 2017 with $p<0.05$. Thus, the average satisfaction score of the 2019 survey year is the lowest in the 3 survey years.

Comparing the average satisfaction score in the first year among provincial/city clinics shows that the group of provinces transferred in 2018 had a higher average satisfaction score than the group of provinces in 2017 ($p<0.05$) and province group in 2019 ($p<0.001$). The average satisfaction score of the province group in 2017 was higher than that of the group in 2019

(p<0.0001). There was no difference in the average satisfaction score of patients in the group of provinces transferred in 2017 over the 3 survey years. The comparison between the three groups of provinces in the 2019 survey year shows that the group of provinces in 2017 and group in 2018 have a higher average satisfaction score than the group of provinces in 2019 (the difference is statistically significant).

Table 24: Compare the patient's average score of satisfaction with nurse's consultancy by clinic level

| Year | Average score (Standard deviation) | |
|---|---|---|
| | Province/City level | District level |
| Year 2017 (N=509) | 3.57 (0.75) | 3.66 (0,81) |
| Year 2018 | 3.70 (0.76) | 3,82 (0,70) |
| Year 2019 | 3.60 (0.74) | 3,35 (0,73) |

*Note: Compare the difference between two means by Bartlett's test*

Table 24 presents the results of comparison of the average satisfaction scores on nursing consultations by clinic line. The comparison results show that there is no difference between the provincial and district clinics in 2017 and 2018. However, in 2019, the average satisfaction score of the district level was lower than that of the provincial level in the same period. (p<0.0001) and lower than district level in 2017 (p<0.0001) and district level in 2018 (p<0.0001). This score is also the lowest in all 3 years. Comparing the results between provincial clinics over the past 3 years of survey shows that patients at provincial clinics are most satisfied with the advice of nurses in 2018 with p<0.05. There is no difference between 2017 and 2019 (p>0.05).

### Qualitative information has clearly explained the patient's satisfaction in providing nursing consultation services

- *Nursing staff are the ones who spend a lot of time guiding the patient during the early stages of transition*

Information from FGD with patients and IDI with nurses shows that, in the first year of transfer, nursing staff must spend a relatively large amount of time advising, explaining, and instructing patients about the medical examination and treatment process under health insurance at the hospital, the procedures related to buying health insurance and transferring referrals, etc.. This can explain the relatively high percentage of patients who are satisfied with the advice, guidance and explanations of nurses, especially especially at the district level in 2017 and 2018 – the first phase of the transfer was still confusing for many patients. This helps to explain that the satisfaction score of patients at the district clinic on nursing advice is higher than that at the provincial level and higher than the score for the doctor's consultation in 2017 and 2018.

> After transferring to this health insurance, there is a lot to explain to the patient. It is simply a matter of instructing the patient to go from which room to which room to do the test, then to do the scan, then where to bring the documents to assess the health insurance. That is, the educational level of these people is mostly not very high. That's why it's hard for them to remember. Sometimes they go and come back a few times to finish a document.
>
> V1_IDI3_HW_ĐT_Province 01

So we have to take advantage, nurses must be here first, early in the morning before the doctor. Every day, since the morning I was stick with the patients ... Actually, it's really tiring, but we're used to it. Part-time staff, for example, a nursing staff, we do a lot of work. From consulting, making reports, reports are many. In general, just like a superintendent, have to know everything...

V1_IDI8_HW_ĐT_Province 02

- *In new district clinics, patients feel more comfortable asking nurses than doctors*

New patients transferred to the district level need even more guidance in the early stages because they are still confused with the new clinic, the new medical treatment process, and the new doctor. FGD information shows that, in some district clinics, patients feel more comfortable and easier to ask female nurses than doctors. Psychologically, the patient really wants to talk to the doctor; but at the clinic, many there are many patients waiting for the examination, seeing that the doctor is busy, the patient would be afraid to ask the doctor out of fear of disturbing. Therefore, many times the patient keeps to themselves or tries to ask the nurse.

PATIENT 2: Sometimes, people here also have a lot of questions but don't know who to ask?

REPORTER: Haven't you tried, or did you not know who to ask?

PATIENT 2: Don't know how to ask.

PATIENT 5: Some nurses would answer, but shouldn't ask male doctors because mostly they don't want to answer.

PATIENT 3: I find that the clinic is very crowded, so even if I have any questions, I'm afraid to ask. Only when my body is not well or I feel sick, I would only ask the nurse

PATIENT 5: Don't know who to ask, the doctor worked in a hurry and didn't have time to ask.

V1_FGD4_PATIENT_NT_Province 02

- *However, nurses are overloaded with bookkeeping and reporting tasks, so they gradually unable to spend much time with patients*

IDI information with health workers shows that nurses are doing a lot of work in the health insurance examination process and projects and programs. In addition to the work related to patient care, they have to take care of all the jobs related to reading medical records, updating the patient's health insurance card status, entering data on the computer, in the books, program reports, etc., so they wouldn't be able to spend a lot of time with each patient. During the first years of transfer, nurses have to spend a lot of time to guide and explain to patients to adapt to the regulations of health insurance examination. Maybe, because in 2019 when health insurance examination activities have gradually stabilized, nurses will reduce the time spent on consultations to focus on other care tasks as well as books and reports, which already overloaded them. This may explain the trend of patient satisfaction scores on nursing advice decreasing in 2019.

Because of the initial number of patients was too crowded so there was no time, gradually it became a habit. For example, there are patients who go to check for other diseases elsewhere, they are examined, their blood pressure is measured, and then people come back to ask them questions. I answered that I hope people will understand because the number of patients is too crowded. A nurse who just writes a book, just inputs too much, but there is no time to measure blood pressure because now the insurance system has one more thing to check the insurance card to see if it is valid or good. not anymore. It took one more step.

V1_IDI6_HW_ĐT_Province 02

#### 2.2.2.3. *Patient satisfaction with advice/instructions from other health workers*

Table 25: Compare the average satisfaction score on other health workers consultancy

| Group of provinces | Average score (Standard deviation) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Transition in 2017 | 3.57 (0.76) | 3.73 (0.85) | 3.53 (0.57) |
| Transition in 2018 | | 3.62 (0.71) | 3.62 (0.78) |
| Transition in 2019 | | | 3.30 (0.60) |
| **Total** | 3.57 (0.76) | 3.63 (0.73) | 3.46 (0.70) |

*Note: Compare the difference between two means by Bartlett's test*

In general, the average score of satisfaction with the advice of other health workers was 3.0 or higher (equivalent to the "satisfaction" level of the scale) over the survey years. Survey data of 3 years show that patients seem to be more satisfied with the advice of other health workers in 2017 (3.57 points) and 2018 (3.63 points) and less in 2019 (3 points). ,46) with $p > 0.05$.

Comparing the first year between groups of provinces shows that the group of provinces that transferred the project in 2017 and 2018 both had a higher average satisfaction score than the group of provinces in 2019 with $p<0.0001$.

Comparing the average score of the group of provinces in 2017 over 3 years of survey shows that there is no statistically significant difference. Comparing average satisfaction scores of 3 groups of provinces in the survey year 2019 shows that the average satisfaction score of the group of transferred provinces in 2019 is lower than that of the group of provinces in 2017 ($p<0.05$) and lower than the group of provinces in 2018 ($p<0.05$). $p<0.0001$).

Table 26: Compare the patient's average score of satisfaction with other health workers consultancy by clinic level

| Year | Clinic level<br>Mean (SD) | |
|---|---|---|
| | Province/City level | District level |
| Year 2017 (N=509) | 3.56 (0.73) | 3.58 (0.80) |

| | | |
|---|---|---|
| Year 2018 | 3.62 (0.75) | 3.66 (0.66) |
| Year 2019 | 3.55 (0.72) | 3.31 (0.63) |

*Note: Compare the difference between two means by Bartlett's test*

Table 26 presents the results of comparing the average satisfaction scores on consultations of other health workers by clinic level. The comparison results show that there is no difference between the provincial and district clinics in 2017 and 2018. However, in 2019, the average satisfaction score of the district level is lower than that of the provincial level in the same period ($p<0.0001$) and lower than district level in 2017 ($p<0.0001$) and district level in 2018 ($p<0.0001$). There is no difference in average satisfaction scores at provincial clinics over the years.

The support staff is the person most mentioned by the patient in the discussion. In general, patients were very satisfied with the information provided by the support staff who were experienced peers. Previously, the support staff was paid by the project, but now, due to the lack of funding, not all clinics have support staff. Some clinics still raise funds from the province or the hospital or department to pay for support staff. Support staffs are people with H who have experience in treatment and are ready to advise and support patients at clinics. They are approached by patients (met during medical examination, by phone, text message, Facebook, Zalo...) to ask any questions related to the disease and life.

> Advantage is the support staff enthusiastically help us a lot .... She worked for a long time so she was good too, for example, checking records of viral load, for example, we would remind them to see, if any patients have not done it, they will check it if they haven't done it yet. remind. She asked about health insurance, instructions for making referrals of patients very much.
>
> V1_IDI8_HW_ĐT_Province 02

> Here we have the support staff, including those who are ill and those who are not. Because people do not get sick, that is, even the medical staff but do not work in the hospital, but they will do supportive foot treatment, that is both the patient and the patient. Then the Italian components, they are very agile and knowledgeable to advise patients, if patients do not come, they call, and advise patients who are late and do not comply with treatment.
>
> V2_IDI19_HW_ĐT_ Province 04

> The support staff is still present even though she doesn't have any salary, so I urge the director to give her 500,000 VND a month. I've only been able to work for a few months ... the program has been cut off ... she's done it for 8-9 years ... and AIDS Center, how much more to support 1 month ... just a little but not a lot.
>
> V2_IDI20_HW_ĐT_ Province 06

> I was always afraid to ask, but then there was something that people told me. If anything, then ask Ms. L to answer. Ms. Le is like a second family. I can't speak in my family, but she talks all things. Because when talking to her there is closeness, just looking alone will see it. Anything can be said, anything can be confided. She seems to understand everything. For example, if I don't have insurance, I would recommend going here and there. Hospital transfer within 1 year always.

V2_FGD13_PATIENT_ĐT_ Province 06

However, during the transition period, because the support source from the project is no longer available and possibly due to the limited resources of the unit, especially at the district level, gradually the clinics cannot maintain the staff. support member. Perhaps because of this, the percentage of patients satisfied with the advice of other health workers decreased, especially at the district level in 2019.

Q: So you don't have a support staff either. Is there before?

A1: Before, T managed a lot of people, a whole department.

Q: So it's still like that now?

A1: No, there are no [support staff] here anymore.

V2_IDI11_HW_NT_Province 07

#### 2.2.2.4. Health workers that patients like most

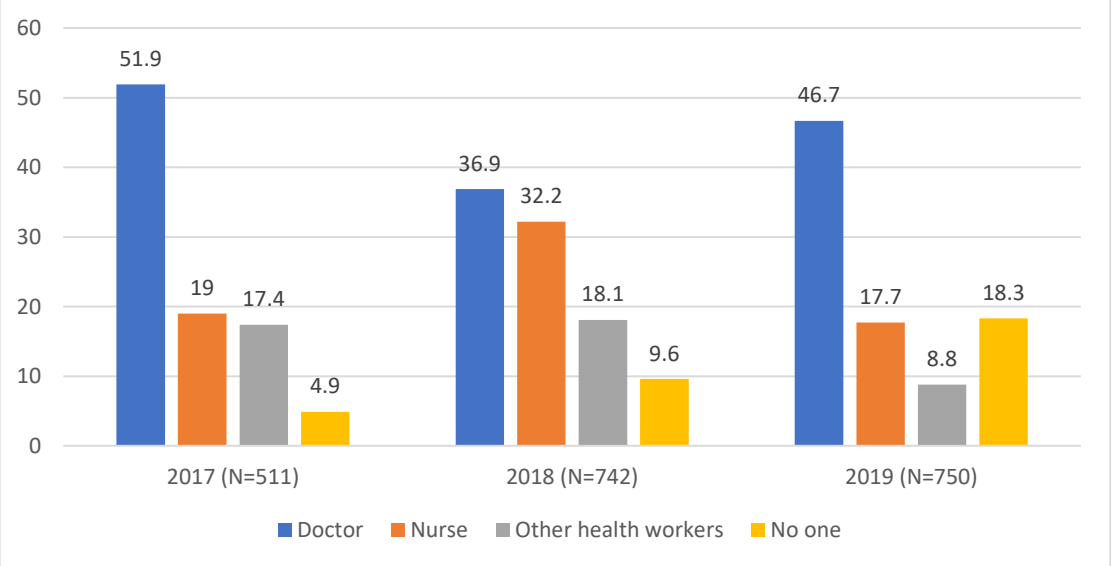



Figure 3: The health workers that patients like most at the clinic

Patient satisfaction with HCWs was also further described through the survey questionnaire to find out who the patient likes to see the most at the current clinic. Survey results show that in all 3 years, patients prefer to see a doctor when going to the examination, accounting for the highest rate compared to nurses and other health workers (Figure 3). However, by 2018, the proportion of patients who liked to see a doctor increased dramatically, and the rate of like to see a doctor decreased significantly, nearly equal to the rate of like seeing a doctor in the same year. This change can be explained based on qualitative information and quantitative analysis of waiting time (see below) and satisfaction with consultation/guidance of doctors and nurses, and the other health workers mentioned above.

According to the results of quantitative analysis, the province groups in 2018 achieved higher satisfaction scores for service delivery and guidance from the health workers compared with the surveyed provinces in 2017 and 2019. Patients with regard to nurses and other health

workers have also increased and is similar to the satisfaction with doctors' consultation. Waiting times for patients in the 2018 survey year are also longer than those in 2017 and 2019. Therefore, although patients still want to see a doctor, to hear their doctor's advice and ask for a consultation. Every time they go to see a doctor, the patient still feels shy, especially those who have just moved to district hospitals or in a clinic where a new doctor is usually more apprehensive when asking the doctor about their questions. me. Due to the work pressure, doctors often just ask quickly if the patient has any health problems, if the patient does not ask anything, the doctor will not exploit further information, examine quickly to call the next person. Maybe so, so the communication between doctors and patients becomes more limited. Under such circumstances, the patient tends to turn to other nurses and health workers to answer their questions. This can explain that the proportion of patients who are satisfied and like to see nurses is equivalent to that of people who like to see a doctor. Therefore, this is a good sign showing the effective and supportive activities in service provision among health workers in the clinic.

The survey results also showed a remarkable point that the proportion of patients who did not like to meet the health worker the most at medical examination tended to increase gradually over the years and sharply increase in 2019 (reaching 18.3%) compared to in 2017 (4.9%) (Figure 3). The increase in patients who no longer feel like meeting someone at medical examination is an indicator that needs attention in the management, care and treatment of HIV patients in the context of transition. Therefore, in order to improve and improve the quality of service delivery and communication between health workers (especially doctors) and patients, it is necessary to have considerations related to monitoring, supportive supervision and evaluation. in providing services to specific groups of patients. On that basis, to promptly grasp the thoughts and aspirations of the health workers as well as those of the patient, especially in the central hospital, to ensure the rights and obligations of both patients and health workers. such as the sustainability of HIV / AIDS treatment and care programs after transfer. At the same time, the work of developing human resources for HIV / AIDS treatment and care also needs more attention, implementing better supportive surveillance to ensure that the next team is trained, trained, and inherited. The good qualities of the team of health workers have been formed in the project phase.

Some clinic leaders who have devoted many years in the field of HIV treatment have also recognized the importance of communication in improving the quality of care and treatment for patients.

The important thing now is to communicate and service for them. Before, their illness was very serious, they came in different then now they are fine now. The only communication is 1, the care for them is 2 to create favorable conditions, because communication is an important factor, I am a doctor when interacting with patients who bring a pleasant feeling, it is easy to reveal the pathology, the difficult problems, they will confess and tell us so we can intervene

V3_IDI22_HW_ĐT_Province 07

### 2.2.3. Patient satisfaction with information security

Table 27: Compare satisfaction score on information security at clinics

| Group of provinces | Average score (Standard deviation) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Transition in 2017 | 3.60 (0.75) | 3.61 (0.87) | 3.67 (9.57) |
| Transition in 2018 | | 3.77 (0.73) | 3.65 (0.77) |
| Transition in 2019 | | | 3.47 (0.62) |
| **Total** | 3.60 (0.75) | 3.75 (0.76) | 3.57 (0.70) |

*Note: Compare the difference between two means by Bartlett's test*

Table 27 presents patient satisfaction scores with clinic information confidentiality over 3 years of survey. In general, patients are rated at satisfaction or higher with scores ranging from 3.47 to 3.77. A general comparison over the three years of the survey shows that the score in 2018 (3.75) is higher than in 2017 (3.60) with $p < 0.05$ and higher than in 2019 (3.57) with $p < 0,0001$. There is no difference between the year of survey 2017 and 2019 ($p > 0.05$).

Comparing the satisfaction score in the first year of the transferred provinces shows that the group of provinces transferred in 2018 had a higher satisfaction score than the transfer province group in 2017 ($p < 0.001$) and higher than the transfer province group in 2019. ($p < 0.0001$). The satisfaction score of the province group in 2017 was higher than that of the province group in 2019 ($p < 0.05$). There is no difference in the satisfaction score of the province group in 2017 over the 3 years of the survey.

Comparing the satisfaction scores of the 3 province groups in the 2019 survey year shows that the satisfaction score of the transferred province group in 2019 is lower than the province group in 2017 ($p < 0.05$) and lower than the province group in 2018 ($p < 0.01$).

Table 28: Compare patient satisfaction scores on information confidentiality at clinics

| Year | Average score (Standard deviation) | |
|---|---|---|
| | Province/City level | Province/City level |
| Year 2017 | 3.34 (0.69) | 3.41 (0.73) |
| Year 2018 | 3.53 (0.72) | 3.60 (0.60) |
| Year 2019 | 3.45 (0.67) | 3.22 (0.60) |

*Note: Compare the difference between two means by Bartlett's test*

Table 28 presents the results of comparing information security satisfaction scores by clinic level. The comparison results show that in 2017, patients at district clinics tended to be more satisfied with information security than patients at provincial clinics ($p < 0.05$). However, by 2019, the opposite trend is when patients at the district level are less satisfied ($p < 0.05$). The satisfaction score of the district level in 2019 was lower than that of the district level in 2017 ($p < 0.001$) and lower than the district level in 2018 ($p < 0.0001$). This score is also the lowest in all 3 years. Comparing the results between provincial clinics over the 3 years of the survey shows

that in 2018, patients at provincial clinics were more satisfied with information security than in 2018 ($p < 0.001$) and 2019 ($p < 0.05$). There is no difference between 2017 and 2019 ($p > 0.05$).

Qualitative information explained about patient satisfaction in information security

- *Feel secure because it's familiar and there are no problems after the time of examination and treatment at the clinic*

Information from FGD with patients at clinics at the provincial and district levels shows that the reason why patients felt satisfied with the confidentiality of information at the current clinic was that they felt familiar and reassured because after a long time of treatment, without any incidents. This can illustrate the survey results with a high percentage of patients satisfied with the clinic's information security over the years. For patients who have chosen to visit a district clinic near their home, they are familiar with and trust the clinic's confidentiality. Those who agreed to voluntarily transfer to the district level during the first year of transfer were also those who were not as worried about possible information disclosure as patients who wanted to stay at the provincial level. It is worth noting that in 2017 and 2018, the transfer of patients to lower-level hospitals was carried out very carefully, with attention being paid to counseling and empowering patients in choosing a hospital. where will continue to examine and treat (this content was mentioned in the analysis of patient satisfaction with general services above). In case the patients were not ready to go to the lower level, they can still continue to be examined and treated at the provincial hospital; even patients who have been transferred to the district level can still apply to be transferred to the provincial level for examination and treatment.

> Interviewer: How the clnic keep your information when you take the medicine here?
> Patient 5: They hide it for us .... No one knows. Everyone keeps your information confidential so no one is afraid of going away on the street. They also hide for us.
> Interviewer: How does it feel to take medicine at your home place like this?
> Patient 4: It's more convenient here.
> Patient 5: I'm used to it.
>
> V2_FGD7_PATIENT_NT_Province 07

- *Patients who do not want to be transferred to the district level because they are more concerned about information disclosure due to meeting acquaintances at the hospital and then being criticized than because of the confidentiality of information of the district clinic*

Many patients think that one of the reasons why they did not want to move back to the locality was because they were afraid that if they go to the district hospital near their home, they will meet someone they know at the hospital. Acquaintances can be doctors and health workers of the hospital or acquaintances who also go to that hospital for medical check-up, and then have complaints, gossip, and information disclosure that leads to self and family problems, especially their children would be stigmatized, shunned, affecting their education. Some people even shared that they wanted to go to the provincial level for treatment, but was still afraid of being exposed when going to the district hospital to ask for a referral. Therefore, patients who are being examined and treated at provincial hospitals may be the ones who are more worried about the security of their information. This could explain the fact that patients at the provincial hospital's clinic had a slightly lower satisfaction score on information security than patients at the district clinic in 2017 and 2018.

When I returned there, I was worried about the security of my information. I went to the district where I lived, afraid to meet someone I know.

V2_FGD7_ PATIENT_ĐT_Province 05

Patient 3: I do not want to transfer to the district level.

Patient 4: I did not want to move there because I had many acquaintances at home, so in the past, I told them to come here, but I did not dare to take it, and then went to Hanoi to get it. Now I come here.

Patient 3: Very worried. Now that people send me to the district, I am very worried. It disturbs everything. Before that, no one knew but now, the other was disrespectful and then told to the other.

Patient 2: So this OPC was so close to my house ... Almost every month, every week, every day, my acquaintances came out. But when I went to get medicine at the OPC, sometimes it was still embarrassing.

V1_FGD2_PATIENT_ĐT_Province 01

- *The process of transferring patients to the locality and assisting in the purchase of health insurance cards for patients may affect patient satisfaction regarding information security at district clinics in 2019*

As analyzed above, the transfer of patients to the locality was carried out cautiously by provincial hospitals in 2017 and 2018, whereby patients were consulted and selected a clinic in accordance with their wishes. However, by 2019, some areas have transferred all or most of the patients to their areas, not accepting new patients or patients at the district level for examination and treatment. The patients were no longer able to decide, instead, the provincial hospital's clinic contacts the district clinic to transfer the patient to the locality. Accordingly, patients who are already very worried about information disclosure, so when they are transferred to the district level, they will feel even more worried about the security of their information. It takes time for them to get used to and feel comfortable with the new clinic.

The district here has opened very early, so now there will not be a rushing situation to bring patients back to the locality, because due to the problem of the staff reduction project, people reduce the personnel, reduced funding, they did not earnestly do it, and then they rushed patients back to their localities, nothing happened, reduced staffing, reduced project funding so they cut them, they moved back in spite of that, that was very dangerous for patients, will face many difficulties, because patients who choose here [provincial hospital] are having problems that cannot be treated [at district hospitals] so they have to be here.

V2_IDI9_HW_ĐT_Province 07

Another reason why patients were not satisfied with information security was related to updating personal information of patients to issue free health insurance cards for HIV patients. In this synthesis process, confirmation at the commune/ward level was required, which may led to disclosure of information where the patient lives. In addition, some health workers have a less discriminatory view of HIV and HIV patients on the one hand, but on the other hand, it may also happen that they are less cautious in the process of patient transfer and update

patient's personal information. These may explain why the satisfaction score of patients at the district hospital dropped sharply compared to the satisfaction score of patients at the provincial level in 2019 and was the lowest score in all 3 years of evaluation.

> Previously I was treated in Hanoi, it was tight, no one know. But then, when I returned to the province, I would have to take it to the district, only the district hospital would know it, but then the insurance would send me to the commune and commune to ask for the insurance number to be issued to H patients, I think they had already known. If they brought them to the commune, they already knew that one of them would be closed and the other two would be open.
>
> V2_FGD1_ PATIENT_Province 01

> In fact, in my opinion, it is necessary to gradually treat HIV patients as ordinary patients. Because they take the pill regularly, they still give birth to normal children, they take the medicine evenly, they still live normally without decreasing the life expectancy, ... they are still like ordinary normal people, right.
>
> V3_IDI5_HW_ĐT_Province 04

Qualitative research results show that patients' need for confidentiality was very high. This need becomes even more urgent in the context of transferring patients to the local area for examination and treatment, close to where they live. Therefore, to ensure the sustainability of the transfer of health insurance services to local patients, the organization of clinics and service provision still needs to focus on convenience and friendliness for patients; ensuring privacy, confidentiality, helping patients feel more secure every time they come to the medical facility for medical examination. In addition, the local health insurance support for HIV patients should be organized more carefully on the basis of ensuring that the patient's personal information and health status are kept confidential at all levels.

### 2.2.4. Appointments, waiting times and satisfaction of patients at the clinic

#### *2.2.4.1. Appointments*

Table 29: HIV appointment and receiving appointment at clinic

| | Year of survey<br>n (%) | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| The appointment schedule has been | 507 (100.0) | 683 (92.0) | 646 (86.1) |

| | | | |
|---|---|---|---|
| determined for the previous visit | | | |
| No appointments available | 0 (0.0) | 59 (7.9) | 104 (13.9) |
| **Total N (%)** | **507 (100.0)** | **742 (100.0)** | **750 (100.0)** |

*Note: Compare the difference between two means by Bartlett's test*

Table *29* shows that, in 2017 and 2018, the majority of patients had scheduled appointments and provided drugs during the previous visit (92% -100%). This rate gradually decreases to 86.1% in 2019. At the same time, the proportion of patients having an appointment before going to the examination gradually increases to 7.9% in 2018 and 13.9% in 2019 (p <0.001). There is also no accurate evidence to explain the increase in the proportion of patients who must have an appointment before visiting in 2019. Quantitative data shows that among 163 patients (6.2%) have time Treatment in the clinic less than 12 months only 5 people have to make an appointment before visiting. Therefore, it is possible to eliminate the possibility that the patient first visits the clinic, so an appointment must be made in advance. Qualitative information shows that patients are experiencing difficulties with the consistency of the examination schedule due to living and work arrangements. It is likely that these patients want to change the appointment sooner or later to suit their personal time, so they had to contact to change the appointment. PVS information with NYVYT shows that clinics tend to keep patient's examination schedule to monitor adherence to treatment, but in some necessary cases there can be flexibility to facilitate real patients. is now more adhere to treatment.

### *2.2.4.2. Waiting time*

Waiting time is also an important indicator of service quality. In this analysis, waiting times for examination will be compared between survey years, comparing each group of provinces transferred over years, and between groups of provinces in the survey year 2019.

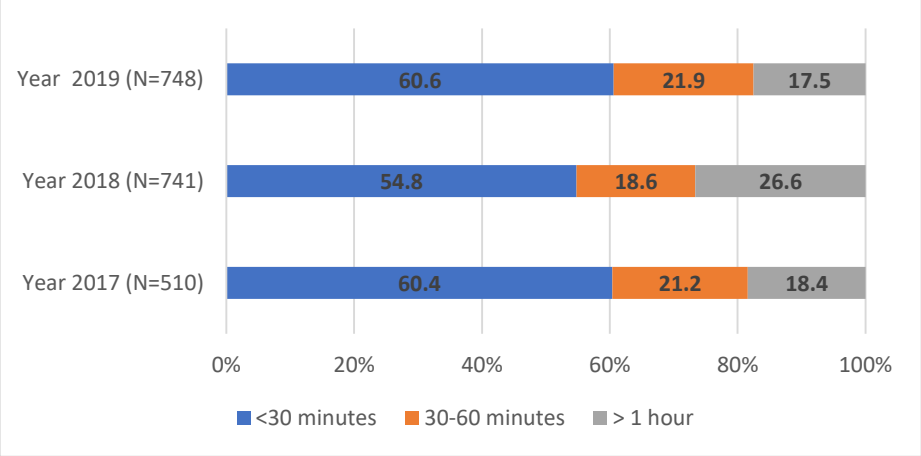



Figure 4: The time the patient waited for examination over 3 years of survey

Figure 4 illustrates the distribution of the time the patient waits for their turn at clinics over the 3 years of the survey. The results show that about 60% of patients are examined within 30

minutes of waiting. Waiting time for patients to wait longer than 1 hour accounted for the highest proportion in 2018 (26.6%) compared to 2017 (17.5%) and 2019 (18.4%).

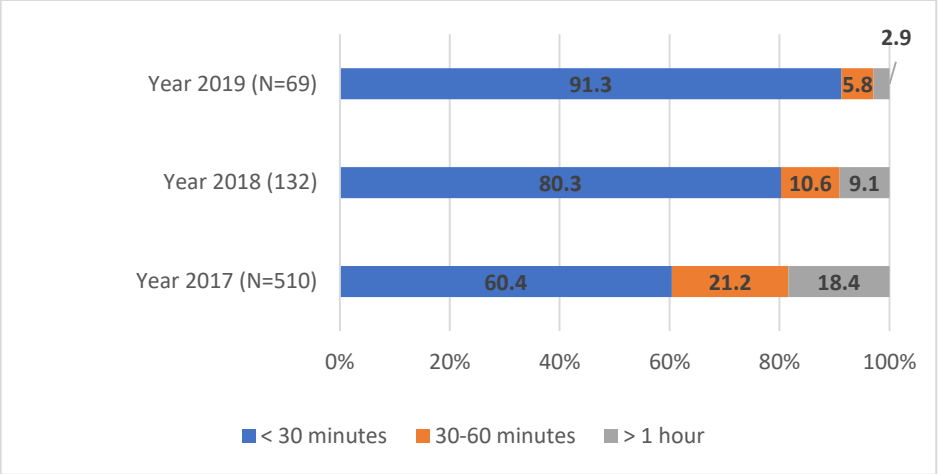



Figure 5: The time the patient waited for examination in the transfer provinces of 2017 was through 3 survey rounds

**Error! Reference source not found.** illustrates the change in the time patients wait at clinics in transitional provinces in 2017 over 3 years. Results showed that there was a significant improvement in the proportion of patients waiting for examination less than 30 minutes over the 3 years of the survey. This rate reached 60.4% in the first year of implementing the transfer, increasing to 80.3% in 2018 and reaching 91.3% in 2019. Similarly, the provinces transferring in 2018 also had significant improvements. in terms of reducing waiting time for patients, specifically, the percentage of waiting time less than 30 minutes increased from 49.3% (in 2018) to 60.5% (in 2019) (Figure 6).

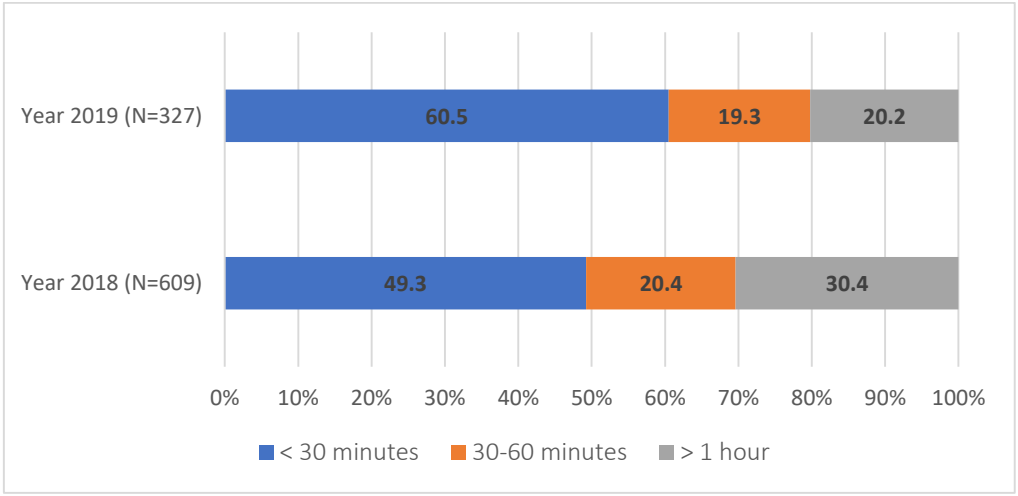



Figure 6: The time for patients waiting for examination in the transfer provinces in 2018 was through 2 survey rounds

Figure 7 compares the distribution of waiting times of patients among transfer provinces in the year of the 2019 survey. The results showed that the patient waiting time in the clinic of the transfer provinces in 2019 was the longest. The waiting time is decreasing and the shortest among the transfer provinces in 2017. This can be explained by the group of transfer provinces

in 2019 being the first year, so there will be disturbances affecting the waiting time for medical examination. Disease and the good signal is that there have been improvements over time as provinces have made a transition for 2-3 years.

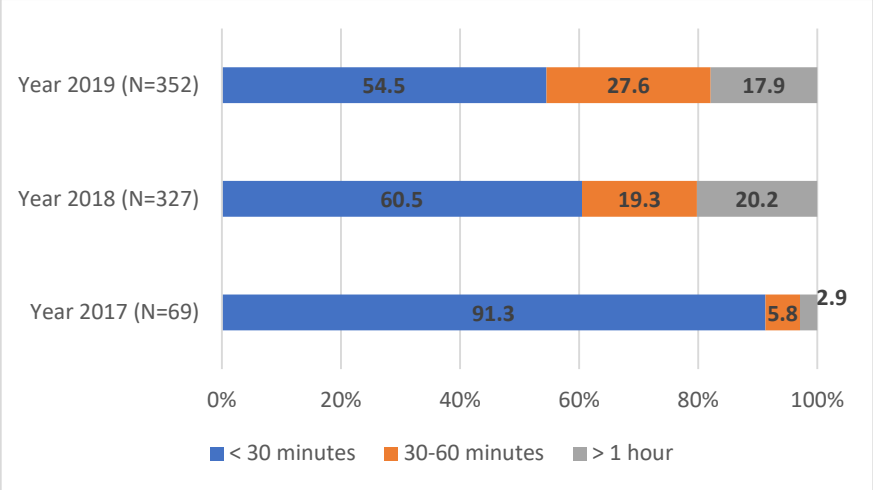



Figure 7: The time the patient waited for the examination between provinces transferred in the survey year 2019

Following the assessment of waiting time, patients were asked to self-assess their perception of the level of waiting on the levels of "long / very long", "relatively long", and "not long".

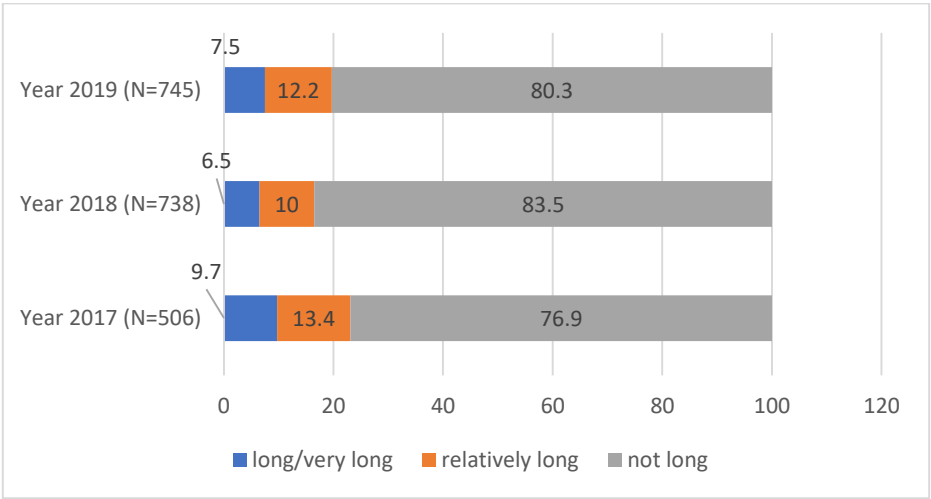



Figure 8: Feeling of patients about about waiting time over 3 years of survey

Figure 8 illustrates the patient's assessment of the degree of waiting for the visit at clinics over 3 years of survey. The results showed that patients had a longer feeling of waiting in the 2017 sample (23.1% believed that waiting time was very long / long or relatively long) compared to 2017 (16.5%) and 2018 (19.7%). Although the wait time in the 2018 sample is the longest (Figure 4) but the rate of patients evaluated as long / long and relatively long is not the highest. This may explain the perception of patients in 2017 as the first year of implementing health insurance examination, they have a comparison with the year before the program program examination, so they feel like they wait longer. By 2018, patients are more familiar with the health insurance examination procedures since 2017, so the feeling of waiting is no longer seen as last year.

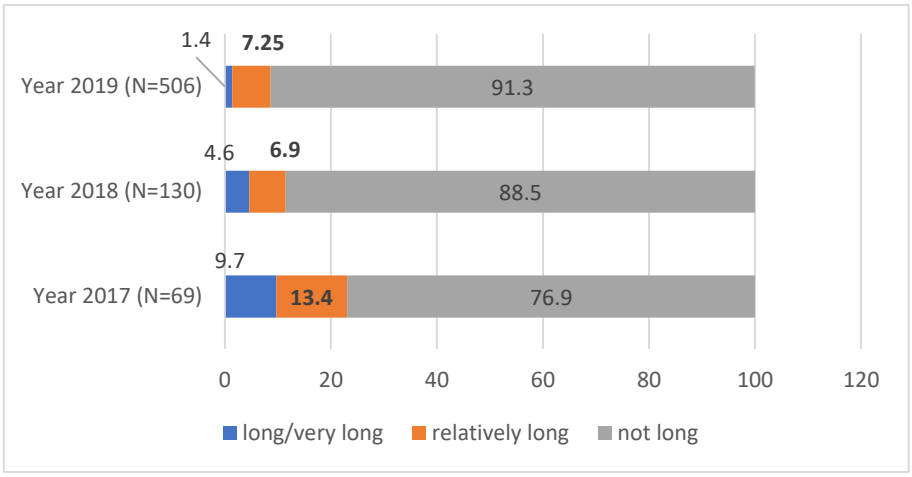



Figure 9: Feeling of patients about waiting time for examination by patients in the group of provinces transferred in 2017 through 3 survey rounds

**Error! Reference source not found.** illustrates the change in the patient's assessment of wait levels in clinics in transition provinces in 2017 over 3 years. The results showed that the percentage of patients who rated the wait as not long increased gradually over the 3 years of the survey. Specifically, this rate reached 76.9% in the first year of transfer (2017), increased to 88.5% in 2018 and reached 91.3% in 2019. In 2018, the proportion of patients with positive assessments of the waiting level is very high, accounting for 93.6% -94.4% in the two years 2018-2019 (Figure 10).

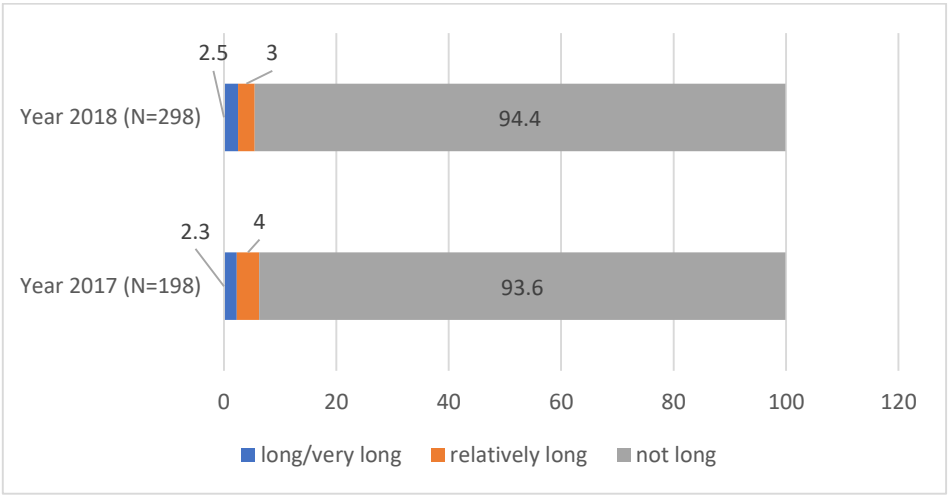



Figure 10: Feeling of patients about waiting time for patients from the province transferred in 2018 through 2 survey rounds

**Error! Reference source not found.** shows a comparison of the assessment of patients among the transfer provinces in the year of the 2019 survey. The results show that patients at clinics in the transfer province group 2019 have assessed the waiting time as very long/long or the highest relative income (27.6%) compared to the two groups of provinces in 2017 (8.6%) and 2018 (13.7%). Thus, clinics belonging to the transfer province group in 2017 have greatly improved in reducing waiting time and won a positive assessment of patients on waiting time after 3 years of transition.

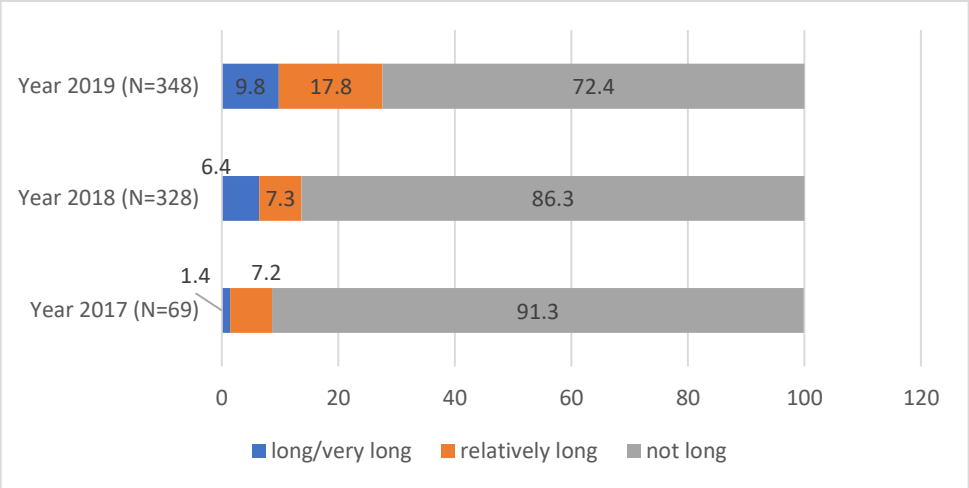



Figure 11: Feeling of patients about waiting time for patients from the province transferred in 2019 through 2 survey rounds

*2.2.4.3. Satisfaction with waiting time*

Table 30: Compare satisfaction score on patient waiting time at clinics

| Group of provinces | Average score (Standard deviation) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Transition in 2017 | 3.11 (0.64) | 3.57 (0.89) | 3.36 (0.51) |
| Transition in 2018 | | 3.36 (0.68) | 3.57 (0.89) |
| Transition in 2019 | | | 3.11 (0.49) |
| **Total** | 3.11 (0.64) | 3.39 (0.72) | 3.24 (0.62) |

*Note: Compare mean difference by Bartlett's test*

Table 30 presents the satisfaction score of patients about waiting time for examination in clinics over 3 years of the survey. In general, patients assessed at the level of satisfaction or higher with a score ranging from 3.11 to 3.57. A general comparison over the 3 years of the survey shows that patients are more satisfied with the waiting time for examination in 2018 (3.39) compared to 2017 (3.11) with $p < 0.0001$ and in 2019 (3, 24) with $p < 0.001$. The score for 2017 is higher than that of 2019 with $p < 0.001$.

Comparing the first year among provinces shows that, the group of provinces transferring projects in 2018 had a higher average satisfaction score than the province group in 2017 ($p < 0.0001$) and higher than the province group in 2019 ($p < 0.0001$). There is no difference between the scores of 2017 and 2019.

Comparing the satisfaction score on the waiting time for examination of the group of provinces transferred in 2017 over the 3 years of the survey shows that the score in the first year (2017) is lower than in 2018 ($p < 0.0001$) and 2019. ($p < 0.05$). There is no difference between the second year (2018) and the third year (2019) in patient satisfaction. Thus, in this group of provinces there has been an improvement in waiting time for examination and patients are also more satisfied in the following years.

Comparing 3 groups of provinces in the survey year 2019 shows that the two groups of provinces 2017 and 2018 both have higher satisfaction scores than in 2019 with $p < 0.001$. There is no difference between the province group 2017 and 2018. This can be explained by the fact that the group of 2019 provinces carried out the transfer in the first year, so there were disturbances affecting waiting time and satisfaction of patients about waiting time for examination than the two previously transferred provincial groups.

Table 31: Compare patient's satisfaction score on waiting time by clinic level

| Year | Average score (Standard deviation) | |
|---|---|---|
| | Province/City level | District level |
| Year 2017 | 3.09 (0.64) | 3.14 (0.63) |
| Year 2018 | 3.37 (0.76) | 3.47 (0.59) |
| Year 2019 | 3.30 (0.65) | 3.13 (0.54) |

Table 31 presents the satisfaction score of patients about waiting time by clinic level over 3 years of the survey. The analysis results show that, there is only a difference in patient satisfaction with the provincial and district clinics in the survey data in 2019. Specifically, patients at the district level are less satisfied than waiting time for patients at the provincial level ($p < 0.001$). A comparison between provincial clinics by year of survey shows that patients are least satisfied with the waiting time of 2017 ($p < 0.0001$). In contrast, patients at district clinics were least satisfied in 2019 and 2018 with the highest satisfaction score ($p < 0.0001$).

From the above survey results, it shows that there is no consensus between waiting time for examination and the feeling of waiting for long time and patients' satisfaction with patient waiting time in the past 3 years. Although patient waiting time is the longest in 2018, but feeling long and dissatisfied with waiting time accounts for a high proportion in 2017. This can be explained by many changes in 2017. Newly following the process of insured medical examination, the patient may have negative feelings about this change. By 2018 and 2019, patients have gradually adapted to the insurance examination and procedures, so they can feel more positive.

This result is also very similar to the trend that patients are more satisfied with the services provided and advised by doctors, nurses, and other health workers in 2018 as analyzed above. This shows that, HIV / AIDS treatment and care activities in 2018 are highly appreciated by patients in terms of both service providers and service providers; and maybe the patient has to

wait longer because the patient is spending more time consulting and examination by the doctor and other health workers, so they are more satisfied.

Qualitative information helps to explain in more detail patient satisfaction about waiting time at the clinic.

- *Patients have to go through many cumbersome and complicated administrative procedures, so they are not satisfied with the waiting time in the first year of transfer*

The results of group discussions with patients showed that, in the initial stage of transfer, most patients were not satisfied with the waiting time at the clinic because it was related to administrative procedures that they had to carry out such as: go to get transfer papers at lower-level hospitals, queue up to register for examination and submit documents, get stamps between departments while the patient doesn't want to have to go back and forth in the hospital or ward a lot for fear of being seen by acquaintances , and will be suspected.

> In general, the patients want to hurry to go home. Since the end of the program, it was cumbersome ... and stamp a lot of things. Sometimes I can't get medicine for the whole day.
>
> V1_FGD2_PATIENT_ĐT_Province 01

However, by the second year of the transfer operation (2018), it seems that the patients were more familiar with the medical examination and treatment procedures covered by health insurance, so they also easily accepted the procedures and felt more comfortable with the waiting time.

> From the last 2 years, I have to go to the clinic to get a number and then examine it like a normal patient. I have to go in to get medicine, then wait and then sign the papers, get the appointment letter, get the insurance paper and then go back, it's also a bit long.
>
> V2_FGD4_PATIENT_ĐT_Province 05

> … First come first serve. It's like when the doctor is seeing someone else, I have to wait but that's normal and nothing ... Normal .... Until then, doctors still have to do paperwork continuously.
>
> V3_FGD9_PATIENT_ĐT_Province 06

- *Patients in some areas have to regularly do tests and other paraclinical techniques, so they find the time to visit the doctor longer*

In some areas, patients believed that the longer waiting time is because they had to do more tests, scans, and ultrasounds than before. The rationale for the physician's appointment of the patient for more frequent testing was outlined in the review of service delivery changes above. Although patients were also aware that testing is good for them, the psychology of patients who go to the doctor only wants to finish work quickly to go back to work, rest, or do not want to stay at the hospital for a long time out of fear of being seen by someone they know.

> It's only good for me but sometimes it is cumbersome and there are people there while sometimes I want to hide, I don't want to meet anyone…. The day before [from 2016 and earlier], I only came to take it and then I went back, only tested once every 2-3

months…. Now, every month, I have screening, ultrasound, blood collection. Every month, there will be 3 rotations ... Afterward, you have to wait for the doctor to give the medicine .... Wait until you have to sign things before you can go home.

V1_FGD2_PATIENT_ĐT_Province 01

2-3 months to do this test .... Like me last year I had to do 4-5 times.

V2_FGD13_ PATIENT _ĐT_ Province 06

That's right, 2 months to check 1 time or 2-3 months to check once, all checks are okay, take the whole session but give 2-3 months to check 1 time. A year is divided into 3-4 periods or something. If they go to the emergency room, they won't say it, but if they don't do it, they can go home quickly. The first is work. The second is that people come here, people are also afraid to meet. As I came here, I was also afraid, unfortunately, I met the neighbors, acquaintances here people asked how to come here ... People see, people know and then people ask the room's protection to treat something, protection comes out of HIV, the treatment that people find themselves in.

V1_FGD2_PATIENT_ĐT_Province 01

Information from IDI with health workers and FGD with patients showed that there is a phenomenon of patients refusing to take tests to get home quicker.

People don't even want it, people refuse it ... people just need medicine. Tell them that if you take these medications, it affects your liver and kidneys. You need to do these to check this to see if the medicine has any problems. when they were treated early, they said, “No, I won't do it, I will do it next month, I'm normal, I'm still fine, I don't need to do it…. Come on, I'm busy, let me do something quickly”.

V1_IDI4_HW_ĐT_ Province 01

Explaining the patient's longer waiting time than before, some health workers said that the total working time of the clinic did not change much compared to before. Before the transition period, the number of patients in each clinic was larger. But after the transfer, the number of staff at the clinic also decreased a lot, plus the shift to medical examination by insurance required a stricter process, more bookkeeping and was more complicated (related to data entry software), hence requires health workers to spend more time recording and synthesizing data. This can also lead to patients having to wait for their turn for a longer time.

In general, the results of the assessment of patient satisfaction about HIV/AIDS treatment and care services during the 3 years of transfer show that patients tend to be satisfied with the general services of the clinics. Patients were most satisfied with service delivery in 2018 and patient satisfaction at the district level in 2019 tended to decrease. Specifically, patient satisfaction scores at the district level in 2019 all decreased at the district level in all areas: general service delivery; advice and interpretation of instructions from doctors, nurses, and other health workers; waiting time; and information security. The decrease in patient satisfaction at the district level in 2019 may be related to the results of "massively" transferring patients to district hospitals not based on the patient's wishes, leading to socio-mental difficulties for patients when they come for examination and treatment at district clinics. In addition, receiving an additional number of newly transferred patients can also cause overload,

exceeding the capacity of district clinics to provide quality services. This content will be discussed more in the analysis of difficult factors for clinics in the transfer process, which can affect the decrease in patient satisfaction, especially at the district level, in 2019 as the above results described.

## 2.3. Coverage of HIV/AIDS care and treatment activities by outpatient clinics

The assessment of coverage of HIV/AIDS treatment and care activities was initially designed based on secondary data collected from the locality (provincial level and clinics). However, it is very difficult to collect secondary data in provinces and clinics because the aggregated data were not consistent on variables/indicators between the province and clinics, between clinics and hospitals. This led to incomplete data and not similar between units to be able to compare. For example, while the figures for 2017 and 2018 are for the whole year, the figures for 2019 only aggregate nine months. Therefore, in the following presentation, the research team can only describe some of the main content on the basis of data availability. Therefore, in this part, assessment metrics were collected based on post-transfer follow-up reports provided by CDC. Detailed results of post-transfer monitoring program data can be found in another CDC and Project report.

### 2.3.1. Multi-level model of transferred provinces

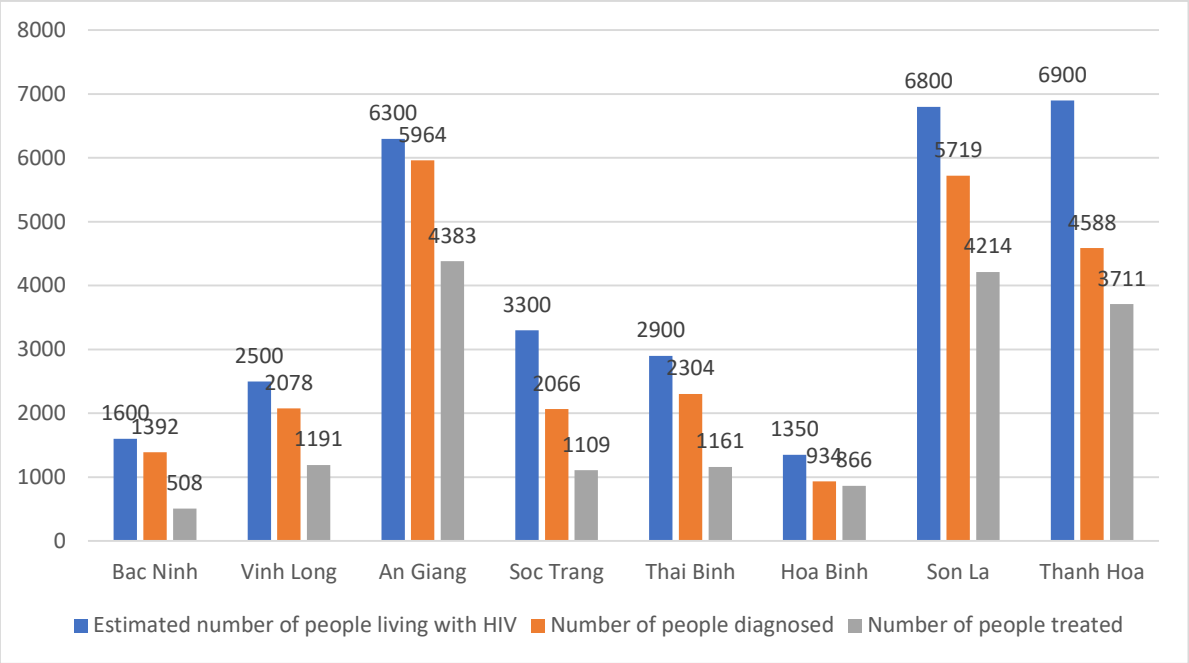
The analytical tool "Multi-Level Modeling" was applied in a comprehensive prevention and care program to identify gaps and shortcomings in the service delivery system that affect the effectiveness of prevention, care, and HIV treatment. The multi-step model assesses the successive stages that each infected person goes from initial diagnosis to successful control of virus growth. Correspondingly, the multi-level model presented below includes three components: an estimate of the number of people living with HIV, an estimate of the number of people diagnosed, and an estimate of the number of people receiving treatment.

Source: Patient loss tracking data managed and provided by CDC.

Figure 12 and Source: Patient loss tracking data managed and provided by CDC.

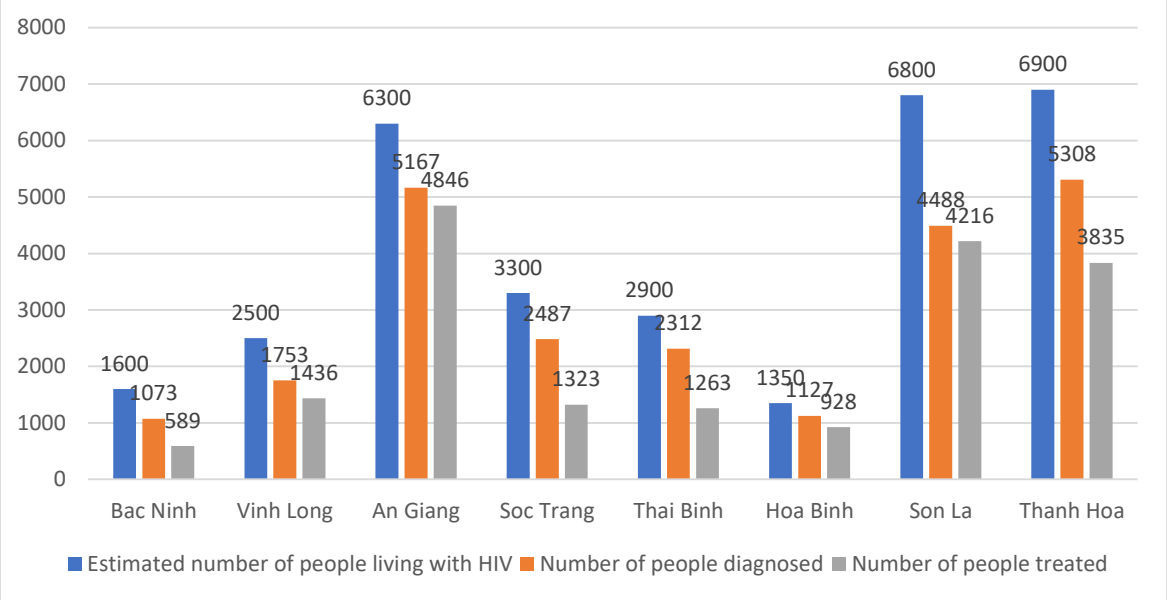
Figure 12: Multi-level model of monitoring in provinces in 2017

presents the estimated number of infected people recorded by provinces from 2017 to 2019. The data source is compiled by a group of experts in charge of data from PEPFAR in collaboration with the M&E department of VAAC - Ministry of Health. provisional economy for use in provincial planning. Number of diagnoses reported from case surveillance system – adjusted based on assessment of reported data quality, number of treatments reported directly on program data reporting system – C03 of VAAC. It is worth noting that the 2019 chart has had a relative adjustment in the number of people diagnosed with HIV because the cleaning of infected management data has been carried out in a number of provinces. Some reporting errors such as duplicates; bogus patient data were removed from the report.




Source: Patient loss tracking data managed and provided by CDC.

Figure 12: Multi-level model of monitoring in provinces in 2017




Source: Patient loss tracking data managed and provided by CDC.

Figure 13: Multi-level model of monitoring in provinces in 2019

Although the transition time of the variables in the study is different, within the scope of this report we do not aim to make a detailed comparison for each province before and after the transfer. In general, Source: Patient loss tracking data managed and provided by CDC.

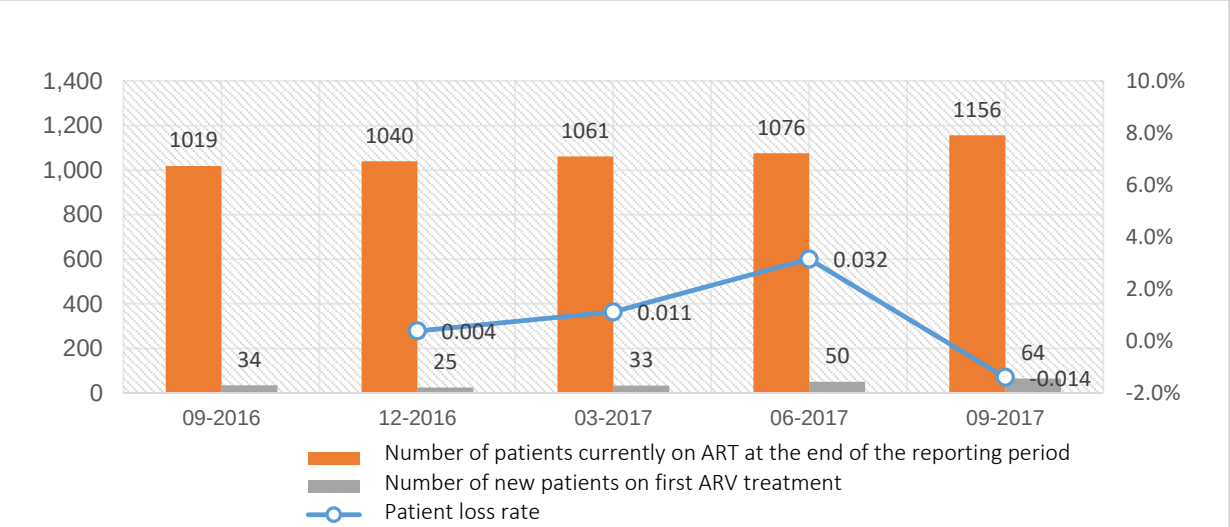
Figure 12 and Source: Patient loss tracking data managed and provided by CDC.

Figure 12: Multi-level model of monitoring in provinces in 2017

shows that after the transfer, the number of patients being treated is relatively stable, there is no change in loss. In some provinces, the number of patients has increased relatively well, such as An Giang and Soc Trang. This shows that services at the provincial and district levels have been maintained relatively effectively during the transition period 2017-2019.

### 2.3.2 Monitoring patient losses and some lessons learned

In this section, we describe a case of monitoring patient loss during transfer at HIV outpatient clinics in Vinh Long province based on US CDC tracking data in Hanoi as an example for the efforts to ensure coverage during treatment.




Source: Patient loss tracking data managed and provided by CDC.

Figure 14: Monitoring patient loss at HIV outpatient clinic in Vinh Long

US CDC tracking data shows that the patient loss rate in Vinh Long province suddenly spiked to 4% in the second quarter of 2017 - 3 times higher than the expected 1.25% ( Source: Patient loss tracking data managed and provided by CDC.

Figure 14). As soon as the problem was discovered, the US CDC working group together with the Department of HIV/AIDS Prevention and Control came to work in the province to find out the problem and find a solution. One of the reasons pointed out is that due to the incorrect understanding of health insurance, patients mistakenly believe that after the transfer they will not be able to visit the provincial hospital anymore because health insurance will not pay. After trying to contact the patient again to explain, 20 of 30 cases reported as dropping out of previous treatment returned to the hospital and continued treatment.

### 2.3.3. CD4 and viral load monitoring tests in outpatient clinics

In the framework of monitoring the program after the transfer, the outpatient clinic quality improvement program data is reported annually to the VAAC - US CDC project. The following data tables are taken from the post-transfer tracking data provided by the project. However, data were not collected in all of the assessed provinces because the data were not available locally or were not reported to the project.

Table 32: The percentage of outpatients who received a CD4 test at least once in the past 6 months

| Province | Year 2017 (%) | Year 2018 (%) | Year 2019 (%) |
|---|---|---|---|
| Bac Ninh | N/A | 100% | N/A |
| An Giang | *24.5%* | *77.2%* | N/A |
| Hoa Binh | 57.7% | N/A | N/A |
| Soc Trang | 73.6% | 85.0% | N/A |
| Vinh Long | 47.9% | 69.6% | N/A |
| Thai Binh | 46.8% | N/A | N/A |
| Thanh Hoa | - | - | 100% |

Source: Data provided by the CDC-VAAC Project (in lowercase) and some data collected by the research team in the provinces (in italics). N/A: No data available.

Table 33: The percentage of outpatients who received a CD4 test at least once in the past 12 months

| Tỉnh | Năm 2017 | Năm 2018 | Năm 2019 |
|---|---|---|---|
| Bac Ninh | 70.5% | 9.8% | N/A |
| An Giang | *96.5%* | *98.5%* | N/A |
| Hoa Binh | *65.4%* | N/A | N/A |
| Soc Trang | 100.0% | 86. 7% | N/A |
| Vinh Long | 76.9% | N/A | N/A |
| Thai Binh | 86.0% | N/A | N/A |
| Thanh Hoa | 93.7% | 98.0% | 82.4% |
| Son La | N/A | 54.3% | 69.8% |

Source: Data provided by the CDC-VAAC Project (in lowercase) and some data collected by the research team in the provinces (in italics). N/A: No data available

Table 33 and Table 34 shows that after 2017, the data from the activities to improve the quality of perinatal care in these localities are incomplete, the percentage of patients who are periodically tested for CD4 is no longer recorded in 2019 (except for Thanh Hoa province). could

be explained by a change in treatment guidelines, as PKNTs have begun using an alternative viral load monitoring test. However, the underreported rate of routine viral load testing of patients also indicates a disruption in routine testing of patients at ICPs during this transition period.

Table 34: Percentage of patients have ARV treatment at the clinic from the patient's point of view

| | N (%) | | |
|---|---|---|---|
| | Year 2017 | Year 2018 | Year 2019 |
| Always receive medication | 491 (96.7) | 737 (99.3) | 728 (99.2) |
| Not getting enough medication each time you are late for your appointment | 12 (2.4) | 5 (0.7) | 3 (0.4) |
| Didn't receive medication and the reason was unknown | 5 (1.0) | 0 (0) | 1 (0.1) |
| Did not receive medication and know the reason (arrive earlier than appointment / coverage expired) | 0 (0) | 0 (0) | 2 (0.3) |
| **Total** | **508 (100)** | **742 (100)** | **734 (100)** |

Table 34 presents the results of a patient survey on receiving adequate medication at each medical visit. In general, patients receive full medicine at each visit. A certain percentage of patients do not receive enough medication possibly because they arrive later than scheduled. The health worker explained that patients can come 1-2 days earlier to receive full medicine, however, if they come later than the scheduled appointment, the pharmacy staff will actively reduce the amount of medicine of the days that are overdue. Besides, through observations at some clinics, mainly at the district level, there were 1-2 cases of patients coming to the clinic late in the day, the clinic ran out of medicine because they had not been able to return from the province in time. In this case, the clinic contacted the nearby district clinics to borrow the medicine and made an appointment that the patient could come back the next day to receive the medicine.

### Qualitative information explaining service coverage

- *Provincial, district/city hospitals are capable of performing all kinds of paraclinical tests, scans and these services are covered by insurance, so patients can use services more fully*

  As you said, in the past, when the medicine was provided, the patients came here and asked for some information, but they were not asked carefully and the tests like blood test or whatever were not checked regularly like now and there are some cases were late. But now it not has every month but every month will have to come here to see what the situation is like, what to do. For example, if someone came here to tell me how bad a headache is, if we were afraid of getting encephalitis, we immediately had a CT scan. All subclinical examination, we can do it all.

V1_IDI3_HW_ĐT_Province 01

- *However, due to the change in financial support, some testing services are not performed as routine as before, making it difficult for doctors in the treatment process and assessment of treatment results for patients*

Due to changes in financial support from the project to insurance payments, the project had cut some services for patients. Currently, the project only provides funding for ARV drugs for all the project provinces and the cost of viral load testing for some provinces has not yet been transferred. OI drugs and baseline tests are now covered by insurance, however, there are still some tests that are not covered by insurance (eg, CD4, viral load, hepatitis C) leading to difficulties for HIV diagnosis and treatment.

- *In order to reduce costs for uninsured patients, treating doctors may not assign or delay some basic tests for patients*

In addition, in some areas, because there is still a certain percentage of patients who do not have health insurance, health workers have considered to reduce costs for this group of patients by reducing the types of tests that was "not necessarily needed". Doctors will order tests for patients without health insurance when there are abnormal signs. In some other areas, patients are still required to do all kinds of tests according to the treatment protocol, however, patients who do not have health insurance may be assigned to test more slowly to wait for them to buy health insurance and not forcing them to buy it right away.

> Some patients do not have insurance, but every time I give them a test, some of them want to give good results but the test is expensive, some poor people like it Every blood test is very expensive.
>
> V1_IDI3_HW_ĐT_Province 01
>
> We make the patient have to do it all, if you want to pay for medical help, you go to the insurance, of course the patient also agrees to pay for himself, people will follow the insurance so that they can enjoy the benefits, but I did not reduce the test at all. Using insurance or not using, you do not use, I think so, I remind the patient, advise the patient he uses insurance, he will be reduced money.
>
> V2_IDI1_HW_ĐT_Province 07
>
> Of course, ARV treatment to assess the effectiveness of treatment, evaluate the exact pharmacological function for the patient requires CD4 and viral load, and the other tests are just to monitor the health of the patient for themselves. Adjustment of drugs, changing of regimens, those tests within the reach of the hospital complete, there is no shortage, and there is no distinction between patients who are insured and those who do not. It is only a matter of distinguishing the patient who works on time or the patient is late compared to the deadline, if the patient has not used it then slowly remind the patient to apply for insurance to do it, the patient voluntarily pays I can only pay for the sick
>
> V2_IDI1_HW_ĐT_Province 03

### 2.3.3. Financial and health insurance coverage

#### 2.3.3.1. Financial coverage

At the time of transfer of the first year (2017), health insurance paid for basic biochemical tests, ultrasounds, X-rays, and drugs for OIs (except for Hepatitis C test). If the patient has a health insurance card, they almost do not have to pay any extra, except for the cost of medical examination and purchase of additional supplements outside the doctor's prescription. Doctors have also tried to reduce costs for patients by limiting patients to only performing certain tests, ultrasounds, and X-rays in each visit so as not to exceed the amount paid by health insurance. For patients without health insurance, they will have to pay for medical care (about 35,000-39,000 VND depending on the area), test fees, and drugs for OIs treatment. The cost of the input test depends on whether the project funding is available or not, if not, the patient will have to pay for the input test, which may include CD4 test. In some (not very many) cases where it is necessary to evaluate the success or failure of treatment, the patient will be assigned to self-administer CD4 tests, viral load and drug resistance at a relatively high cost, and they may even have to pay the cost of testing for other family members plus travel expenses, so it is not easy given the economic condition of HIV patients.

> It is good to have money for testing [before treatment] for patients, how can I get insurance if I get patients ... because there are so many poor patients ... for the poor, that is big money. Sometimes we also have to pay out-of-pocket money for that poor person, some people can't even earn 20,000 VND, so we have to find medicine for people to return to at other times.
>
> V1_IDI8_HW_ĐT_Province 02

> Q: How much does it cost?
>
> A: More than two million VND for both loading and resistance. There are patients who do not get the viral load unresponsive then they do not conduct drug-resistance multiplication, so that the patient costs little money, just loads. There are 2-3 cases falling into that situation, I doubt, I am so scared, no CD4, no load, only for the patient, instead of people having difficulty walking, I wrote the whole sheet. viral load and drug resistance. Up there, people are also very flexible, when they see a good viral load, they do not cause drug resistance, they pay it back, and if they see a viral failure, they continue to work on resistance.
>
> V2_IDI1_HW_ĐT_Province 03

> It is 800.000 VND, nearly 900.000 VND, owning a viral load I pay 20%, it must be 180 thousand already, but maybe in a family, not one infected person, both husband and wife, children, pay once. Not a little money.
>
> V2_IDI5_HW_ĐT_Province 05

> There are patients who do not get the viral load unresponsive then they do not conduct drug-resistance multiplication, so that the patient costs little money, just loads. There are 2-3 cases falling into that situation, I doubt, I'm too scared, no CD4, no load, only for the patient, instead of people having difficulty walking, I wrote the whole sheet. viral load and drug resistance.

V2_IDI1_HW_ĐT_ Province 03

By 2019, from March 8, HIV/AIDS patients officially used ARV drugs in treatment from the health insurance fund. Accordingly, the patient will have to pay 20% of the co-payment for ARV drugs. However, areas have promptly supported patients to pay 20% of this copayment from the project's funds or the provincial budget, so patients still do not have to pay for ARV drugs.

> That was before 2019, and from March 2019 we provide drugs under the health insurance fund. However, about providing drugs under health insurance fund, the co-pay will not be paid by the patient himself, but will be taken from the project and with the provincial budget, they would also support, hence the patients actually still get the medicine for free, with only service fee was paid from the insurance fund. Therefore, not much changed regarding the patients' financial, helping them feel more secure going to see the doctors.

V3_IDI1_HW_ĐT_Province 01

Regarding the payment of insurance for CD4 test and viral load, some areas have started to pay the cost of viral load testing from the 3rd quarter of 2019, while some other provinces have not been able to resolve the issues with insurance to pay for this test. Therefore, it can be said that the financial difficulties for some patients who are required to have CD4 tests and viral loads have not really been resolved.

> Of course, what this hospital can do is almost done, now there is another one which is a CD4 for a long time that has not been done in a place and there is still a measure of the viral load being implemented but that is. I don't know how.

V3_IDI2_HW_ĐT_Province 01

> The viral load and the CD4, for example, are currently due to some problems that have not yet been paid for by the patient ... now this month his side has begun deploying .... From January to August, if the patient is interested, people will go to work on the load and what will be CD4 down the central level ... From September to start deploying as a viral load for patients. ... and only for patients with insurance.

V3_IDI5_HW_ĐT_ Province 04

According to health workers, it is possible that patients with difficult economic conditions, without health insurance will have the risk of dropping out of treatment or refusing to take tests because it was beyond their ability to pay. Uninsured patients must pay for the entrance test themselves. After the transfer, the costs for input diagnostic tests to participate in the examination and treatment of HIV/AIDS patients were reduced. Some tests are covered by insurance, some required tests (such as CD4) are not covered by insurance, causing an economic burden for patients. In some cases, patients left without testing and never returned to the clinic again due to their inability to pay.

This shows that the percentage of patients with health insurance cards and the percentage of patients using health insurance cards are among important indicators, especially after the phase during the drugs were financed by the project and the patients would have to pay for medicines of their ARV treatment.

Advise the patients to do it and when they have the money they do, they don't have it but we don't do it anymore, even if the patients quit, it was so poor that it came back for treatment, now we did not do, insurance next year, then how to do .... The ARV until early 2019 is really difficult for the patient there because ARV has to go through insurance, now I have ARV available for the patient, it does not affect.

V2_IDI1_HW_ĐT_ Province 03

At least every 6 months for clinical patients or normal patients once a year. But for patients with a high viral load, for example, every 6 months or at high risk of failure, every 3 months, if this is not possible, here cannot be served. The satisfaction of both the doctor and the sick does not like that. Then people say they will not spend money, they do not have money.

V3_IDI1_HW_DT_Province 01

#### 2.3.3.2. *Health insurance coverage*

Table 35: Percentage of patients with health insurance cards

| Nội dung | | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|---|
| Join the health insurance | Yes | 495 (97.8) | 738 (99.5) | 746 (99.5) |
| | No | 11 (2.2) | 4 (0.5) | 4 (0.5) |
| | **Total** | **506 (100)** | **742 (100)** | **750 (100)** |
| Reasons for not participating in health insurance | Unable to pay for health insurance | 4 | 1 | 2 |
| | There is no need to use the health insurance card | 1 | 1 | - |
| | **Total** | **5** | **2** | **2** |

The survey results show a good sign that the percentage of patients with health insurance is very high and this rate gradually increases from 97% to 99% over 3 years from 2017 to 2019.

**Qualitative information helps to explain in more detail the high percentage of patients with health insurance cards**

Qualitative information shows that the majority of patients participating in this study are using one (or several) of four types of health insurance, including health insurance paid by the state budget (insurance for the poor), health insurance of the People's Committee Provincial support for local HIV patients, compulsory health insurance (paid by employers and employees), and voluntary health insurance (participation in health insurance according to the household).

To support patients who are on HIV treatment, have household registration in the locality but without health insurance, poor households and cannot afford to buy health insurance; Provincial People's Committees of some areas have supported the purchase of

health insurance for HIV patients to ensure that they have full access to and use of HIV/AIDS treatment and care services during the transition period, without being affected and avoid discontinuity. This support also contributes greatly to increasing the proportion of HIV-treated patients with health insurance.

In some other areas, although patients are not supported to buy health insurance, they also show their willingness or try to buy health insurance to continue receiving treatment under health insurance. Some patients and health workers (mainly in the southern provinces) believe that patients are able to spend an amount of about 600-700,000 VND/year to buy health insurance, to receive medical treatment and medicine continuously. At some clinics, the percentage of patients with health insurance is 100%, although the locality does not support buying health insurance, but under the advice of medical staff, they also buy health insurance for themselves and their families.

> PATIENT 4: If you have to buy, want to live, you have to run money to buy it. If we have to contribute to the government, we will have to run and live without any progress. If it was too expensive, I would be old enough to give up. It just has to run the money, the descendants run for that.
>
> PATIENT 1: If I still have a health insurance card to pay for drugs, but later, if I do not have a health insurance card, force me to buy medicine, just like my sisters told me to buy drugs. Now, if I don't have health, I can go to work. Because buying medicine is so expensive, my condition is not there, nor can I go to work.
>
> V2_FGD12_ PATIENT_NT_Province 04
>
> The second thing is to buy it, you can buy it. If you live in the West, then when you have activities with them, when you buy it, you will not see any difficulty, they automatically buy it all because of that: you If no one came here to receive medicine, no one would not ride a motorcycle. Everyone had a motorbike. Secondly, everyone has a cell phone. But I said the difficulty is that I don't have five, six hundred health insurance is not right, if I say that is not true. So they say they buy it all, no matter what they don't buy.
>
> V2_IDI9_HW_ĐT_Province 07

- Reasons why patients do not buy health insurance

Results of IDI with health workers and FGD with patients showed that only a very small number of patients did not buy health insurance due to inability to pay, because most of these people were provided with health insurance according to the Government's policy to support the poor. The majority of patients who cannot buy health insurance or cannot use health insurance cards are related to many administrative procedures because they work far away, do not have household registration, do not declare temporary absences, so they are not eligible to buy health insurance.

> Q: Are there any cases where people don't buy insurance or they don't want to?
>
> PATIENT 2: Yes, it is not that people do not buy but people do not have enough money to buy.
>
> V1_FGD3_ PATIENT _ĐT_Province 02

Some patients have difficult economic conditions, do not have money to buy health insurance cards, not even enough money to pay for travel.

> A: I have to make a call. If the patient is treated, he / she will also call if they quit, they will commit drugs, then they will have to move down to level 2 again. Scared people like that. People know that they go, so many go. There are people who are sick and tired of life, people also quit. Many illnesses are at home, now they have no money to go. I was nearby but I can't go anymore. Bao taxi now is where the money is not where to take a taxi to the hospital that examination.
>
> V1_IDI8_HW_ĐT_ Province 02

> Now, I just hope that the government will pay for patients like everyone else, and give each person an insurance card every year to go get medicine. The sisters just wanted to be like that.
>
> V2_FGD12_PATIENT_NT_Province 04

Table 36: Proportion of patients using health insurance cards in 2018 and 2019

| | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|
| Yes | N/A | 713 (96,6) | 745 (99,9) |
| No | N/A | 25 (3,4) | 1 (0,1) |
| Total | N/A | 738 (100) | 746 (100) |

Note: In 2017, this question was not included in the survey questionnaire. N/A: No data available.

Table 36 presents the proportion of patients using health insurance cards in HIV/AIDS care and treatment in clinics. The results show that the number of people using health insurance cards is very high and gradually increases to absolute in 2019. These results show that patients are more and more assured with the use of health insurance cards in HIV/AIDS examination and treatment.

Qualitative information collected in 2017 and 2018 shows that, although the proportion of patients with health insurance cards is relatively high, some patients are quite cautious in deciding whether to use health insurance cards for HIV examination and treatment or not. They are afraid that using health insurance cards for HIV/AIDS examination and treatment may lead to the disclosure of information about their disease status. Patients who do not use health insurance cards are mostly those who have health insurance cards issued by agencies, companies or enterprises where they work. They fear the information will be transferred to the insurance agency and from there to their workplace. Some people are afraid of information disclosure, so even though they already have a health insurance card, they still buy more voluntary health insurance or are willing to pay for medical care for each visit because the medicine is still being provided free of charge from the project's support, therefore the cost of medical examination and treatment is not high.

Some other people, even though they have health insurance for poor households provided by the locality, but because they work far away, cannot return to the locality to check health insurance or get a hospital transfer paper, so they cannot use their health insurance cards for examination and treatment at the temporary place of residence. For these patients, it is not easy to have all the documents to buy voluntary health insurance because they have to go back to their hometown (some people are quite far away) to register for temporary absence and register for temporary residence at the place they are staying... so they keep delaying, leading to not being able to buy health insurance for themselves and other family members who are also being treated or may have an illness but have not been diagnosed. In some areas, there are policies to support the issuance of free health insurance cards for HIV patients with household registration in the province. This policy, on one hand, is meant to support patients, but on the other hand, there is a distinction between patients who do not have a household registration but are living and working in the province (mostly working in industrial zones of the province or hired, freelance work). Those who do not have household registration at the area are those who have difficulty in obtaining sufficient documents to be able to buy health insurance or for some reason cannot return to their areas to buy health insurance. This may lead to limitations in the patient's access to and use of HIV/AIDS care and treatment services.

> The patients who do not have health insurance, it may not be that much, but sometimes, he or she has insurance but people dare not use it. Because people's insurance is elsewhere. I take the example of an ill person in Hai Duong but people do not take medicine in Hai Duong because people are afraid of that or that and others do not get down there, even though they have insurance. Or they are workers down there, they have insurance, but they do not dare to examine, but when they come up, people do not get insurance anymore because it is off-line and they do not receive insurance. That is one of the difficulties of the patient.
>
> V1_IDI3_HW_Province 01

> They could not afford it, but for example they worked here but they did not apply for temporary residence so they could not buy it. Some people, people actually do, but they don't like it, now they have to go to the commune to declare it.
>
> V1_IDI2_ HW _ Province 01

> Yes, it is also difficult that currently the hospital is treating some patients outside and outside the province, people are also afraid of revealing their identities, people from other provinces come for treatment, but in that case we still have to sent ... But there are some people, people with the same names and addresses, but people in Thai Binh, for example, we ask for a temporary residence permit, in Thai Binh for example, people are allowed to buy card in Thai Binh. People still have IDs but people ask for temporary residence papers.
>
> V2_IDI5_ HW _ Province 05

## 2.4. Health status and experiences related to the patient's health at the clinic

In this study, the patient's health status was assessed based on two content groups, including a set of clinical indicators based on secondary data sources and a content group on health-related experiences. Patients analyzes were based on qualitative information.

The group of indicators for evaluating clinical indicators determined under Decision 5418 / QD-BYT issued on December 1, 2017 on the HIV / AIDS Care and Treatment Guidelines is a effective decision in Research space of the topic. Based on the guidelines for HIV / AIDS treatment and care guidance on treatment failure assessment of Decision 5418, this study identifies three indicators to assess the health status of patients over time from 2017- In 2019, specifically: (i) The rate of clinical failure: new occurrence or recurrence of clinical stage 4 diseases after ARV treatment at least 6 months; (ii) Prevalence of immunological failure: The percentage of patients with CD4 + T-cell count drops to or below pre-ART with continuous ARV or CD4 count of less than 100 cells / mm3 at two successive tests (6 months apart) ; (iii) Viral failure rate: patients on ART for at least 6 months with HIV load of 1,000 copies / mL or more at two consecutive tests 3 months apart after counseling strengthen adherence to treatment. However, as mentioned above about the inadequacy of secondary data, the evaluation of the patient's treatment results according to clinical indicators is also limited and cannot be generalized into trends.

### 2.4.1. Evaluation of clinical indicators

#### 2.4.1.1 The rate of clinical failure

Table 37: Percentage of new and reinfected TB patients

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| Province | Number of patients | Number of new and reinfected TB patients n (%) | Number of patients | Province | Number of patients | Number of new and reinfected TB patients n (%) |
| Bac Ninh | 503 | 4 (0.80) | 548 | 6 (1.09) | 567 | 2 (0.35) |
| Vinh Long | 1191 | 22 (1.85) | 1335 | 39 (2.92) | 1400 | N/A |
| An Giang | 5288 | 66 (1.25) | 5577 | 114 (2.04) | 4846 | 51 (0.89) |
| Soc Trang | 1108 | 20 (1.81) | 1209 | 16 (1.32) | 1324 | 87 (6.57) |
| Thai Binh | 1161 | 10 (0.86) | 1023 | 12 (1.17) | 1264 | 2 (0.16) |
| Hoa Binh | 866 | 0 (0) | 906 | 1 (0.11) | 913 | 0 (0) |
| Son La | N/A | N/A | 4271 | N/A | 4216 | 25 (0.59) |
| Thanh Hoa | N/A | N/A | 3838 | N/A | 3832 | N/A |

Note: Data source provided by CDC-VAAC Project; N/A: No data available.

Table 37 presents data on management of newly infected and relapsed TB patients in the total number of patients being treated for HIA/AIDS at clinics of surveyed provinces in the three years 2017-2019. This rate is mostly below 3%, except for the rate that increased to 6.57% in Soc Trang in 2019 (compared to 1.8% and 1.3% in 2017 and 2018 respectively). Some provinces do not have data for this content.

#### 2.4.1.2. Immune failure rate

During the evaluation process, due to changes in the HIV/AIDS treatment guidelines of the Ministry of Health, the CD4 test is no longer performed periodically for patients, but only for initial testing for new patients. So that, this content is not presented here.

#### 2.4.1.3. Virology failure rate

Due to the low coverage of viral load testing, the following table shows only viral load control rates in the group of patients who received periodic viral load testing. In general, the proportion of patients with a viral load of less than 1000 copies/ml is relatively high in some evaluated provinces (over 90%). Some provinces have lower rates and some provinces do not have complete data, so there is not enough basis for comparison.

Table 38: Proportion of tested patients with viral load below 1000 copies/ml (%)

| Province | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|
| Bac Ninh | 96.4 | 95.4 | N/A |
| Vinh Long | 97.6 | N/A | N/A |
| An Giang | *99.0* | *100* | *98.5* |
| Soc Trang | 92.2 | 94.1 | 86.3 |
| Thai Binh | 78.4 | 96.2 | N/A |
| Hoa Binh | 96.4 | 93.8 | N/A |
| Son La | N/A | 90.9 | 95.9 |
| Thanh Hoa | *97.7* | *99.2* | 93.7 |

Source: Secondary data provided by the VAAC-US CDC Project (in lowercase) and provided by the province (in italics). The numerator is the number of patients with a viral load of less than 1000 copies/ml during the reporting period. The denominator is the number of patients with viral load during the reporting period.

Although secondary data are collected incompletely, unreliable, and difficult, qualitative information more or less reflects HW's observations and patients' experiences of their own health condition during the transition period.

After a year switching to insurance treatment, there are something like this. One is that patients are more disciplined, more responsible to themselves. Because in the past, people were given free medicines, so they can take things lightly regarding adherance to treatment and responsibility to themselves, but when it comes to insurance, it takes time to go to the doctor's office, so the patients' sense of compliance are better. It must also be clearly stated that, with the evidence from 2017 and before, when the measure of the viral load of our institute was carried out in 2018, then the virus below the threshold was only 87%, 88%, but after 2018, when we performed it again, it went up to 95%, even 97 % were viruses below the threshold of detection, that was the assessment of the highest quality of treatment.

V3_IDI1_HW_ĐT_Province 01

### 2.4.3. Patient's health experience

The patient's health experience is synthesized based on the results of FGD with the patient and FGD with the service provider showing that, in addition to the improvement in physical health such as feeling healthy, not feeling tired, eating drink and sleep well; The improvement in the patient's health status is mentioned a lot related to mental health aspects such as optimism, trust etc. Below are some of the patient's experiences with health during their ARV treatment.

- *Patients feel normal, no fatigue after a period of ARV treatment*

A: Regarding health, I don't know if it's due to this disease or because of age, but if it is reduced, it must be reduced by 30-40%.
Q: Is that so? That is, how do you feel about your health?
A: I offen feel tired.

V1_FGD1_PATIENT_ĐT_Province 01

It was a big shock to me because I was afraid of dying and leaving my baby behind, but when I was on ARV, I felt fine because I was healthy.

V1_FGD_PATIENT_Province 03

Feeling sick just now. And later on taking the medicine, I found it normal, but I did not see the impact on health in all aspects. Ie normal health, there is no disease going back and forth.

V2_FGD3_PATIENT_ĐT_Province 06

- *Eating well, sleeping well, and gaining weight are important health indicators for sick people*

The status of eating, drinking and sleeping were matters concerned by patients and are considered an important indicator for the good progress of their health status. After a period of treatment, patients will feel secure to continue taking the drug if they see an improvement in their weight, sleep well, and eat well; on the contrary, they will be very confused if they eat well, take medicine continuously but the weight does not increase. Patients may suspect that the drug is not suitable, so it is difficult to sleep and not gain weight. Therefore, increasing counseling for patients on nutrition to help patients improve their weight will help patients feel more secure and adhere to treatment.

PATIENT 1: I was only 35 kg, after going up there, he saw that I was too weak, so he gave me medicine and have me tested.
Q: Does that mean when you're too sick, you go to the doctor?
PATIENT 1: When I was sick, I was only 35 kg, too thin, now I am 53, 54 kg.

V1_FGD5_PATIENT_NT_Province 02

PATIENT 1: Drink at 9pm - 10 pm and sleep, it's hard to sleep

PATIENT 2: The first few times I found it hard to sleep but dreamed that the plane touched me.

V1_FGD6_ PATIENT_ĐT_Province 03

I was infected in 2012. I went to the doctor and found out. Doctors also give oral medications. Since then, taking medication regularly has also seen eating and drinking, each crime has lost weight.

V2_FGD12_ PATIENT_NT_ Province 04

Doctors have said that during treatment, many things like alcohol, tobacco, pipe tobacco should be abstained but the patient can not quit. If it takes only 1 week or a dozen days to see it fully stretched out.

V2_FGD12_ PATIENT_NT_ Province 04

...I was always in elevated liver enzymes. Every time she didn't take the liver tonic it was the same as the elevated liver enzymes. He [the doctor] said, "Did you eat your rice?" She said, "Yes, I am bored of eating." then went home to drink liver enzymes or detoxify the liver, eating and drinking all the leaves that detoxified his liver. OK. So I went back to my sleeping and eating treatment. That's taking care of yourself.

V2_FGD10_ PATIENT _ĐT_ Province 01

- *Patients have knowledge, information, and study hard to better treat the disease*

Some patients can read the drug's name or mostly recognize each drug by the color of the pill and understand the effect of each drug. Therefore, patients are very sensitive to changes in the color of the pills they receive. Some patients think that it is necessary to remember the name of the drug to take it correctly; distinguishing by color can be mistaken because the drugs can change color in each release. Some patients promptly discovered that the doctor had prescribed the wrong medicine or that the pharmacist gave them the wrong medicine or expired medicine.

PATIENT 4: In general, the doctor's advice is quite good, nothing. The second is that I also learned.
REPORTER: That means you also feel like you can learn more information, right?
PATIENT 1: I was sent to study many times, once I even went to study for a week in Hanoi.
REPORTER: Is that the study thing you just talked about?
PATIENT 1: People force me to go study, to comply. They force me to go study

V1_FGD1_PATIENT_ĐT_Province 01

Because the drug manufacturer. For example, Vietnam produces white, India produces blue or Germany produces another color, for example. Because I saw some friends who took medicine but people could not read the name of the medicine, for example, some of them took the wrong medicine and got drunk.

PATIENT 1: Why is it wrong, I thought the doctor said it.

PATIENT 2: Doctors dispensing drugs sometimes give the wrong medicine. That's why I have to remember the name of the medicine I took so I know it.

V1_FGD1_PATIENT_ĐT_Province 01

I know, you guys have to be clear like that, for example, it's normal or like when I first examined Asia, every six months I will get tested once, but the first majority will be CD4, people will test CD4, and then later people will do CD4, they will tell in advance, for example, the next month the test, this month they will give before 1 month, ... people say it is the main more precisely, the result. As for me, testing for this virus does not need to be fasted, for example, nowadays there are regular examinations but at least once a year, 2 tests. And most of them are the first CD4, especially within 6 months, to spend, so that people can check if their viral load has increased, their medications have improved or not.

V2_FGD2_PATIENT_ĐT_Province 03

- *Patients are more responsible for their adherence to treatment*

Due to strict regulations of medical insurance, patients have a better sense of drug management (do not dare to lend) for fear of not having drugs to take; pay attention to get the medicine on the right day because if too late, it will take time to redo the tests; take the medicine on time, at the right dose, and have a reserve of 1 box or dozen of pills in case there is an unexpected situation that they cannot go to receive the medicine.

they can come sometimes, sometimes they can't, they can borrow medicine from each other. The person who was sick was like he was always playing with each other, forming a group, sometimes just borrowing medicine from each other, borrowing after another to pay later, and so on. But not now, not like that.

V1_IDI2_HW_ĐT_Province 01

Sometimes when the day I can't come, 2 to 3 days late, the doctor will ask me about 2-3 days where to take the medicine. Because this is a lifelong pill, I have to take it every day. Granted, I was delayed for 2-3 days I did not take the medicine but I had to reserve another bottle. Usually, one bottle can be delayed for 1 month. But within 2-3 days of coming here, the doctor had to make the viral load and then roll back from the beginning.

V1_FGD2_PATIENT_ĐT_Province 01

Q: Not much, is it? But do they often quit smoking or do they find it by themselves?

PATIENT 4: Borrowed. Not that people leave people not to drink.

PATIENT 1: 30 members in one month.

Q: But then that person doesn't have enough medicine.

PATIENT 4: Not for example if we take medicine first, we can borrow from each other, after a few days, we will return our own number. It may have been before, but it is not now.

V2_FGD11_ PATIENT _ĐT_Tỉnh 04

- *Patients no longer feel anxious; happy, assured with the treatment results; feel like there's a future*

After a period of treatment, patients participating in this review reported feeling better, happier, and more optimistic with their treatment outcomes. Some patients with small children are very assured of treatment to have good health and take good care of their children. Some people have the desire to have children, while others believe that if they adhere to the treatment well, they will be cured, no longer able to infect others, and are even luckier than people with cancer because they could die instantly etc. A change in mental health status is one of the important health indicators. Therefore, in studies assessing the health status of patients on HIV treatment, it is necessary to pay attention to the assessment of mental health status in addition to physical health indicators through clinical indicators to have a more comprehensive picture of the effectiveness of HIV/AIDS treatment and care.

PATIENT 6: I was scared at first, hoping to live a few more years with my children, but now I come here and see someone who has taken medicine for a dozen years, now I feel relieved.

PATIENT 2: In general, being more carefree than ordinary people. As the doctor says, people with this disease are less likely to get other malignancies. Yes, she said that if she had to choose between the two diseases, she would choose this disease.

PATIENT 3: Cancer just lost money but died quickly and this disease is still more durable than cancer.

PATIENT 1: Like I have been taking medicine for 2-3 years, my psychology seems to be that I do not remember that I have this disease. Sometimes I sit and play with my friends and they talk about this disease, they don't know if I have it and I hear it just a little tickle in my heart.

V1_FGD3_PATIENT_ĐT_Province 02

I'm healthy now, can go and come home by myself, just need to remember to take medicine at the right time, but do not worry anymore.

V1_FGD2_PATIENT_ĐT_Province 03

My parents and siblings followed me, but I could not go, could not eat or drink. Staying in Binh Duong for 8 days and then returning home, no time, no thought, my health did not collapse. I was just thinking about my husband and kids and nothing but nothing. Now don't think at all, just come home from work with the kids.

V1_FGD4_PATIENT_NT_ Province 02

## 3. Objective 2. Contextual factors that facilitate the successful delivery of HIV/AIDS care and treatment services

### 3.1. The system of guiding policy documents was fully developed and promptly supplemented during the transfer process

It can be said that the work of HIV/AIDS treatment and care service delivery has been based on a system of relatively complete and with timely supplemented guiding documents. This system of policy documents has created a favorable environment for the transfer of HIV/AIDS treatment and care services under Vietnam's health insurance in recent years. Below is a summary of the documents that have been issued to prepare for the transfer (issued before 2017) and continue to be supplemented (from 2017 onwards) during the transfer to timely overcome difficulties related to service provision of health facilities and use of HIV/AIDS treatment and care services by patients.

- *Documents related to the management and implementation of medical examination and treatment activities at medical examination and treatment facilities*

  Law on Medical Examination and Treatment No. 40/2009/QH12;

  Decree 109/2016/ND-CP stipulating the granting of practice certificates to practitioners and the granting of operation licenses to medical examination and treatment establishments;

  Circular No. 14/2014/TT-BYT dated April 14, 2014 regarding referrals between medical facilities;

  Decision 1313/QD-BYT dated April 22, 2013 of the Ministry of Health on the promulgation of guidelines for medical examination at the hospital's medical examination department;

- *Documents related to medical examination and treatment Health insurance*

  Law on Health Insurance No. 25/2008/QH12 dated 14/11/2008;

  Law amending and supplementing a number of articles of the Law on Health Insurance No. 46/2014/QH13;

  Circular No. 40/2015/TT-BYT dated December 16, 2015 of the Ministry of Health on registration of initial medical examination and treatment with health insurance and referral for medical treatment to health insurance;

  Decree No. 146/2018/ND-CP dated October 17, 2018 detailing and guiding the implementation of a number of articles of the Law on Health Insurance;

  Circular No. 09/2019/TT-BYT dated June 10, 2019 of the Ministry of Health guiding the appraisal of conditions for signing initial medical insurance contracts, transferring to perform paraclinical services and some cases direct payment of expenses for health insurance care and treatment;

  Circular No. 102/2018/TT-BTC dated 14/11/2018: accounting regime for social insurance;

- *Documents related to HIV/AIDS and HIV/AIDS treatment and care under health insurance*

Law on Prevention of HIV/AIDS No. 64/2006/QH11 dated June 29, 2006;

Decision No. 2188/QD-Ttg dated November 15, 2016 on Regulations on payment of antiretroviral drugs that are procured at national level, using funds for medical examination and treatment covered by health insurance and supporting people using antiretroviral drugs for HIV;

Circular 28/2017/TT-BYT dated June 28, 2017 of the Ministry of Health regulating the management of antiretroviral drugs that are procured at the national level using funds for medical examination and treatment covered by health insurance and cost support co-pay for antiretroviral drugs for HIV-infected people with health insurance cards;

Decision 5418/QD-BYT dated December 1, 2017 promulgating "Guidelines for HIV/AIDS treatment and care";

Circular 28/2018/TT-BYT dated October 26, 2018 of the Ministry of Health regulating the management and treatment of HIV-infected and HIV-exposed people at health facilities;

Circular 39/2018/TT-BYT dated November 30, 2018 The price of CD4, viral load testing services are included in the list of prices for technical and testing services paid from the health insurance fund;

Circular 08/2018/TT-BYT dated April 18, 2018 amending and supplementing a number of articles of Circular 28/2017/TT-BYT dated October 26, 2018;

Decision No. 1112/QD-BYT dated February 26, 2019 of the Ministry of Health providing for the appointment, treatment and provision of HIV testing for HIV/AIDS monitoring and treatment;

Circular 27/2018/TT-BYT dated October 26, 2019 of the Ministry of Health guiding the implementation of health insurance and medical treatment with health insurance related to HIV/AIDS;

Decision 5456/QD-BYT dated November 20, 2019 on the issuance of "Guidelines for HIV/AIDS treatment and care" (replacing Decision 5418)

The scope of this study is not intended to assess the role and relevance of all of the above legal documents in the transfer of HIV/AIDS treatment and care under health insurance, some contents are mentioned more deeply in the analysis of advantages and disadvantages in the service delivery process.

## 3.2. The project's commitment to funding and coordination with stakeholders during the transfer process

The role of the Project in the transfer process was particularly emphasized by the local research subjects. The project has committed to sponsor and coordinate with parties to ensure the transfer process goes smoothly and without fluctuations. The role of the Project is demonstrated through its commitment to fund drugs and CD4 as well as viral load testing services during the initial transition period, ensuring drug availability during the transition to care and treatment under health insurance; coordinate with other units in providing timely guidance and information support to clinics during the transfer process; and organize training

activities, which is highly appreciated by health workers in supporting updating new knowledge and carefully preparing for transfer activities.

### 3.2.1. Committed to sponsoring drugs, ensuring the availability of drugs, not causing drug fluctuations in the first stage of transfer

One of the favorable factors to ensure a successful transfer is the Project's commitment to sponsor antiretroviral drugs during the initial phase of the transfer. Quantitative results of three rounds of the survey show that the percentage of patients receiving adequate drugs is almost absolute (accounting for 99%). Qualitative information with health workers also shows that drugs were always fully delivered by the project, always available, and there was almost no change regarding drug shortages. This sponsorship commitment helps hospitals to not be under financial pressure and administrative procedures related to payment and settlement of insurance drugs right at the beginning of the transfer, which is already volatile. At the same time, the drug funding project also helps to reduce most of the costs for patients without health insurance cards.

> A: Actually, according to the switch, all ARV drugs are still provided by the project. Currently, as Bac Ninh is still granted the project, we still supply drugs and medical records for uninsured patients and maintain medical examination and medicine for patients at the first stage, when Uninsured patients.
>
> Q: Is the medicine sufficient?
>
> A: The medicine is very complete, including anti-OIs drugs, preventive drugs, ARVs, three drugs that the project is still being granted.
>
> V1_IDI1_HW_ĐT_Province 01
>
> A: Until now, anti-OIs drugs are donated by the tuberculosis prevention program. So here, actually, for now, there's only medical examination. As for the ARV that was granted by the project ... So now I ask what difficulties I have not seen yet.
>
> V2_IDI9_HW_ĐT_ Province 07

Maintaining free supply of ARV drugs to patients in the early stages of the transition was very important when some patients still did not have health insurance cards or were not ready to pay the 20% co-payment for the treatment drugs. Both the health worker and the patient shared their observations and experiences about not buying drugs for OI when the patients were not given free medicines because the OI drugs had not been delivered to the hospital in time. The same can happen with ARVs if uninsured patients are not given free medicines during the early stages of this transition.

> Honestly, there's no such thing as the best. Everything has its flaws. For example, when providing medicine to a patient, sometimes it is provided in a timely manner, but sometimes it is not, sometimes it is necessary to go to buy it. Especially those OI drugs. Many times, when the drugs run out, the medicine did not make it in time, the patient had to buy it, and that affected the patient, without money, the patient would definitely be affected.
>
> V1_IDI6_HW_Province 02

### 3.2.2. Coordinate with units in providing timely guidance and information support to clinics during the transfer process

Qualitative research results show that between the Project, the Department of HIV/AIDS Prevention and Control, the Center for AIDS Control had cooperated in updating information and promptly answering questions for areas. The forms of information support of the above units mentioned by health workers include documents developed to guide the transfer, update of new information via email, support and monitoring activities, and specifically, health workers can call and talk directly over the phone with the project coordinators of the province and the central government. During the implementation process, units that have difficulties and problems can contact project staff, Departments, and Departments for advice, support, and answers to questions. Local AIDS Centers also play an important role in the preparation for the transfer, such as coordinating with clinics to update patient lists, collate and verify patients' conditions, etc. complete all administrative paperwork related to medical care by insurance.

> See the subjects at the stage of treatment failure and risk of treatment failure, then they will review why and whether to adjust something or not, etc. The second one is that if there is any new information update, he will still send me an email or if I have any questions or concerns, I can also call him or contact him or send via email, the two brothers exchanged information.
>
> V1_IDI3_HW_Province 01

> REPORTER: Through which channels do you update the procedures and documents?
>
> PATIENT 1: The AIDS Center is the source of the procedures as well as everything up to date. Sometimes it's a bit late.
>
> V1_IDI9_HW_Province 03

> That is the project side of the past was very enthusiastic, very enthusiastic men ... The thing is that it has a program that will give me a book about the specific side of AIDS this is very nice. After I also took my phone number, I needed to call, I asked really ... actually, it's not like the young ones remember things so I often have to ask.
>
> V3_IDI2_HW_ Province 01

> One is to update via official dispatch from the Provincial Centers for Disease Control and AIDS, they move back, and the second one is through HIV-specific training, the third is through meetings and meetings. briefings, again through the times that already exist but when I have time to be more proactive, the brothers call to instruct me to get information so I can be more proactive about resolving the regime of the people diseases, health insurance and drug treatment related issues, bidding for drugs, drug supply companies to ensure their source of drugs, ensuring the implementation of regulations.
>
> V3_IDI14_HW_ĐT_Province 03

### 3.2.3. Organize training activities, which are highly appreciated by health workers in supporting updating new knowledge and carefully preparing for transfer activities

During the first phase of the transfer, the Project, the AIDS Control Department, and the provincial AIDS prevention and control centers organized training activities to update new information and knowledge for the health workers participating in HIV prevention and treatment activities in areas. Training activities are held regularly in the first phase to prepare for the transfer process; highly appreciated by health workers, helping them to update new knowledge in the context that hospitals often do not have training activities on these contents. Following China's successful transfer experience, continued technical assistance by the US Government and UNAIDS had helped domestic agencies and organizations improve their technical capacity and level to further promote and provide effective HIV treatment and care. According to the recommendations of researchers in the field, even in the context that financial support has been cut, donors should consider continuing to provide technical assistance to the countries that have made the transition (Flanagan et al., 2018).

> This is on the side of the AIDS center, the VAAC, the government that regularly conducts training sessions ... involving a lot of things like reporting, software updates, quality management, ARV treatment, planning medicine etc. Last year when you took this ARV training class, you got a certificate. That is according to the project. They sent me a letter to go to school, sent me to go, but I didn't have any classes in the hospital. That was mostly outside the central training, I went. Any training program that has a province [name of province], if you participate, you will go there.
>
> V1_IDI4_HW_ĐT_Province 01

> In general, if we don't know anything, we just ask. Also try to improve, and allowed to get training.
>
> V1_IDI8_HW_Province 02

> We don't organise those classes here [the hospital], the AIDS Center does a lot of training classes. The content of training is mainly on patient management, care and treatment. We are just teachers. The center for AIDS prevention would organise the classess.
>
> V2_IDI5_HW_Province 05

> … With this HIV, the hospital will not have an organization, so now it can only be because of the programs, funds and funds ... let's just change ... 2018 went once, going to the classroom. instructors on how to switch TB and HIV treatment back to districts ... One time last month outside the AIDS department, people were giving away about preparing to switch to health insurance ... Yesterday, the CDC People are training on HIV viral load testing.
>
> V2_IDI12_HW_ĐT_Province 01

## 3.3. Management, commitment to support of local authorities and departments for transfer activities

The direction and commitment of the local government played an important role in the success of the transition. The commitment and support of the local government was demonstrated through the timely supervision, decision-making, and direction of the People's Committee and the Provincial People's Council in implementing supportive solutions for patients with favorable conditions to access and use services in the early stage of transfer.

### 3.3.1. Organize workshops, assess and forecast difficulties that may affect treatment adherence, on that basis, identify timely solutions to support patients

The support of the government and mass organizations in each locality through the issuance of decisions to support patients in the transfer process is very important. Some areas have promptly directed the assessment and forecasting of difficulties that HIV/AIDS patients may face, barriers to maintaining the ability to access and use services, and compliance. adherence to treatment – results that have been achieved during the implementation of the HIV/AIDS/AIDS treatment and care program under PEFFAR funding. These results have been presented and discussed in steering meetings, scientific seminars with the participation of all levels of government and departments (Department of Health, Center for HIV/AIDS Prevention) and hospitals. On that basis, these areas have issued decisions to provide financial support for free health insurance cards and 20% co-payment for HIV patients in their areas. This support is of great significance for people living with HIV/AIDS, who are in difficult circumstances and are less able to pay medical expenses for themselves and their families.

> On the provincial side, the provincial People's Committee and the Department of Health are also very interested in this… there were a lot of seminars [organized] to figure out what problems need to be solved. It is most convenient for patients to go there [district level]. For example, the province had spent money to buy insurance cards for patients. The second is that we are planning to pay for the 20% of viral loads, CD4 that the patient has to co-pay because the amount is not small.
>
> V2_IDI5_HW_ĐT_Province 05

### 3.3.2. Some areas have supported patients to buy health insurance cards right from the first year of the transfer

In some areas, the Provincial People's Council and the Provincial People's Committee have shown interest and support through directing deductions from the local insurance fund to support the purchase of health insurance for patients with household registration in order to create conditions for patients to maintain access to and use HIV/AIDS/AIDS treatment and care services, without being affected or interrupted by treatment due to lack of health insurance cards. The participation and support of the locality contributes to helping the sick, especially the poor, have conditions to access and use medical services after the transfer. Having a health insurance card not only helps patients use health services related to HIV/AIDS/AIDS treatment and care, but also helps patients use other health care services that health insurance can cover.

> In the first stage, we also have the direction of the Provincial People's Council, the Provincial People's Committee, that is, deducting a part of the residual fund of insurance to buy for H subjects if any object is really difficult, no insurance. We have made a list

in the province of patients with a household registration without insurance and will report ... I think it will be okay. There was a project in the past and now there is insurance support if all patients have insurance. This is also one of the benefits for poor patients who are treated for free. That is one of the difficulties the patient will be solved. And I think policies like this will not be a problem.

V1_IDI3_HW_Province 01

On the provincial side, the Provincial People's Committee and the Department of Health are also very interested in this, as I just said, there were also many seminars to discuss what difficulties need to be solved. It is most convenient for the patient to go there. For example, the province had spent money to buy insurance cards for patients. The second is that we are planning to pay for the 20% of viral loads, CD4 that the patient has to co-pay because the amount is not small... It's 800.000 VND, almost 900.000 VND, one load alone. If we pay 20% of the viral load, it would be 180.000 VND but maybe in a family there are not just 1 infected person, both husband and wife, children, paying one time it would not be a small amount of money.

V2_IDI5_HW_ĐT_Province 05

It is difficult. Must have insurance, they send people to cut it before they dare to go to the doctor because they don't have money, they are afraid of spending a lot of money and don't dare to go. Two people.

V1_FGD5_PATIENT_NT_Binh Duong

### 3.3.3. Some areas continue to support health insurance and pay 20% co-pay for patients in the 3rd year of the transfer process when drugs start to be paid under health insurance

According to the Government's regulations, on March 8, 2019, HIV/AIDS patients nationwide officially used ARV drugs in treatment from the health insurance fund. In the surveyed provinces, in general, the transition to drug supply under the Insurance Fund took place smoothly and did not cause many changes for patients because the drugs could still be supplied from the project's drug source or the insurance budget of the provinces, in which the provinces not only support the purchase of health insurance, but also support the 20% copayment for patients, so patients still do not have to pay for their ARV drugs.

It was before 2019 and from March 2019, we provided medicine under the fund of the health insurance. However, we have to say like this, the copayment, the patient himself does not have to pay one. the source is from the project to give the second patient that the provincial budget also supports the co-pay, actually the patient this drug is completely free of charge only. The patient is entitled to insurance money. So the patient has nothing very financially variable to help the patient go to the clinic

V3_IDI1_HW_ĐT_Province 01

As for the drug mechanism, according to health insurance, currently, in addition to the Insurance Fund, it is supported by some project programs. In the future, when the project is withdrawn, the locality may have a budget that they can offset the payment for the patient or the patient who can pay for it together is also far away.

V3_IDI5_HW_ĐT_Province 04

> For example, the province will pay the difference, for example, your insurance is 20%. For example, if you have to pay 100.000 yourself, the province will pay you that 100.000 VND.
>
> V3_IDI5_HW_ĐT_Province 04

According to China's experience, successful transition is largely determined by the support and involvement of the government in the process of transferring HIV/AIDS treatment and care. Therefore, to continue to ensure a successful and sustainable transition, the local HIV/AIDS control agency should continue to mobilize the support of the government by providing and updating information to the local community leaders to get timely support to overcome systemic difficulties during the transition (Flanagan et al., 2018).

## 3.4. Financial security for payment of health insurance premiums for HIV/AIDS treatment and care

### 3.4.1. Ensure basic testing services and HIV/AIDS drugs are covered during transition

The Ministry of Health has cooperated with Vietnam Social Security to develop guiding documents for implementation; consolidating and signing health care insurance contracts with HIV/AIDS treatment facilities. During the transition period, the Health Insurance Fund paid for OI treatment and routine tests for HIV patients with health insurance cards. In general, patients with health insurance cards are entitled to routine testing services paid under health insurance like other diseases. Except in 2017, because some OI drugs were still received from funded projects (for example, the TB control project), the drugs were not delivered in time from the project, resulting in a situation where a small number of patients did not receive OI treatment drugs; HIV patients can use their health insurance cards to examine and receive insurance drugs for other diseases.

> One is that patients are provided with free ARV drugs, the second is that OIs are covered by health insurance, furthermore, the tests are also covered by health insurance.
>
> V1_IDI12_HW_Province 03

> Hospital has already had plans, has a contract with health insurance, social insurance and all the tests, this one has been doing it for years, step by step. By now, everything like this hospital is already complete, go into the machine, all information technology is ready [for insurance payment], as well as for normal chronic patients, like hepatitis B, endocrine treatment, diabetes.
>
> V2_IDI5_HW_ĐT_Province 05

> Advantageously, all services are enjoyed as normal patients. Any tests that insurance is given for the HIV patient are entitled to all.
>
> V2_IDI8_HW_ĐT_Province 05

> And in the past, if you were sick with special signs of dermatology such as Herpes, Zona or whatever, then I would recommend it to you through the dermatological examination like normal disease, it goes to medicine.
>
> V2_IDI9_HW_ĐT_Province 07

As antiretroviral drugs and testing for CD4 and viral load continue to be funded by the project, in 2017-2018, ARV drugs still were not needed to be paid for by health insurance. By March 2019, antiretroviral drugs began to be paid through the health insurance fund. Research results show that after transferring drug payment under health insurance, drug dispensing activities still take place stably, with no fluctuations due to drug shortage. The percentage of patients who received full medication in the previous visit was very high (accounting for 99.2% in 2019 compared to 99.3% in 2018 and 96.7% in 2017). The remainder did not receive full medication in 2019 mainly due to late arrival (0.4%), or expired health insurance (0.3%). Financial security for free drug funding, health insurance payments for drugs and paraclinical services, and co-payment support for patients have ensured full access and use of services during the transition period.

> Before 2019, in fact, there were only insurance services covered by insurance, and medicine was still provided under the project program .... From March 2019, we provided drugs according to the insurance fund. healthcare ... but patients still do not have to pay because of the rest of the project or the provincial budget support .... So the patient does not have much financial change. The patient can go to the doctor alone ... no payment is required.
>
> V3_IDI1_HW_ĐT_Province 01

## 3.5. HIV/AIDS stigma and discrimination tend to decrease

### 3.5.1. Stigma in healthcare facilities has decreased after the project funding period

The situation of stigma and discrimination against patients with HIV/AIDS in health facilities has improved, so HIV/AIDS patients on one hand receive the attention of health workers at the clinic, on the other hand are also considered as other hospital outpatients. Reducing stigma in health facilities is one of the important factors creating a favorable environment for transfer activities. Patients can safely go to the new medical facility for examination and treatment with new doctors and health workers without feeling afraid, anxious, and cautious in interacting and communicating with health workers.

> I feel normal, no change at all. As I said at the beginning, when they didn't work in this field, they thought these people were a bit strange to me so they were embarrassed but if I got used to it, I found it normal.
>
> V1_IDI3_HW_ĐT_Province 01

> PATIENT 2: When I came here, people were very open and advised, but no one reproached me at all. They gave me advice, encouraged to make me feel that coming here to talk with them is much more fun than my friends. Because with my friends, I still have to hide them, but the girls and the doctors here are nothing to hide.
>
> PATIENT 1: In general, at the clinic, from the doctor to the staff, everyone always examine enthusiastically and helpful, always advised to take medicine regularly. In general, the visit at this clinic is very good, from staff, doctors to nurses.
>
> PATIENT 3: I also agree with your opinion because in normal clinics, doctors, nurses, and assistants are not as considerate as this infection department, so I feel very

comfortable. The nurses and doctors here talk to me like their own relative, not as patient and doctor.

V1_FGD3_PATIENT_ĐT_Province 02

The development of science and technology in HIV treatment has contributed to raising awareness and belief of health workers and HIV patients regarding the effectiveness of treatment. The belief and optimism of health workers is transmitted to the patient and motivates the patient to commit to treatment compliance in all circumstances.

> In fact, at the beginning, we did not really believe in the results of ARV treatment ... At first, we propagated or advised that I was afraid to say what to say, basically did not believe much about the treatment results .... But after the 2010 treatment, I became more confident and at the same time, I was able to quantify the HIV virus before I was sure that the ARV drug will kill the virus, I have tested it experimentally and I downloaded it. the amount of virus is less than 1000, especially if the patient complies well, I find that the virus is not detected as much as 60% so I have an excited problem.

V1_IDI9_HW_ĐT_Province 03

### 3.5.2. Stigma in the community in some places has decreased

Stigma in the community in some areas has decreased, patients feel more comfortable to reveal their illness to those around them. It seems that discrimination is reduced in ethnic minority communities, in mountainous areas compared to Kinh communities, in urban areas, or in rural areas.

> REPORTER: Are there any of you here who are currently hiding from others that you are on ARV or are you already letting everyone know that information, likes people around you?
>
> PATIENT 6: Generally, no.
>
> REPORTER: No? How about other?
>
> PATIENT 1: No, we don't.
>
> REPORTER: So how do you feel about the way people around you treat you?
>
> PATIENT 2: Also feels very good, likes normal.
>
> PATIENT 6: It's actually normal.

V3_FGD4_PATIENT_NT_Province 04

### 3.5.3. Reducing self-stigmatization, patients are more confident

After a period of treatment, the patient's health condition improved. Many patients also have the opportunity to participate in peer activities, so they have more knowledge and confidence. Along with the trend of reducing stigma in medical facilities and in the community, patients will feel more confident and reduce self-stigmatization. They are willing to go public about their illness and feel secure in their treatment, work, and life development. For these people, the transfer to the district or commune health facility didn't cause much difficulty.

In general, I'm just openly. In general, people know they are sick. Many people know that they are sick. She publicly. Sometimes when some women in the ward go down because they are open to the public. People turned to hide or not to hide themselves on that television. If you want to go up, then you can hide it.

V2_FGD13_PATIENT_ĐT_Province 06

For those who still hide, are afraid, that's it, but with her publicity and her mind, there is nothing about the district or the commune. Because when she found out that she had been public and active in the group, among the peer groups, she did not mind the district or the commune.

V1_FGD1_ PATIENT _ĐT_ Province 01

I don't care, anyone who knows, just knows... I just live a carefree normal life like a normal person. I also need to be more confident.... Don't feel guilty, we have to share. If you feel guilty, mainly in your head, your thoughts are always guilty, thinking that you're sick and feeling so guilty that people would shun you, that's not it.

V2_FGD4_PATIENT_ĐT_Province 05

# 4. Objective 3. Advantages and disadvantages in the process of transferring HIV/AIDS treatment and care services

## 4.1. Advantages in the process of transferring HIV/AIDS treatment and care services

### 4.1.1. The support of the hospital's board of directors and departmental leaders ensures patient-friendly HIV/AIDS care and treatment services

One of the favorable factors to ensure a successful transfer process was the support and facilitation of hospital directors and department leaders to organize transfer activities on the basis of maintaining stability, did not cause fluctuations, disturbances for the patient.

- *Try to limit many changes in medical care activities that cause confusion for patients*

The support of the hospital's Board of Directors and the department's leaders is shown in the spirit of ensuring that the department still fulfills its tasks well and that the patients do not cause too much disturbance during the transfer. Most of the departments that receive clinics from provincial hospitals take into account the stability of patients, such as trying to keep the examination and drug dispensing activities at the old location, providing care and treated by at least one (several) former doctors and nurses, and strives to provide a self-contained, patient-friendly service such as dispensing medicines at or near the clinic, taking blood samples for testing at clinics, etc., which help patients feel familiar to services, do not have to travel much between departments in the hospital, leading to fear of encountering, meeting acquaintances, or contacting health workers in other units in the hospital. This contributes to the patient's psychological stability and peace of mind each time they go to the doctor and during their treatment journey.

Therefore, the Board of Directors also agreed to leave the clinic at C5 building for the first advantage in terms of expertise. Second, the patient is easy to see. The second thing is that, most of the tests are done, and the patient can take blood right at the clinic. After the health workers took the blood, they took it for testing and got the

results back. The process is the same, not forcing the patient to run up there to take the test and then be asked this and that. One is that people in the laboratory are also afraid to take blood for HIV patients, as unfortunately, it could be contagious. Moreover, there are a lot of sick people up there, while there are less such people here, so it is, more or less, better.

V1_IDI1_HW_ĐT_Province 01

A: In addition to the place where the test is registered, there is a problem with the test I do here, the nurses here directly do it, take the blood on the spot.

Q: Don't they have to go to the testing department?

A: No, not at the testing department, the patients here are highly prioritized.

V2_IDI21_HW_ĐT_Province 06

People with HIV/AIDS are inherently weak, afraid of confrontation and sensitive to changes in administrative procedures. Because the disease is characterized by sensitivity and fear of information disclosure, the patient's mentality wants to be stable and get used to the habits that have been built. Major changes can cause psychological distress and rejection due to reluctance to face challenging changes. In reality, preparation for the transfer process had been done quite carefully in some areas, so that patients could adapt to these systemic changes.

- *Patients are given the right to choose the appropriate treatment place*

During the transfer period, it is very important to choose how to transfer patients who are being treated at outpatient clinics of provincial hospitals to district hospitals, determining the success of the operation. At the survey clinics, most of the leaders of the clinics were thoughtful and cautious and did not massively transfer patients to the lower levels, leading to disturbances for patients. Some clinics of provincial hospitals only transfer patients who are willing, were being treated with stable condition and were in good health, to the district level, and kept newly treated or patients who were not stable enough to continue monitoring and treatment. Patients still have the option to stay at the old clinic if they want. At that time, they only need to apply for a referral at the district level to go to the provincial level for treatment. Empowering the patient to choose a place of treatment helps the patient to be undisturbed and difficult; easier access to and use of services and better adherence to treatment during the transition period.

Q: Can patients here choose where they are treated for HIV or who has the final say in what patients receive in the hospital for their final treatment?

A: This doesn't matter. The problem is where the patient wants treatment. If the patient wishes to move back to Que Vo or to any other place, we will transfer them all to facilitate the people. In general, it is not the doctor who decides which decision is made. If you need to go back to the hospital to find out where the patient wants to treat, there is a clinic that is convenient for the patient.

V1_IDI4_HW_ĐT_Province 01

I was the person in charge, I decided, the hospital did not have any ideas ... I myself took the lead that I did not have much work, I worked for people, helped somewhat or that

part. When there is a decision, I will follow the decision. As far as I can tell, if the patient is stable, then it is appropriate for the patient to come to the district level, but if the patient is not stable, it is up here, at the provincial level ... but then the patient refused, we could not be transferred. Here we see patients who refuse to go to the district a lot more than 50%

V2_IDI3_HW_ĐT_Province 01

That is, there must be a hand-in-hand form so that the members of this HIV treatment field must understand each other so that if the patient they move is where the ability is not available or the service of if they are not good, they should transfer it to the patient.

V1_IDI6_HW_ĐT_Province 02

Due to the peculiarity of HIV and the psychological, economic and social barriers for HIV patients, it is important to consider the difficulties and wishes of the patient in choosing the appropriate place of examination and treatment was one of the sustainable factors, determining the success of the transfering activity. It is necessary to be cautious and empower the patient to choose a place of treatment to successfully transfer the patient, in addition, it is also necessary to monitor and support the patient in the process of transferring to the local area for examination and treatment in order to keep up supporting them to adapt to the new environment or have the opportunity to be transferred to a more suitable and favorable medical facility. Research results at Mc-Cord hospital, Durban city, South Africa show that by continuing to monitor 4000 patients who were transferred to community health centers after funding was cut; 70-90% of patients were successfully transferred to the new clinic (Katz, Bassett, & Wright, 2013). This is evidence that it is necessary to actively manage patients to promptly support and guide them during the early stage of the transition.

### 4.1.2. Hospitals have the necessary capacity to provide services

One of the favorable factors for the successful transfer is the improved service delivery capacity of provincial and district hospitals in recent years. Hospitals also aim to improve the quality of service delivery, to meet the needs of patients, and towards patient satisfaction, including patients who are examined and treated by health insurance.

- *Provincial hospitals have enough capacity to support lower levels*

Up to now, HIV/AIDS treatment and care services have been provided at provincial hospitals with quality assurance. The doctors all have training certificates to accept HIV/AIDS treatment, the hospitals have the capacity and equipment to perform basic biochemical tests, and some hospitals are capable of performing the tests. such as CD4, viral load, etc. This helps to reduce a lot of difficulties related to hospital sample transportation and travel costs for patients. In some provinces, because provincial hospitals do not have the capacity to test CD4 cells, local patients, if they need testing, have to go to another province to perform it, increasing costs and travel time for patients.

At the beginning, the minimum services were simple, I used the nationally prescribed instructional medicines. Simple drugs and simple services gradually develop over time, now the clinic can provide basic services, for example, if the diagnosis provides basic tests and tests. confirmed, CD4, viral load ... In treatment, basic treatment of first and second line ARV, OIs. In general, the basic problems are enough to solve the problem.

For example, common OIs such as tuberculosis, fungi, the basic department I put into inpatient treatment. After inpatient treatment, move to another room.

V1_IDI5_HW_Province 02

Basically, at the provincial level, we do blood biochemical tests as well as paraclinical tests, and the medical team is quite capable to treat patients.

V1_IDI5_HW_Province 01

In the department, we create closed models. In fact, if the patient does not have to be diagnosed, he only has to go to the examination department to have a blood test done and then he is given a medicine without having to go anywhere due to the relatively closed range so the patient has There are many advantages. The advantage is that we are at the provincial hospital so the basic services are very good to meet, this is basically the main advantage including facilities. Our name is also separated into an infectious department and the facility has been recently built so it is very clean and spacious.

V3_IDI1_HW_Province 01

Provincial hospitals also have technical support activities for district hospital clinics in the early stages of opening and receiving patients. This helps lower-level clinics to improve their HIV/AIDS treatment and care capacity to be ready to receive and provide services to patients.

A: 2017, 2018 also did, came down and provided hand-on training to see how people actually worked, what was missing, what the problems were so that we could show people how to do things.

Q: What do your trainings usually involve?

A: Open a lot of classes, mainly management, care and treatment of patients. Meaning when new clinics are opened, people have not been trained, so we train them.

V2_IDI5_HW_Province 05

- *Some lower-level hospitals have the capacity and experience in providing HIV/AIDS treatment and care*

Before the transfer, care and treatment services for HIV patients were provided in a number of district hospitals and achieved certain results. Up to now, some district hospitals have also had experience in treatment and are ready to receive patients from higher levels or elsewhere. Therefore, the model of examination and treatment for HIV patients at district hospitals is feasible and can ensure quality and effective implementation.

In my opinion, the regulation of transferring to the district level is suitable for patients. At first there may be problems, but after the machine is working, people will get used to it. Because the district has already been treated, there are many patients there already, not new, half [the patients] are treated at the district level. Because in our province managing over 1,000 patients on ARV, the provincial general hospital manages 600 patients.

V2_IDI5_HW_Province 05

… many clinics opened very early, before this stage, patients were mobilized locally before, not because now this stage is required hospital units to have an application. at the beginning of HIV treatment, the provincial clinic [name of province] has just opened, and the towns here have opened very soon ... If this is the case then people will be back home, not until now because of this insurance issue.

V2_IDI9_HW_ĐT_Province 07

### 4.1.3. Health care services under health insurance have been operated better and have better quality in hospitals

- *The model of health care by health insurance has been well operated and is prioritized in public hospitals*

One of the factors contributing to the smooth transfer was that the health care model under health insurance had been operated well in the public hospital system, so the transfer does not cause much disturbance regarding organizational structure and implementation coordination. For the locality with a small number of patients, all activities have gradually come into order after a short time (2-3 months). For areas with a larger number of patients, the preparation time was longer, but it is gradually stabilizing. For provinces that started the transfer from 2018 to 2019, there are almost no more difficulties due to a longer preparation time.

In terms of hospitals, the model for health checkup is very simple. Hospital, a provincial hospital, the examination of hundreds of patients is not a big deal .... What about the hospital, of course, is the hospital, then under the direction of the higher level, then also the direction that most of the doctors are still, still the hospital's salary they will do no No matter what, of course people do it harder, more marginally, in that respect, but it's not a very serious problem.

V1_IDI1_ HW_ĐT_Province 01

Of course, at first, it was difficult to switch from project to insurance, but after a few months, it would operate normally. Right now, there are no problems.

V1_IDI12_ HW_ĐT_Province 03

Besides, the examination and treatment activities under health insurance are very strict, requiring health workers to perform more elaborately and carefully; at the same time, it requires the patient to be more compliant. Therefore, both health workers and patients must perform more systematically, with more positive treatment results.

Actually, according to the insurance policy, it follows the hospital model, so we actually have to improve more than before, one is to watch the patient closely and test it more often. Every patient who complies with the examination is also better adhered to. In the old days sometimes, when people appointment today, they will come until the next day. People will come even if there are cases of patients who go to work far away. two or three months in a row. In the past, the project was like that, sometimes when I went to work in Quang Ninh, it was also distributed after all the things that told me the medicine for two months, but now following the model of the hospital where people go, and people have to comply. The first is compliance, people have to comply, the second is

that they are more responsible to themselves, there is no way that he could be pierced and also see sometimes the quality of treatment sometimes. even better.

V1_IDI1_ HW_ĐT_Province 01

#### 4.1.4. Better facilities

One of the advantages mentioned by clinic health workers is that after integrating the clinic into the hospital, the clinics were arranged in newer, more spacious locations (V3_IDI18_HW_ĐT_Province 06), and were supplied by the hospital and fully equipped with necessary equipment for HIV/AIDS treatment and care (V1_IDI3_HW_ĐT_Province 01).

As for our advantages when providing services, every clinic was the same, fully equipped and decent, we just have to work, if anything was broken, we would just fix it.

V1_IDI4_HW_ĐT_Province 01

… for the equipment, my hospital is fully responsive. That is the advantage already.

V3_IDI3_HW_ĐT_Province 01

Compared to before, it was better, before our department was a level 4 house, it was very luxuriant, after completion of construction, it was more spacious and clean. In the past, there were patients who came, people saw the facility, they saw the infectious department, they saw the facilities like that, they didn't go to hospital anymore.

V2_IDI5_HW_ĐT_Province 05

The advantages are that we are a provincial hospital so the basic services are very good to meet this is basically the main advantage even in terms of facilities in our name is separated into an infectious department and the facility clinic here is also newly built, very spacious and clean.

V3_IDI1_HW_ĐT_Province 01

#### 4.1.5. Information technology supports health insurance examination and connection with friendly and convenient service providers for patients

- *Applying information technology helps to connect the clinic with the units in the hospital, creating conditions for convenient and patient-friendly service provision*

Some hospitals have applied information technology in the management of medical examination and treatment activities to ensure convenience in organizing clinics. Thanks to the network connection system, the layout of the clinic is also more flexible. For example, the clinic may not necessarily be located in the examination department, so it is possible to arrange the clinic in the old location or in a convenient and discreet location for the patient. Thanks to the network connection, the service provided to the patient is also more convenient and private (for example, the results are transferred to the clinic for the treating doctor via the network system, so the patient does not have to wait to receive the results), meeting the needs of patient information confidentiality every time they come to the clinic.

Now, the thing is, this clinic follows the rules of the polyclinic system, but there's no room so it remains here, but the network system is still related to the polyclinic system.

V2_IDI9_HW_ĐT_Province 07

> Only X-ray and ultrasound tests are done for the sick person. As for blood tests, the ill person does not have to go. They just need to take blood and wait for the results ... Another thing is that the hospital results are now online. When there are results, there is an outcome on it. So based on the above results, we can examine the sick. Very convenient.

V1_IDI1_HW_ĐT_Province 01

- *Information technology helps health workers to integrate the two systems of service delivery under project and health insurance during the early stages of transfer*

During the first phase of the transfer, the clinics still implemented two systems of management of HIV treatment and care activities under the project and under the health insurance scheme. Accordingly, ARV drug administration and CD4 and viral load tests are under the project, while other health care activities including OI drug delivery are covered by health insurance. The management of medical treatment activities under health insurance requires to be very strict, no mistakes are allowed to avoid the risk of being disbursed. Therefore, having a network system to help synchronize the two systems helps doctors and other health workers reduce the pressure in controlling errors and confusion during HIV treatment and care.

> Actually, we prescribe medicine now because of information technology, now under the insurance mechanism, it has two, one is a project drug without money but still requires a prescription. is not. It has vouchers, then the test must be calculated according to insurance, all of this we do operate on the computer only. No matter what, if there's a prescription, then the insurance examiner then they sign, they assess how much it costs. Percentage, the cost of testing, we only dispense drugs.

V1_IDI1_HW_ĐT_Province 01

> Yes, or the drug it has no update in the network, no experience to manage. There is not enough medicine from the network, but the medicine is there, it just hasn't been online yet, it's common and could be adjusted later. Things are fine now.

V1_IDI9_HW_ĐT_Province 03

> I think patients are very happy to have a cool air conditioner room before, they have to enter manually Now, the doctors also equip the insurance test tip for example, then the process of checking into the tip is done. is the equipment ... When the patient came, to welcome the patient to the hospital I just took the bar code of the insurance and I scanned into it now I have only a few months at my clinic only that line before sometimes you have to enter things manually

V1_IDI3_HW_ĐT_Province 01

## 4.2. Disadvantages during the process of transferring HIV/AIDS treatment and care services

### 4.2.1. The organizational structure of the clinic is not suitable, requires guidance from the Ministry of Health

So far, after 3 years of carrying out the transfer from 2017-2019, there are still no regulations and guidelines for deciding which hospital unit to put the outpatient clinic. Each hospital, depending on the individual views of the hospital leadership, and each area have different decisions. Currently, there are three main models of clinic integration, including transferring the clinic to the Department of General Examination, or the Department of Dermatology, or the Department of Infectious Diseases.

- *Integration into the Department of General Examination*

According to the health workers, the transfer of the HIV treatment outpatient clinic to the Department of General Examination also revealed certain inappropriate points. According to the management leaders of the clinics, due to the peculiarity of HIV examination and treatment activities, it is necessary to monitor and manage patients very closely like inpatients, so the nature of outpatient examination activities is very important. Hospital for HIV patients is not as simple as outpatient examination for other diseases. Management of HIV patients is much more complicated because of the management of patient records, treatment according to protocol and based on results for treatment, data management and reporting, counseling, quality indicators. etc., if applied according to the patient management model of the polyclinic, it will affect the results and quality of treatment achieved in the past time. At that time, if the doctor performs according to the function of the outpatient clinic, everything will be finished when the examination is completed, and there is no need to monitor the patient; However, if the HIV/AIDS treatment and care requirements are strictly followed, the work will be overloaded and pressured when both performing the duties of the department and closely monitoring the HIV patients of the medical examination department.

> My clinic has a reputation for being outpatient, but it is actually a lot more outpatient, because it has an extra system of records, a counseling system, a recording and reporting system, and a full quality indicator, rather than a general clinic, it is thought that this is a specialized clinic in the system of polyclinics is not its norm. Manage treatment counseling records and follow up with periodic medical examinations and treatment. But now if I call myself impartial, I follow this style, and the patient comes to the first regimen, the predictive regimen, and the big one to give medicine back in a carefree way, it is too wasteful. efforts and efforts of all those who have previously built the HIV treatment system.
>
> V2_IDI9_HW_ĐT_Province 07

> Previously it was also here. Initially, the transfer was intended to move to the clinic area. But counting back and forth, it also many. One is that manpower to work out there is not enough manpower. Doctors are also many doctors are attending school. Cannot send a doctor, a nurse to the clinic. Some days, 5 or 3 people are sick, but sometimes 20 people get sick. It is so difficult that it cannot be done. Integrating it into the clinic out there is very convenient for reporting. But it is not professionally advantageous.

V1_IDI1_ HW_ĐT_Province 01

> The clinic above is finished on that day, and we here still have to manage the patients, not finish it.

V1_IDI6_HW_ĐT_Province 02

- *Integrating to the Department of Dermatology*

In some other areas, the HIV outpatient clinic that was transferred to the Dermatology Department of the hospital also revealed inappropriate points. According to some clinic leaders, although the clinic belongs to the Department of Dermatology, it still needs professional support from infectious disease doctors, leading to difficulties in coordinating service delivery personnel. However, in some places, the Department of Infectious Diseases did not want to receive the clinic from the Dermatology Department, dispite the proposal from the clinic's leaders for a long time (5-6 years). According to this leader, it is appropriate to have written instructions from superiors to guide the transfer of the clinic to the Department of Infectious Diseases.

> This is the most difficult thing for the hospital, so far I still give advice for 2-3 years but I haven't given it to the infected person, the HT doctor is the dermatologist, he doesn't want to do HIV. I also begged, thanks to her help. After that, the hospital did not take any action to return the infected person to another person. That's a worrying problem for myself. The health sector also saw that there was no plan, what action to solve.

V2_IDI1_HW_ĐT_Province 03

- *Integrating to the Department of Infectious Diseases*

In some other areas, hospital leaders have considered and decided to set up an outpatient clinic in the Department of Infectious Diseases because they are usually located in a discreet area of the hospital, in accordance with the trait to avoid contact of HIV patients, in that ward, the health workers have professional qualifications and are familiar with contacting and providing services for infectious patients, so it is easy to build a friendly relationship with the patient, and convenient in managing both human resources and coordinating expertise in providing care and treatment for HIV patients.

> Some other provinces are located outside the medical examination area in Bac Ninh province, they are located in the infectious department under the Department of Infectious Management. Because of some factors when transferring insurance, some people consider moving to the clinic of the provincial hospital. Due to the peculiarities of HIV-infected patients, it is very difficult to contact. Some employees, though, do not discriminate, but people are more or less guilty, so people are afraid that people will not come to a crowded place to examine, but the examination in the infectious department is familiar and everyone knows each other as close as acquaintances already. The board of directors decided to have the clinic in the department of infectious diseases, which is managed by the department of infectious diseases, both in terms of human resources and professional terms.

V3_IDI1_HW_ĐT_Province 01

- *There needs to be an orientation from the Ministry of Health for the integration of clinics into hospitals*

The integration of the clinic with the Department of Infectious Diseases seems to be the most appropriate compared to the Department of General Examination and the Department of Dermatology. However, according to some clinic leaders, HIV treatment is considered a burden for the department and the hospital because it does not bring in revenue. In addition, health workers of the Department of Infectious Diseases also have certain pressures about work and stigma in hospitals, especially in the context of HIV/AIDS treatment and care transfer that is no longer subsidized from the project as before. Therefore, it is necessary to have supporting mechanisms to encourage and motivate health workers in the field of infectious diseases in general and HIV/AIDS treatment and care in particular.

> Because it is certain that this clinic is a burden, if it is said that the hospital has to do business, then the HIV clinic is always a burden, never a profitable clinic, and if it's a burden, of course they want to reduce it to the maximum extent possible. No one can maintain the ideal clinic to do good work.
>
> V2_IDI9_HW_ĐT_Province 07
>
> The second thing is that if I can say, as I said, the infectious profession is usually very low-income, project facilities that provide extra support for staff working in the field of care and treatment, it's not just like before but it is partly of a motivational nature for you.
>
> V2_IDI5_HW_ĐT_Province 05
>
> A: In general, it is not necessary to say that a doctor examines HIV/AIDS, just saying that an infected doctor is different. Not only HIV/AIDS but also infectiousness, the whole department had a different impression already.
>
> Q: So how do people get the different impression?
>
> A: They thought that the infectious department was the infectious department, so were the doctors at that department. That's what they think in their thoughts, just like people look at having a bad impression of themselves, that's what it is.
>
> In general, my people also discriminated against infectious doctors, even in medical people. Normally, I would like to ask for more people to be infected, but no one is willing to pay attention, other than district.
>
> V1_IDI6_HW_ĐT_Province 02

### 4.2.2. Some regulations on managing patients under health insurance are not suitable with the peculiarity of HIV/AIDS treatment and cares

- *Making records and managing medical records year by year makes it difficult to manage and track treatment results*

According to regulations, health insurance medical examination and treatment requires the management of medical records for each financial year. Accordingly, all the old medical records of HIV patients will have to be transferred to the new medical records and managed at the clinic in that year. At the end of the year, medical records will be returned to the planning department for storage. However, due to the specific characteristics of HIV care and treatment, not only treatment is required like other diseases, but it also requires management, monitoring

of treatment results, quality assessment and assurance, etc., so the management of medical records by year does not create conditions for treating doctors to monitor and evaluate the patient's treatment results over time. The creation of new medical records every year on the one hand puts pressure on human resources to perform, on the other hand, it also makes it difficult for treating doctors who still need to monitor the patient's treatment results over time. There is no information regarding previous years in the medical record.

> …When entering insurance, according to the law of insurance and the regulations of the hospital, the medical record must be renewed once a year or when the insurance card expires, you must make a summary of the medical record or submit it to the insurance company. A new card, for example, requires a new medical record. Then it's much messy. In the past, an HIV patient only needed to make one medical record, now it has to be more. This medical record should have been returned to the planning room by the end of December, but we still had to keep it because the patient was still receiving TB prophylaxis. Well, that's the hard part because now I have to work overtime.
>
> V1_IDI4_HW_ĐT_Province 01

- *Lack of detailed instructions in implementing patient management under health insurance, clinics have to grope for implementation in the first year of transfer*

In the first year of the transfer, according to the regulations of medical care with health insurance, clinics must urgently complete new medical records for all HIV patients being examined and treated at the clinic. Preparatory activities include making a list of patients; coordinate with the provincial AIDS Center to compare and verify the patient's personal information on the old medical record (managed according to the project program, it is not required that all personal information of the patient must be filled out completely and accurately) with the patient's information on the health insurance card and identity card, household registration; make new medical records; plan and carry out the transfer of the patient to the hospital for examination and treatment at the district or local hospital where the patient lives, etc.

For the provinces that transfered in the first year (2017), everything is still very new, there are no detailed instructions (for example, how to verify information, when to have patients do confirmatory tests, etc.), so the clinic's health workers have to strive on their own, looking for ways to coordinate the implementation to suit the personnel, time, and work progress of the clinic.

> So last year we were tinkering little by little, because there were no documents that instructed how, how. So, I have to ask by myself. Last year was very difficult my dear, anything is strange.
>
> V1_IDI4_HW_ĐT_NB

> The medical records in the past were clear throughout the entire treatment process. Maybe 5 to 10 years. But to the insurance treatment, it must make a new medical record. If a new medical record is made, it is necessary to confirm the HIV status of the person, if there is coordination with the AIDS prevention center, there are some patients who have the list already and then people go there. confirm because an HIV certificate is required to make medical records.

V1_IDI1_HW_ĐT_NB

> Other provinces across the country also faced to difficulties when we granted insurance. Previously, when I issued it, people could hide my identity, they gave me a different name, another address, now under the right insurance policy, I have the right address, my name is very clear, but really this is really hard. There is a solution to the problem, the Ministry also has no guidance on whether or not such patients need to be retested, their identity, and many patients with incorrect identities.

V2_IDI5_HW_ĐT_Province 05

However, IDI information with health workers in the provinces shows that the pressure and confusion only occurred in the first stage of the transfer process, which took place in 2017. For the provinces that carried out the transfer in 2018, the transfer process took place in 2017. The preparation has been more planned, health workers are no longer surprised and passive due to the reference, inherited lessons learned from the previous provinces.

> The stage of processing the information accordingly: name, age, address, identity card, health insurance, all appropriate, all of which were processed from 2015 until now, now no longer available. That problem too, I handled 2015, handled names and information for coincidence from 2014 is to handle all of that already. So now the medical records of all patients have to match up all. The preparation of information matching is done early, so when transferring it does not cause any difficulties.

V2_IDI9_HW_ĐT_Province07

- *Health workers are busier with the work of records, books, reports, insurance payments, worrying about being paid out*

Because care and treatment activities for HIV patients comply with insurance laws and hospital regulations, health workers have to perform more complicated administrative procedures than in the project management phase. Health workers have to perform some tasks on a daily basis such as managing new medical records according to the insurance year; ensure the accuracy of medical records to be able to settle insurance payments, not to be disbursed; update the patient's health insurance information in each examination; Enter data on the software and ensure the accuracy of information and books. In addition, clinics still have to perform data aggregation tasks according to the project... This is in the context of health workers no longer receive subsidies from the project as before and the pressure of payment is higher.

> If you compare it like before, then it's very simple before, come and check and go right back. And now, when I checked into the health insurance, I have to do it very carefully because I miss a mile by mistake, related to documents ... I have to correct the mistake. Certainly more complicated when entering health insurance.

V1_IDI4_HW_ĐT_Province 01

> We just get used to it, but it's really tiring, dying might make it easier, but younger people probably can't do these things, have to take care of a lot of things. Just a clinic but we are so tired it feels like dying, just full of reports.

V2_IDI21_HW_ĐT_Province 06

So, the story is going to test, the day before, for example, I will test late for the next batch. As for insurance now, I am afraid, if something is off, if I'm afraid ... I don't want if I miss something wrong, because this is so new. If I work in a hospital, it's been a long time. This is new, so I don't know who to ask. Suppose you are here [in the General Clinic] you ask in here, you are in that department. And here [the clinic is outside the hospital], it is forced to consider it, it is considered a manual, must consider decisions.

V2_IDI10_HW_ĐT_Province 07

### 4.2.3. Hospital autonomy and financial and human constraints

Transfer of HIV treatment and care services takes place in the context of hospitals having to be financially self-sufficient. The funding for HIV/AIDS treatment and care services has been cut, so when it is transferred to a certain hospital unit, that clinic must also be organized according to the hospital's autonomous management mechanism, of the hospital's management system. taste. This is not easy and suitable for specific health care services like HIV/AIDS.

- *HIV clinics are "not profitable" so they have to reduce their size as much as possible*

Information from IDI with the leaders of the clinics shows that these managers are quite concerned when the clinic has to operate under the hospital's autonomy mechanism. This means that the clinic must also share financial responsibility with the management department in particular and the hospital in general. According to clinic managers, HIV clinics do not bring economic benefits to the hospital, so they are considered a burden for the receiving department. This can also explain why in some provincial hospitals, when the clinic is transferred to the hospital, although both parties find that the transfer to the Department of Infectious Diseases is the most appropriate, the clinic still has not been received by the Department of Infectious Diseases (V2_IDI9_HW_ĐT_Province 07). Because it is a "burden", it will have to reduce the number of people working as much as possible to reduce costs; and this can lead to increased work pressure and reduced work motivation of medical staff working at the clinic.

The budget is actually that a patient exam is 39 thousand, then subtracting the others, the other and then divided to serve 4 people working there, it certainly is not enough to pay for 4 people work there. But in terms of work, we still have to do it, it's about the expense.

V1_IDI1_HW_NT_Province 01

We are self-reliant to pay the 70% allowance for people working on HIV, so it was very difficult because it was difficult to divide the common space for the whole unit, so it was difficult. will not be as comfortable as it used to be.

V3_IDI8_HW_NT_Province 04

Because to say for sure that this clinic is a burden, to say that the hospital must do business, the HIV clinic is always a burden, never a profitable, profitable clinic, but if is a burden then of course they want to reduce the maximum extent possible to reduce. It is impossible to maintain an ideal clinic to work properly. It's also not big problem, really, when it comes to being devoted, it is not as good as it used to be. But the work is still to be done, must be completed.

V2_IDI9_HW_ĐT_Province 07

In fact, like our provincial hospital, the mechanism of self-accounting ... all the doctors in any department have to take care of themselves to follow the mechanism of the hospital, nothing is unique. . However, having three people to serve an outpatient clinic is not enough to raise ... the hardest thing ... for HIV-positive people ... Now a doctor treating here on average monthly about 10 to 11 million. But if the income from the HIV outpatient clinic is probably not enough to support one person, let alone three people; hospitals do not have any specific mechanism to support the industry, the project does not have .... The infectious department must make up for the physician.

V3_IDI1_HW_ĐT_Province 01

- *The number of health workers working at the clinic decreased sharply in the first year of transfer*

Right in the first year of the transfer, after the outpatient clinic was integrated into the public hospital system, one of the big changes was that the number of health workers serving at outpatient clinics decreased compared to the previous period under the project. The reduction of staff at the clinics is partly due to the fact that the number of patients is also less because the patients are transferred to the locality, another part is analyzed as above to ensure self-accounting of the faculty. Through observation, clinics, regardless of the number of patients, are more or less (there are clinics with more than 100 patients, but there are also clinics with about 600 patients, and clinics with around 1000 patients), the staff working at the clinics are mainly 4 people (01 doctor, 01 nurse, 01 pharmacy staff (if medicine is dispensed at the clinic), and 01 physician). Some clinics have a large number of patients, so they have to be financially self-sufficient to pay support staff, which play an important role in reporting and coordinating patients on the day of distributing medicine. A decrease in the number of health workers compared to before and not based on the number of existing patients of the clinic can cause overload for clinics with an overcrowded number of patients.

The first stage may be that I have two doctors, two counselors, two nurses, one nurse, eight people, and a starting point of eight. The following is a change in personnel due to the increase in the number of patients, there are two additional pharmacists specializing in this clinic always, a total of 10 people. The first was ten people, ten increased to a maximum of eighteen people and now there are three of them ... is Uncle T [doctor] in charge of the clinic, Mr. H is in charge of nursing and Ms. H is in charge of consulting. In the past, there were two clinical pharmacists at the clinic, now that the pharmacy is returned to the pharmacy ... people will be given medicine at the pharmacy clinic.

V2_IDI9_HW_ĐT_Province 07

Actually, the current quality of services, the examination, I have not yet timely examination. For example, if the patient comes and I have to examine like another patient. As I see often, I ask if there is still a problem, measuring blood pressure, my heart does not care about…. because the number of sick people is too crowded. A nurse who just writes a book, just inputs too much, but there is no time to measure blood pressure because now the insurance system has one more thing to check the insurance card to see if it is valid or good. not anymore. It took one more step.

V1_IDI6_HW_ĐT_Province 02

> Before the staff here so much, I will spend more time with the patients, from counseling, nursing and supportive work and more, but now I I have to arrange a time for it.

V2_IDI9_HW_ĐT_Province 07

- *Human resources change while effective skills and approaches are peculiar and take a long time to train*

During the transition period, clinics also face a number of difficulties related to changing human resources while the skills and approaches required for effective HIV/AIDS treatment and care is quite special, takes time to train and practice to get it. The reason for the change in human resources may be due to retirement, job transfer (transfer to another faculty, another field such as tuberculosis, or change to self-employment), refusal to continue working, possibly due to the lack of support, working in the field of infectious diseases includes many risks, being stigmatized, etc….

> This is the most difficult thing for the hospital, so far I still give advice for 2-3 years but I haven't given it to the infected party. The other [doctor's name] is from the Department of Dermatology, he doesn't want to do HIV, I also have to beg, thanks to her help.

V2_IDI1_HW_ĐT_Province 03

> In general, it is not necessary to say that doctors who treat HIV / AIDS, just say that an infected doctor has a different impression ... my people also discriminate against the infected doctor, even in civilian medicine. The same is true. Normally, I would like to ask for more people to be infected, but no one is willing to pay attention, other than district.

V1_IDI6_HW_ĐT_Province 02

According to health workers serving at the clinic, it would be much better to have an HIV specialist at the clinic. However, currently, the regime for doctors in the HIV field does not exist, except for the toxic subsidy of the infectious field, so it may not be attractive enough to hold to long-term and experienced doctors.

> Firstly, a doctor who specializes in HIV would be better, the time to support the patient psychologically is very good…. Also, partly due to the low salary… I received no other allowance than the hospital's doctor, only the toxic one.

V2_IDI11_HW_NT_Province 07

Meanwhile, newly transferred doctors could be young doctors from other fields (for example, psychiatrists in province 01), have not had much experience in HIV treatment and care and have little experience in HIV treatment, as well as with HIV patients. New doctors need time to continue training and build a close relationship with the patient.

> Theo em nghĩ không phải là [khám] hơi qua loa. Bác sĩ ở đây giống như mới về, mới tham gia cái mảng HIV nên chưa chuyên sâu, chưa biết nhiều về bên này nên phải đi học cao hơn nữa.

V2_FGD1_PATIENT_NT_Province 03

… the patient feels happy and ... the staff changes that, usually the doctors are naturally changed to this department, it will take a few months to be surprised, but the patient also calls it slow, takes the whole day. Previously, I [the name of doctor] was new, so I thought it was a long time ago. A whole morning, he could only make a few patients. The patient goes to the end of the afternoon to finish the day. But when I got to know him, he did it very quickly but more than that, he was very friendly, sharing and talking to patients happily

V2_FGD10_PATIENT_ĐT_Province 01

At first, the doctor also consulted enthusiastically but now he does not see him anymore. Now that you have just arrived, you have to ask about it and ask for a rough idea of how you feel.

V1_FGD4_ PATIENT _NT_ Province 02

- *Rotating, part-time, so health workers do not spend enough time with patients*

In the context of hospital autonomy, the receiving units must also restructure their human resources to ensure the operation of the clinic, at the same time, the staff can participate in the work and duties of the department. All activities of the clinic will be integrated with the activities of the host faculty on the basis of the arrangement of personnel and resources to ensure financial and work results of the whole department.

In order to balance the general duties of the department and the duties of the clinic, each hospital will have different human resource coordination mechanisms. The relatively common trend of personnel organization chosen by many hospitals is to implement a rotating and part-time regime, not as specialized as before. Accordingly, health workers including doctors and nurses of the whole department will alternately work in the clinic and in the department. Rotation can be weekly or monthly. Only a few hospitals apply the full-time mechanism for a certain period of time (1 year). According to health workers, the organization of rotating work at the clinic partly affects the monitoring of the patient's health situation and the wholeheartedness of the work.

Taking care of patients of HWs towards patients, then the first one is about human resources, human resources like this are being tested. Still working part time is just doing here, just do the other side. Actually, I still have not spent enough time for the patients. Without enough time, there are many things that are not as expected.

V1_IDI3_HW_ĐT_Province 01

In general, it is normal, there is only more income, but normally, now there is no work, common work. The doctor has determined it; we have determined it. In general, it seems that the support is cut by the end of 2016 ha, as if the project is over. As the 5 of us worked hard until the second half of 2017, we started fainting, our new department head gave each one a day, 1 person a day, we still managed to do it for 6 months, without support, we still do it, 5 of us still do it. But because it was too much work.

V1_IDI7_HW_ĐT_Province 02

- *There should be a staffing policy for clinics*

From the difficulties related to reducing the number of staff at the clinics to overcrowding in clinics with a high number of patients. Therefore, the number of health workers serving at the clinics should be determined in proportion to the number of patients of the clinics, and should not be uniform between clinics.

> Which means that my point of view is very clear and very convincing and also a basis, because it also has to do with the number of patients, there are places where you go to the number of patients just over 100, 500. -600, and I've reached 1000, it's clearly different….
>
> V2_IDI9_HW_ĐT_Province 07

And the decision on the number of health workers serving at the clinic is usually decided by the hospital director, so the clinic leaders want to have a staffing policy for the clinics. Accordingly, leaders of new clinics have a basis to propose to hospital leaders.

> … In the end, still couldn't develop a frame for the clinic... In the manual, there was also a need to have clear staffing. But until now, there still not. It was included in one of the resolutions before the transition, stating in a paragraph that there is an obvious need to have a guideline for the clinic.
>
> V2_IDI9_HW_ĐT_Province 07

> Based on the minimum number of patients and in summary to serve, there must be a word above so that when it is easy to implement there is a delicate example, I suggest is to report to the director for someone to ask more about outpatient clinics because now the number of patients is too large following this guide, the leadership will have additional facilities but if I say there is no base.
>
> V3_IDI8_HW_NT_Province 04

### 4.2.4. Difficulties in training and developing human resources for HIV/AIDS prevention and control

Training activities play an important role in helping health workers update information quickly, because the treating doctors and health workers themselves are also “afraid to read documents and instructions”, “we actually don't remember the document, just do it” (V3_IDI2_HW_ĐT_Province 01). This is even more important in the context of changing human resources in the field of HIV/AIDS treatment and care, replaced by a new and inexperienced team of health workers.

- *Training time and frequency of training classes are reduced compared to before*

According to the assessment of health workers regarding human resource training and development, the training of HIV prevention and control personnel is not as methodical as before, specifically, the time is reduced for each module, only theoretical training is provided, there is no clinical practice in the hospital. The frequency of training courses is also reduced compared to before when the project was funded.

> First of all, let's talk about people. If people want to be good, they must be trained. Before in the program, the training was very methodical, now I have transferred it to a number of districts where before people have not been trained, the last time I found

the training was not as methodical as In the past, projects should support training.... Before, when we treated 1 HIV treatment module, it was about 3 modules, each module was 1 week, we still had to go to clinical practice at the central tropical hospital for 1 month (4 weeks), but now here module people treat about 3 days.

Inteviewer: Is there any practice?

ĐT: No practice, only theoretical training.

V2_IDI5_ PATIENT_ĐT_Province 05

Much worse than in the past, but now I know the reason why it's worse in the past... I have been able to go to training but not as much as in the past.

V3_IDI5_HW_ĐT_ Province 04

- *Sending people for training depends on the support level of the Board of Directors and the Planning Department of the hospital; Some places have not sent the right people, with the right expertise*

training programs, seminars, conferences or all training programs in general, the concept of some former leaders signing documents to go to school to access new things. But as for conferences and seminars, sometimes they let me go, sometimes they let others go, sometimes they send them to the wrong people to train, then sometimes they give, sometimes they don't. That's why it's so dangerous.

Q: Is that something the hospital decides?

A: Decided by the general plan.... In the past, the giving and giving program was not difficult at all. But now I go to attend a training on reading the volume, training on how to comply with the right amount, training on the results of the load, what you guys read about three or four full volumes without giving it to work.... People are also not eager to give, but if they are not eager to give, how can they do it right?.

V2_IDI9_HW_ĐT_Province 07

- *Send people to train, then no one would work at the clinic, so choosing on-site training solution*

The difficulty is that many times it is not possible to send, the reason is that the inpatients are too crowded, there are not enough people to go. Not to mention my department is the Department of Infectious Diseases and the Department of Tuberculosis, it will involve 3 specialties whose community relations are HIV disease and HIV/AIDS prevention center, Tuberculosis and the provincial TB center, Infectious diseases and the Center for HIV/AIDS prevention and control. Preventive health care. We have to partner with those 3 centers, those 3 centers have training courses on those 3 specialties, so we have to send people, sometimes we can't send them.

V1_IDI5_HW_ĐT_Province 02

I've been working for a long time, so it is the same, but it's not like I can particiate in a training to update knowledge anytime I want... sometimes, we have to train our own nurses on-site ...

V3_IDI8_HW_NT_Province 04

### 4.2.5. Difficulties in receiving, purchasing, using, and paying for health insurance

- *Health insurance for poor households and support for people living with HIV may not be provided in a timely manner*

Some areas have policies to support health insurance for HIV patients with household registration in the province. In addition, the percentage of HIV patients using health insurance for poor households is also quite high. However, the assessment results show that there is a phenomenon in which the health insurance under the support category is often interrupted because the card expired, the patient has to wait for the local issuance; there is a risk that the card will be issued late, leading to the possibility that the first few months of the year the patient will not have an insurance card to go to the doctor. During the first 1-2 years of handover, when ARVs and OI drugs are still funded by projects, patients were still able to pay for medical examination (VND 35-39.000). However, if the card issuance in the following years is still slow, the possibility that the patient will not have the drug for treatment would be high (especially those receiving regimen 2, 3) because then they have to pay for themselves for ARV drugs due to lack of health insurance card.

> Patients who have been granted it since 2017 are now expiring, they are interrupted and promised next month ... Try to provide insurance for them ... Depending on the AIDS center with the Department, the AIDS center will take the name. book and then go to the Department, get the list from the clinic where the list of patients is provided, submit it to the department, the department will approve and then insurance.
>
> V2_IDI1_HW_Province 03

> Currently, my insurance is still in use but I am afraid that when I receive insurance, it is very easy to buy in December. But this is the state's leadership can not get back to wait for a household registration. Of course, my own life, everyone wants to live, so I accept to pay but for too long time, I can not afford. Because I am taking the second regimen very expensive now. For example, in a short time I can afford it but for a few months I cannot afford it.
>
> V2_FGD5_PATIENT_ĐT_ Province 07

> Self-purchased insurance could be more proactive, support insurance or company insurance is often delayed, sometimes it is not until Februay or March that the cards are issued; or maybe it was there but then cut without knowing why.
>
> V1_IDI5_HW_NT_Province 02

- *Some difficulties when buying voluntary health insurance: must have household registration or temporary residence certificate, must buy household health insurance*

In the process of buying voluntary health insurance, patients in the areas also face certain difficulties related to the necessary procedures and documents such as permanent residence, temporary residence certificate, temporary absence. In the provinces with large industrial zones such as Binh Duong and Bac Ninh, the rate of patients outside the province is relatively high while not everyone has full documents for temporary residence as prescribed, so these patients either have to return to their hometown to buy insurance and get medical examination

there or apply for the necessary administrative documents to buy insurance in the area where they work. From the patient's point of view, they also don't want to transfer papers back and forth out of fear of complicated procedures, it will be difficult to transfer papers back to the locality in the future. Because the procedures to buy health insurance are difficult, the patient either accepts to pay out of pocket or has to go back to the locality to get health insurance. And all of this can cost the patient money and time-consuming travel.

> And the second one is the first stage, actually our first stage, the majority of our patients are over 50% of patients without health insurance. People can mobilize to buy, but not everyone can buy immediately. Or patients who do not have permanent residence are also very difficult to buy. So, anyone who wants to buy a household must have a household registration book. But Bac Ninh is a place with a new industrial zone. However, if the sick people come to work or come from any province to come here, they will not declare any permanent household registration so it is very difficult to face but very much. Some people, people actually do, but they don't like it, now they have to go to the commune to declare it.
>
> V1_IDI 2_HW_ĐT_Province 01

> Yes, because it was difficult to transfer the file later. But I also need an address to receive it once I move out and after some time I come home to work and then move back home. At that time it was difficult to transfer the file again.
>
> V2_FGD13_PATENT_ĐT_Province 06

In addition, regulations on voluntary health insurance that must be followed by households also make it difficult and expensive for patients (for example, the wife already has health insurance provided by the local government, the husband wants to buy it, but have to buy for the whole family, wasteful, expensive etc). It is very good that recently, Decree 146/2018/ND-CP, effective from December 1, 2018 has been adjusted in which it is not compulsory to join the whole family, solving difficulties for patients to buy voluntary health insurance.

- *Insurance does not provide access to HIV patients within the hospital, so doctors cannot connect patients to be examined and treated in other departments in the same hospital; inconvenience for both the doctor and the patient*

> Because the insurance was only available within the outpatient clinic, and now I want to go to my friend's hospital on the 8th floor, the 4th floor consult the patient, the patient must return to the locality to transfer papers, so it is interrupted. . So if I were able to create conditions for them, I would be able to give them a route, which means I would be able to submit to this outpatient clinic, and after that the outpatient clinic would discover other conditions. , they transferred me over there to examine, so I took this I went to the hospital the way my brother examined it was acceptable. And this one does not work, so it is difficult for the doctor. Many times, when I finished the examination, after the test, this patient showed signs of diabetes, the patient had hyperlipidemia, I could not do anything, so I took the test card to go to the other place where I could find the doctor, Routine for HIV patients is the best advantage.
>
> V3_IDI22_HW_ĐT_Province 07

> The health insurance does not have any recommendations at all, just how to make it most convenient, now I say is the communication for them. Of course, in the first stage, it is necessary to make a proper transfer paper.
>
> V3_IDI22_HW_ĐT_Province 07

> Because it is related to the transfer paper, normally when it comes to us from the district, it only has B20, which is the code for ARV, HIV only, it is not related to other disease codes. For example, colitis is not related to the transfer paper, so the insurance will not accept it.
>
> V1_IDI3_HW_ĐT_Province 01

- *Difficulties in using health insurance cards for medical examination: Patients do not use the same health insurance card in many different hospitals at the same time*

Due to the peculiarity of HIV/AIDS, patients will have to be treated for many different diseases at the same time at the same hospital or in another hospital. At that time, the patient will not have a health insurance card for examination and insurance payment in case their health insurance card is being kept at another hospital. Although the clinics are now quite flexible, still providing medicine for patients because ARV drugs are still funded by the project, but after the drugs are provided under health insurance, it will lead to the risk of patients not being able to receive drugs due to their inability to present health insurance card. Therefore, it is also necessary to have guidelines for medical facilities to implement to support, to ensure that patients can access and use health services under health insurance continuously and conveniently.

> For example, I took medicine at this provincial general hospital, for example, but I was admitted to the tuberculosis hospital for example, so now the tuberculosis hospital keeps my health insurance card, but until When I finished my medicine, where did I get the insurance card so I could go to the hospital where I got medicine? ... If I got insurance later, I don't know how these cases will be solved, we are wondering about issues like this, but I don't know later on insurance, now I am transferring. I don't know if it will bring up such cases then later on I don't know how the insurance settled, we don't know
>
> V2_IDI8_HW_ĐT_Province 05

- *Some subclinical services have not been covered by insurance or been reduced, so doctors lack a basis to prevent and evaluate treatment failures for patients*

Some laboratory tests (CD4, viral load, hepatitis C, X-ray…) that are not covered by insurance also cause certain difficulties for treating doctors in preventing and evaluating treatment failures of the patient. According to doctors, if the services are necessary for the specific HIV disease, the services are professionally guaranteed, then insurance should pay for them.

> There is a problem like this, hepatitis testing is expensive but health insurance is not paying ... social insurance is now tightening all specialty but not infectious department itself. I wish if health insurance would expand further .... [services] within the scope of expertise, social insurance to pay.
>
> V1_IDI5_HW_ĐT_Province 02

For example, viral load is done once a year, CD4 is done every 3 months. But now, even CD4 is not done in the whole year, and they can only do viral load after a year.

V1_IDI4_HW_ĐT_Province 01

I really want to do such tests to serve patients like this. That is, they are not like other normal patients in many different ways so it is not always convenient to do these things outside. So it would be nice if there were. We also take better care of the sick.

V1_IDI3_HW_ĐT_Province 01

For example, patients who are still on treatment at 350, patients who are still on opportunistic immunotherapy, then we do CD4, which we rely on to evaluate the treatment process, and treatment failure.

V2_IDI5_HW_ĐT_Province 05

It does not cause difficulties, but I assess clinically about AIDS with non-AIDS it is not accurate .... The viral load you can not measure the effectiveness or not, then fail or not, then it affects during treatment, but we also monitor. Clinical patients with suspicion are here if not, we advise patients to work by themselves

V2_IDI1_HW_ĐT_Province 03

In addition, the third one is subclinical, such as hepatitis B, C is a must give, because in the past it was given, now not giving, only hepatitis B only. So when I was first screened, I found that he had B without C, he had C without B, at that time it would be easier to handle, or difficult to resist drug resistance, I know This guy is due to this reason, that reason for his calculation

V3_IDI22_HW_ĐT_ Province 07

### 4.2.6. Difficulties in drug management under health insurance

- *Insurance is not available throughout the hospital, so some common drugs have not been integrated in the list of drugs that are covered by insurance at the hospital*

There is no integrated mechanism to include conventional drugs in the department's list of insured drugs. Patients who come for ARV examination and treatment are only entitled to receive antiretroviral drugs; if you have other common health problems (cough, headache, bronchitis, etc.) that are not covered by the department's examination and treatment, they will have to return another day for another medical examination before receiving medicine. This regulation makes it difficult in terms of time and travel for patients and is not really suitable with the characteristics that HIV patients are susceptible to OIs, so they have to go to the doctor and get treatment more often.

For example, when they came to collect drugs, for example, now my hospital is here, in addition to the free ARV medicine, the patient is still provided with the current aid, it is provided under the insurance program. Remaining sick people at home that people have but at home if people suffer from diseases such as people coughing, they have a headache or bronchitis or something that people come here to take ARV but wish of people are treating the disease there but not yet granted the other kind for example.... In fact, this one has not entered a specific process. We are also trying hard to apply for

that drug into the list of drugs dispensed with insurance drugs. I have done it for a long time, around the beginning of the year, I have done that already in the middle of the year but other drugs that are related to insurance should not be done

V1_IDI3_HW_ĐT_Province 01

A: Then the clinic was here, it was separate from the clinic and other departments but now I need to send one to another department, my patient has to go very far. Then there was the procedure at another pharmacy.

Q: That is the treatment for the wrong disease?

A: That's right. The model is bothering the sick, one has to walk from here to the gate.

Q: Has it been before?

A: Before, those medicines were bought by patients. Now, people have health insurance, so I have to transfer that disease to another department.

V1_IDI6_HW_ĐT_Province 02

- *The current drug dispensing process is not suitable to the characteristics of HIV patients*

In general, during the period when the project still funded ARV drugs, there was no change in drug availability. Hospitals still provide enough medicine for patients. However, some points related to regulations on dispensing drugs by health insurance seem to cause certain difficulties for HIV patients. Specifically, according to the provisions of health insurance, patients will have to go to the hospital to examine and receive medicine directly, cannot ask relatives to do it on behalf of them in case of poor health, work far away, husband/wife cannot stand in for the other so both of them have to go, etc. While there are some patients who consider it normal to receive their medicines every month, there are sick people (mostly working people) who find it very difficult when every month they have to take the exact same day off to go to the doctor, which can lead to suspicions or objections from employers and colleagues, etc.... Therefore, these people expect to receive the drug for a longer period (2-3 months) to reduce travel and leave difficulties.

I go to work and come home 1 hour early and it is around 11:00 PM. After that, I changed my clothes and then took a car [from Saigon] to come here. This is around 4am in the morning. I waited until I picked the number and took my medicine ... I came back ... around 2:00 PM, I went to Sài Gòn and I took the opportunity to go to work.

V2_FGD13_PATIENT_ĐT_Province 06

However, while some health workers believe that the patients are currently on stable treatment and have a good sense of compliance, so they can give medication every 2-3 months, there are also opinions that the long-term drug supply for patients is not recommended because of the risk of patients dropping out of treatment, making things unmanageable.

...must be strict in the matter of supplying drugs. Because I do not trust patients in 3 months how they store. In fact, many people who go to conferences say that the 3-month level creates favorable conditions for patients to comply well, but they do not comply well, because my reports of patients giving up are many reasons for signs of it. If he doesn't go to take drugs, he will quit. How do you manage to take medicine every 3 months? Seeing the brothers recorded in the report for 3 months then for the

patient's family to receive. Then they reported not giving up because they said very few people quit very much....

V1_IDI9_HW_ĐT_Vinh Long

- *Bidding for drugs should be strictly managed to avoid drug changes that make patients afraid to take new drugs and have to adapt again*

One of the worries of treating doctors is that after ARV drugs are covered by insurance, care must be taken in drug bidding to avoid drug changes leading to difficulties for both doctors and patients during treatment because then drug resistance may occur, patients having to perform resistance tests which would be very laborious and expensive.

> In general, right now there is nothing that it is very entangled in, just afraid that this momentum is after entering the general insurance, then the source of the drug will be equal or not or what it will look like. There are drugs that are sometimes bidding. After the bidding, the old medicine was gone, the hospital did not use the medicine anymore, so I had to switch to use the new medicine again .... I need to take this disease for a long time, even if the same drug that one company or another company is one thing that changes to another medicine is another.

V1_IDI6_HW_ĐT_Province 02

In addition, the patient also proved to be very sensitive to the ARV drug they were taking. They have experience with drug side effects and if it doesn't work, they get drugged up, and they have a belief that one drug has a better response to their body than another. Therefore, negative experiences with the medication they are taking can also affect adherence to treatment.

> I was very hard, the doctor asked if there was any resistance or jerking up, I did not say that I lay in one place a week, stood up and vomited, stood up and vomited but I was very diligent, I still persisted taking the drug because of the doctor said that If the drug was changed, then the chances of getting it would have been more. I think it's like the type of morning sickness and then it's both drunk and tinged and drunk but can't eat anything else. It kept vomiting all day long.

V1_FGD3_PATIENT_ĐT_ Province 02

> Before I drank the blue pill, lost fat, now in exchange for the big white pill, it didn't lose fat .... The previous medicine was that it shrunk the muscles ... Side effect, is that it lost the the fat on my face and my cheeks sucked into it ... but it didn't lose weight, so in exchange for the white pill that I drank again, it didn't lose [fat].

V2_FGD2_ PATIENT _ĐT_ Province 03

### 4.2.7. Difficulties in machinery, equipment, and information technology

While some provincial hospitals have testing machines and are capable of operating CD4 and viral load testing machines, some other areas do not have available testing machines. This may cause certain difficulties such as the cost of transporting the blood sample and having not found a payment mechanism for this transport (eg, province 01) or having to depend on the condition of the equipment of the service provider, which sometimes cause a situation in which when

the patient was mobilized to the clinic to take blood for testing, the service provider announced that the machine was broken, had to stop, making it difficult for the clinic to explain to the patient so that they can sympathize.

> One is that the project does not cover the CD4 problem, and for insurance, the Bac Ninh Institute itself and the neighboring institutes have not done the CD4 cell. So, by signing a contract to do with other provinces, the current insurance has no mechanism…. The second is that insurance does not include how the money transport mechanism.
>
> V1_IDI1_HW_ĐT_Province 01

> The other is that the human system is very extreme, they are used to working for more than 30 days, not every day can load, every day do CD4, it also depends on other places. Like today, for example, if patients have a CD4 test, they have to take blood, transport it to Can Tho city, but we receive a notice that the device has broken down 2-3 days ago and we already have an appointment with the patient, rushing to hundreds of people, then the device breaks down. , and the patients must come back home.
>
> V2_IDI21_ HW_ĐT_Province 06

There are many sources of medicine, but the software they install is just like that. For example, my medicine doesn't run out until the 10th, but people run out from the 9th because they lost a pill. On the 9th, people couldn't come to pick up the medicine. Then the case of drug supply on Saturday and Sunday will be over, but if it's closer to Friday then it is possible, because the software installed on the machine like that. The information at the clinic said that they still have medicine, so they couldn't enter into the computer which was also a problem…. Currently, there is no solution related to information technology. The hospital also has a woman in charge of information technology, but it is very difficult to report that to fix it.

V3_IDI8_HW_NT_Province 04

### 4.2.8. Communication activities for patients about the transfer are not timely

In the early stage of the transfer process, many patients reacted negatively because they do not understand the mechanism or have to deal with difficult problems related to paperwork (must buy insurance cards, must have a hospital transfer certificate and sufficient documents to buy an insurance card or transfer to a local hospital for examination and treatment, etc.), there are even patients who are worried that the district level will not have treatment.

> Now that there is a policy, you guys should advise that you should go there to get it near, but in the district, you encounter some problems such as those who have taken it in the district, you said that the medicine until the day go get medicine, then there is no medicine, not enough medicine. This is something that is very dangerous so it is decided not to move back to the district. The medicine is often there are many people who come to the end of the medicine to get it.
>
> V3_FGD3_ PATIENT _ĐT_ Province 04

Some patients had negative behaviors such as anger, threatened and pressured health workers during the preparation and implementation of the transfer.

> Of course in the beginning, the doctors also had a lot of problems and discomfort because it also had more procedures, a little more travel because previously there was no need for such procedures .... But. after a few months, when people get used to it, it's about 3 months when everything is getting used to it, then I find things gradually stabilizing.
>
> V1_IDI 3_HW_ ĐT_ Province 01

> … it got into trouble with the doctor and then on facebook threatened and threatened the doctor again ... While the doctor explained very clearly that the CD4 load is here to treat it, not to move down there ... they threatened and then after they were scheduled to see the chief doctor also said, it is not always ... they curse um so that ... After we also transferred to Tropical Islands and did not know how to return to us, but now They are very compliant.
>
> V1_IDI8_ HW_ ĐT_ Province 02

> Well, some people who are crazy say they're like this, how can they be like that, of course, in fact, telling her that this type of H patient has a lot of bad elements ... There are patients who grow up screaming that I'm not going to treat me anymore, that person, that person and that person that I'm about to die should be a lot of problems ... the physician is here for a long time, for the relationship between him doctors and sick people have a thickness and then come out when I explain it, people will listen to me.
>
> V1_IDI1_ HW_ ĐT_ Province 01

> Sometimes I have not taken it before it cursed. In the early days, we still had to bring medical records, but the children also struggled, looking at the empty hours, telling them to take advantage of things to bring them out. On the way here, carrying so many medical records and seeing patients waiting, they scolded and called the hotline.
>
> V2_IDI19_ HW_ ĐT_ Province 04

Face to the negative reaction of the patient, the health staff at the clinic took the time to advise, explain and guide the patient to help them gain more understanding and confidence in this transfer and cooperation process. The clinics even assigned a staff member who specializes in consulting on procedures related to buying and using health insurance cards for patients.

> At first, it had many difficulties. These patients are, these people are familiar with taking the project medicine, which means they can come here any time. Then after finishing, the ladies in charge of the room were able to put the medicine back. Thus, it does not have much problem in the matter of examination and then taking insurance drugs and vouchers of other things. After transferring to this health insurance, it is very important to explain to the patients. It is simply a matter of instructing the patient to go from room to room for testing, then to do screenings, then the documents to bring to health insurance assessment. That is, the educational level of these subjects is mostly not very high. So they are very hard to remember. Sometimes they go and return a few rounds to finish a paper.
>
> V1_IDI3_ HW_ ĐT_ Province 02

> Of course, in the beginning, the doctors also had a lot of problems and discomfort because it also had a lot more procedures, a little more travel because previously there was no need for such procedures. I only need to fill in the form and bring the medicine back but now it has to go through many test papers and insurance assessments, many more so it was the first time people were not used to it, so it was a lot of discomfort But well, at the beginning we were really hard, talking, explaining a lot.
>
> V1_IDI3_ HW_ ĐT_ Province 02

It is necessary to have timely information and support for HIV/AIDS patients in the process of preparing administrative procedures and papers to buy insurance and transfer to lower levels. Patients with HIV/AIDS often have problems in meeting administrative procedures and papers because they want to hide personal information, don't want to register for temporary absence, etc. In the previous period, when providing medical care under the program during the project process, administrative procedures are mostly minimized to create favorable conditions for patients to access and use care and treatment services. Therefore, during the transfer process, many patients had difficulty in preparing the necessary documents to be able to continue participating in treatment under the insurance mechanism. Timely and flexible support in the early stage is essential to help patients maintain adherence to treatment and not suffer from psychological anxiety due to not knowing how to solve problems. Some of the flexible solutions that health workers have supported patients have been implemented such as flexibility to give medicines so that the patient can still have medicine and come back to the clinic with full documents the next week, invite insurance sales staff to advise and assist in selling insurance for patients right at the medical facility to increase accessibility etc. In the coming time, areas are preparing for the transfer and even areas which are implementing the transfer need to continue to exchange information, promptly detect problems and provide support to patients to ensure a favorable condition for patients to maintain the ability to access and use services at best.

### 4.2.9. Stigma in the community

- *Patient's experience of stigma*

In addition to the fact that in some communities, social stigma toward HIV and people living with HIV has decreased, but many patients still have experiences of stigma within their friends (alienation) or community (gossip). Therefore, patients are still very cautious in revealing their disease status.

> If you say it, you will be discriminated. I also tried once to tell my friend, and then they don't play with me anymore…. I even chose the April Fool's day, but after that, they didn't play with me either.
>
> V1_FGD4_PATIENT_NT_Province 02
>
> In short, community stigma is still very high.
>
> V1_FGD1_PATIENT_ĐT_Tỉnh 01
>
> Q: Is there still discrimination in the commune? How do people discriminate?
>
> PATIENT 1: Sickness.

PATIENT 2: They said that they were sick and it was very boring. My workplace didn't dare to say it because it was hard for them to find work. Workplaces that people do not understand, they kicked me. But people that have knowledge, they disdain say this and that.

V2_FGD13_ PATIENT_ĐT_Tỉnh 06

- *Fear of information disclosure when transferring to a lower-level clinic*

Many patients still wish to be examined and treated at the provincial level out of fear of being revealed when they are transferred to lower level. This also makes it difficult to transfer patients to the locality as well as affects the patients when they have to be transferred to lower levels and when they go to the district hospital for medical examination and treatment.

PATIENT 3: I do not want to transfer to the district level.

PATIENT 4: I did not want to move because I had many acquaintances at home, so in the past, I told them to come here, but I did not dare to take it, and then went to Hanoi to get it. Only later will you come here.

PATIENT 2: Tells about the district or commune center, even the doctor. So if it's treatment, then treat it here. Because no one knows now. Still hiding, so if I knew I would feel depressed.

PATIENT 3: Closer but people are more heterosexual, and families

PATIENT 2: So those who are still afraid of coming back to the commune will be informed. So people still don't like being taken to the district or to the commune.

V1_FGD1_ PATIENT _ĐT_Province 01

Ban đầu họ có kêu là gửi thuốc về trạm y tế nhưng em từ chối luôn, họ còn kêu tới nhà tư vấn em cũng từ chối luôn. Tại vì em không muốn, sợ biết, tại vì có một đợt mọi người hỏi là em muốn tư vấn qua điện thoại hay là anh chị đến nhà để tư vấn hay là anh chị gửi thuốc về trạm y tế cho gần em, em lấy thì em nói là em không. Em chấp nhận đi xa chứ em sợ mọi người biết. Ở đây bác sĩ cũng biết nhà có hỏi em nhưng em ngại không trả lời.

V1_FGD4_ PATIENT _NT_Bình Dương

A while back, I heard about receiving medicine in the commune. If I have to go to the commune to receive medicine, I will not receive it. When people in the village see that, they would gossip.

V2_FGD3_PATIENT_ĐT_Province 06

- *Do not dare to use the health insurance card of the company / agency due to fear of revealing information about the workplace*

Some patients are very cautious in deciding whether to use health insurance of the company/agency to check and receive medicine or not. They feel very worried because using health insurance may lead to information about their illness being transferred to the agency, causing them to lose their jobs. During the initial transfer, when ARV drugs were still being funded, these people accepted to pay medical examination fees (39.000 VND) instead of using health insurance cards. Some people choose to buy voluntary health insurance, some people

still use health insurance cards, but they use it while worrying, taking a lot of time and effort to deal with every time they take time off to go to the doctor and receive medicine.

> Moreover, the place that I keep thinking is how about the patient without the card, now there are some patients with the card, but we want to hide the identity, people do not want to use the card, I manage how to treat patients. Here I have given the leader of the department now, if any, the patient must be self-sufficient, we still read the medical record but the patient has to spend money to buy, all tests must be self-sufficient.
>
> V2_IDI5_HW_ĐT_Province 05

> Afraid that the company would know… Every month, I pay insurance premiums, minus my salary from social insurance. Fear the company knows. I already bought the insurance, just afraid that it will only be revealed.
>
> V1_IDI5_HW_NT_Province 02

> I still hide it, as of now, I still have to hide it. For example, when I take medicine, I have to hide it. If you go to the doctor to take medicine like this, you have to quit your job. The lie is to ask for a vacation at the company, not the company here. After I checked here, I had to go to the insured place of insurance company to get sick leave certificate…. But to tell you the truth, for months, there was nothing in your body that was tired or anything that took the excuse to go to the doctor and took a rest. The difficulty is that difficult.
>
> V1_FGD1_ PATIENT_ĐT_Province 01

- *Afraid of being revealed, worried that their children would be unable to go to school, being discriminated against at school*

> Those who are educated are very few, like my child, who went to this preschool last time. The child is not infected because when I gave birth to him, I was also receiving preventive treatment. But when I went to class, the parents and I were open, but in that class, there were people from the same village so they knew. Then one person told the other and then the parents there were booing…. Then everyone said that my child is not allowed to study in that class anymore. Then that time I had to stand up, asking the AIDS center to send someone to talk to them but in the end it didn't work… they forced both me and my child to take the test again, afraid that I bought the results.
>
> V1_FGD1_PATIENT_ĐT_Province 01

> Any disease is afraid. Knowing this disease also heard this disease, in addition, people are also afraid. What disease does not know what disease. For example, if the patient says it will die a long time, it is very embarrassing. As for the cancer to die immediately, people will feel normal. This disease said that everyone was scared, afraid because their children would later be told that their mother would be there and then they would go to school and they would be afraid of their inferiority complex.
>
> V1_FGD5_PATIENT_NT_Province 02

It is convenient to move down to the downlines, but people don't want to move to the downlines, because people who don't live near the house or the door don't want to disclose the information. hide a lot because there's a family, a job

V2_IDI8_HW_ĐT_ Province 05

## LIMITATION OF THE RESEARCH

### Secondary data according to the form collected at the clinics is not available

Secondary data were collected based on two forms of secondary data collection that the protocol developed for the provincial and district levels (clinics). However, these indicators are not aggregated like developed forms and are not consistent across levels and provinces. This made things difficult for the research team to synthesize the data and analyze it to generalize the trend of the data over time. As a result, quantitative analyzes of service coverage and patient outcomes during and after the transition period are limited due to the incompleteness and accuracy of the data. A study evaluating HIV care and treatment program delivery after donor funding cuts in India also found that secondary data were not frequently available in a uniform format, and differed between States. This happens in both the pre- and post-transfer periods. These differences in secondary data make it difficult for researchers to detect service delivery trends during the transition period (Bennett, Singh, Ozawa, Tran, & Kang, 2011).

### Limitations regarding research subject and method

The evaluation study only focused on collecting primary information through IDI with clinic's health workers and FGD with patients. The study did not carry out IDI with people who worked at the macro-management level (eg, Representative of the Ministry of Health, Program/Project Officer, Leader of Department of Health, Representative of the Center for HIV/AIDS Prevention and Control) also has certain limitations when assessing the process of managing and operating transfer activities, policy formulation, the appropriateness of policies in local implementation, etc.

In addition, only performing FGD with patients has certain limitations because HIV patients may be afraid to share information with others. In this case, perhaps doing IDI with the patient will provide more information on the patient's personal experiences during HIV treatment and care in the clinic.

### Output variables on patient outcomes should be included in the survey questionnaire

In addition to paying attention to the clinical indicators (CD4, viral load) of the patient to evaluate the success or failure of treatment, attention should be paid to indicators of the patient's mental health (physical health, quality of life). These are important factors that promote self-discipline and motivation in the patient's adherence to treatment.

Add an evaluation component of the outcome/impact of the transfer on the patient, on which the study can assess the change in outcome/impact over time. Some variables should be included: Quality of life, Mental health status, and stigma and discrimination. These are indicators of a program's long-term impact over time.

# CONCLUSION

## Objective 1. To assess the adequacy of HIV service provision, service utilization, coverage and patient level health outcomes during and after transition

### Change in service delivery

The change in HIV/AIDS treatment and care delivery took place most in the first year of transition (2017), then gradually stabilized through 2018 and 2019. Survey results in 3 years showed that patients rated the change in the behavior of doctors, nurses, and other health workers in a direction that was not as good compared to the previous year, accounting for the highest percentage in 2017, in which doctors and nurses had the highest rate. The rate of assessing behavior change in the direction of not as good was the highest. However, the rate of positive assessment of the group of provinces transferred in 2017 increased gradually in the survey in 2018 and 2019. The behavior of doctors, nurses and other health workers was evaluated most positively among the group of provinces transferred in 2018 and this rate decreased slightly in the group of provinces transferred in 2019.

The transfer activities had some confusions at first, but all activities gradually stabilized in the following years. The provinces transferred in 2017 were under more pressure, but then, the provinces that transferred in 2018 and 2019 had more time to prepare and learn from experiences from the previous transfer provinces, so everything was smoother.

### Service use and patient's satisfaction

In general, patients are satisfied with services in general and in particular areas (health workers' behavior, health workers' advice, information security, waiting time...). In general, patients are more and more satisfied over the years, in which patients are most satisfied with the service, advice, and behavior of health workers in 2018. Except in the group of provinces in 2019, patients in District level patients are less satisfied than provincial patients in all assessment areas (service provision, health workers' counseling, health workers' behavior, information security, waiting time).

### Coverage

In general, there is no difference between risk groups in accessing and using HIV/AIDS treatment and care services. Immediately after being confirmed, the patient will be transferred to the clinic for treatment. In 2017, the general trend was that all new patients were transferred to provincial hospitals for stable monitoring and treatment. Severe, unstable patients were also prioritized to keep for further monitoring and treatment. However, by 2019, a number of provincial hospitals had stopped accepting new patients, and these patients would be transferred to the provincial/district/city clinic according to the patient's household registration. Provincial hospitals at this time only treat inpatients, continue to care for and treat old patients; some provincial hospital clinics have preferential policies for certain groups of patients such as teachers, students, and officials in the province to be examined and treated at provincial hospitals. However, this is only a qualitative finding, so it cannot be confirmed or generalized to all areas.

### Service coverage

During the transition period, HIV/AIDS treatment and care activities under health insurance, patients can use services, paraclinical techniques, and routine tests more fully than before. Some patients complain of having to do more tests than they used to. Some patients have refused to take the test to finish quickly and return home. In contrast, patients without health insurance cards were considered by the treating doctor to reduce tests or order tests to slow down to wait for the patient to buy health insurance to reduce costs.

Due to changes in financial assistance and healthcare coverage regulations, some important laboratory services are not covered by insurance (CD4, viral load, hepatitis C, etc) and laboratory techniques which have just been removed from the insurance payment list (such as CT, X-ray) so they also cause certain difficulties for treating doctors in treating and provide prevention service for patients. In some cases, patients needed to have CD4 test results, viral load for input assessment, treatment failure assessment etc... plus this testing service is not available locally, it will be very difficult for them to go for tests in Hanoi or another province; In some cases, the patient may refuse to take the test because of the expensive test cost, expensive to travel, and not knowing how to go.

The proportion of patients with health insurance accounted for very high percent in the survey sample. Currently, patients are using several types of health insurance such as health insurance for poor households, provincial health insurance to support HIV patients, compulsory health insurance, and voluntary health insurance. Some areas have policies to support health insurance for all HIV patients with permanent residence in the area. Out-of-province patients living and working in the area are not eligible for this support. It is worth noting that in areas with large industrial zones such as Binh Duong, Bac Ninh, etc., the rate of HIV patients outside the province is also relatively high. This group of patients can be workers working in industrial zones or freelance workers. They may also have factory-issued health insurance or they may not have it due to self-employment. Patients with compulsory health insurance cards are hesitant to use the card to go to HIV examination and treatment because they fear that their workplace information will be disclosed. During the initial transfer period, when the drugs were still funded by the project, not using health insurance for medical examination did not cost patients much except for medical examination. However, after the drug is no longer funded, the patient will have to consider whether to use the health insurance card or not because they will have to pay for the drug and test fees if they do not use the health insurance card.

### Financial coverage

Because CD4 and viral load are not covered by health insurance; viral load will still be transferred by the project funded to the provinces in the first year of delivery, but will be concentrated on batches, which may lead to some patients needing test results to assess success or failure. If treatment is not available, they will have to pay for testing and travel costs in the event that testing is not available locally. In some cases, the cost will be even higher because the patient has to pay for the test for other family members. High costs can cause patients to delay their testing and delay bringing their children in for examination, diagnosis, and treatment.

Until 2019, after ARV drugs are included in health insurance payment, patients still do not have to pay 20% of the drug payment because areas have used the province's insurance fund to support this amount. With other types of laboratory tests and techniques, doctors will no

longer allow patients to use them. Although doctors thought that these techniques are very good for patients to prevent diseases (hepatitis, liver cancer, cervical cancer, etc.), they still didn't perform those out of fear of disimbursment, being named in the hospital would be very embarrassing.

### Health status and health experience of the patient

Secondary data is not fully aggregated and reliable, so it is difficult to assess the patient's treatment results during and after the transfer. However, qualitative information also showed that patients had positive experiences about their health status. Some aspects of the improvement in health status were mentioned by patients such as no longer feeling tired, stretched skin, no weight loss, eating well, and sleeping easily. Patients were also knowledgeable and proactive in complying with treatment (setting alarms), stockpile medicines in case they don't have time to get medicine, they would still have medicine to take, better manage medicines, and don't dare to lend indiscriminately, proactively go to the doctor on time and go early to get tested, proactively cooperate with health workers, proactively ask other doctors and health workers if they have questions. Patients also feel happier and more secure in the future when they see good health and positive test scores; they feel like they have a future, feel secure to have a long life, and want to work to support themselves and their family. Patients also have a sense of overcoming difficulties to resolve to get better treatment, to be healthier.

## Objective 2. To describe the contextual factors surrounding the successful transition of PEPFAR funded HIV services to Vietnam government

### A system of documents and policies had been developed to prepare for the transfer of health insurance coverage

It can be said that the work of HIV/AIDS treatment and care service delivery and treatment had been based on a system of relatively complete and timely supplemented guiding documents. The system of documents covers 3 areas: (i) management and implementation of medical examination and treatment activities at medical examination and treatment facilities, (ii) medical examination and treatment covered by insurance, (iii) HIV and HIV/AIDS treatment and care under health insurance. This system of policy documents has created a favorable environment for the transfer of HIV/AIDS treatment and care services under Vietnam's health insurance in recent years.

### The project's commitment to funding and coordination with stakeholders during the transfer process

The project had committed to sponsor drugs during the transfer process to ensure the availability and quality of drugs; coordinate with the management agency of the Department of HIV/AIDS Prevention and Control of the Ministry of Health and the HIV/AIDS prevention and control centers of the provinces/cities to promptly guide and provide information support to the clinics during the transfer; organize training activities to support updating new knowledge and techniques for transfer activities. Training activities were held regularly in the first phase to prepare for the transfer process; highly appreciated by health workers, helping them to update new knowledge in the context that hospitals often do not have training activities on these contents.

### Management, commitment to support of local authorities and departments for transfer activity

The direction and commitment of the local government played an important role in the success of the transition. The commitment and support of the local government was demonstrated through the activities of organizing seminars, assessing and forecasting difficulties that may affect treatment adherence, on that basis identify timely solutions to support HIV patients. Some areas supported patients to buy health insurance cards right from the first year of the transfer, and continue to support patients to pay 20% of the co-payment after ARV drugs are paid under health insurances.

### Financial security to pay for HIV/AIDS treatment and care during the transition period

During the transition period, the Health Insurance Fund paid for OI treatment and routine tests for HIV patients with health insurance cards. In general, patients with health insurance cards are entitled to routine testing services paid under health insurance like other diseases. Except in 2017, because some OI drugs were still received from the sponsoring project (tuberculosis prevention project), the drugs were not delivered in time from the project, leading to a situation where a few patients did not receive OI treatments; HIV patients can use their health insurance cards to examine and receive insurance drugs for other diseases. By 2019, antiretroviral drugs have begun to be included in health insurance payments nationwide. The evaluation results showed that there was no change in drugs after the project ended funding, drugs paid for by health insurance.

### HIV/AIDS stigma and discrimination tend to decrease

The situation of stigma and discrimination against patients with HIV/AIDS in health facilities has improved, so HIV/AIDS patients on the one hand receive the attention of health workers at the clinic, on the other hand are also considered as other hospital outpatients. Reducing stigma in health facilities is one of the important factors creating a favorable environment for transfer activity. Patients can safely go to the new medical facility for examination and treatment with new doctors and health workers without feeling afraid, anxious, and cautious in interacting and communicating with health workers.

Moreover, the stigma in the community in some areas has improved significantly. It seems that discrimination is reduced in ethnic minority communities, in mountainous areas compared to Kinh communities, in urban areas, or in rural areas. Reducing self-stigmatization, patients become more confident. After a period of treatment, the patient's health condition improved. Many patients also have the opportunity to participate in peer activities, so they gain more knowledge and confidence. They are willing to public their illness and feel secure in their treatment, work and life development. For these people, moving to the district or commune is not much of a problem.

## Objective 3. To determine barriers and facilitators for the transition of PEPFAR program in Vietnam

## Advantages in the transfer process

### The support of the hospital's board of director and department leaders ensured patient-friendly HIV/AIDS care and treatment services

One of the favorable factors to ensure a successful transfer process is the support and facilitation of hospital directors and department leaders to organize transfer activities on the basis of maintaining stability, did not cause fluctuations, disturbances for the patient. During the transition, the patient was empowered to choose a treatment site that was more psychological, economic, and social suitable than just geographical convenience. This facilitation has made it possible for patients to access HIV/AIDS care and treatment services, contributing to increased patient adherence to treatment.

### Hospitals have the capacity to provide services

One of the favorable factors for the successful transfer was the improved service delivery capacity of provincial and district hospitals in recent years. Provincial hospitals had sufficient capacity to support lower-level hospitals in HIV/ADIS care and treatment. In addition, a number of lower-level hospitals had gained the capacity and experience in providing HIV/AIDS treatment and care during the project period. Therefore, the model of examination and treatment for HIV patients at district hospitals was feasible and can ensure quality and effective implementation.

### Health care services under health insurance have been operated better and higher quality than in hospitals

One of the favorable factors contributing to the smooth transfer was that the health care model under health insurance had been operated well in the public hospital system, so the transfer did not cause much disturbance on organizational structure and implementation coordination. For the locality with a small number of patients, all activities had gradually come into order after a short time (2-3 months). For areas with a larger number of patients, the preparation time is longer, but it is gradually stabilizing. For provinces that started the transfer from 2018 to 2019, there were almost no more difficulties due to a longer preparation time.

### Better facilities

One of the advantages mentioned by clinic health workers is that after integrating the clinic into the hospital, the clinics are arranged in newer, more spacious locations and were fully equipped by the hospital with necessary equipment for HIV/AIDS treatment and care like other units in the hospital.

### Information technology supports health insurance examination and connection with friendly and convenient service providers for patients

Some hospitals have applied information technology in the management of medical examination and treatment activities to ensure convenience in organizing clinics. Thanks to the network connection system, the layout of the clinic is also more flexible. For example, the clinic may not necessarily be located in the examination department, so it is possible to arrange the clinic in the old location or in a convenient and discreet location for the patient. Thanks to the network connection, the service provided to the patient is also more convenient and private (for example, the results are transferred to the clinic for the treating doctor via the network system, so the patient does not have to wait to receive the results), meeting the needs of patient information confidentiality every time they come to the clinic. Information technology helps health workers to integrate the two systems of service delivery under project and health insurance in the early stages of transfer.

## Barriers in the process of transferring HIV/AIDS treatment and care services

### The organizational structure of the clinic was not suitable, required guidance from the Ministry of Health

So far, after 3 years of implementation from 2017-2019, there are still no regulations and guidelines for deciding which hospital unit to integrate the outpatient clinic. Each hospital, depending on the individual views of the hospital leadership and the units have different decisions. Currently, there are three main clinic organization models, including transferring the clinic to the Department of General Medicine, or Department of Dermatology, or Department of Infectious Diseases. Currently, some areas are still having problems and need guidance from the Ministry of Health.

### Some regulations on patient management under health insurance are not suitable with the characteristics of HIV/AIDS treatment and care

Making records and managing medical records by year of health insurance makes it difficult to manage and track treatment results. However, due to the specific characteristics of HIV care and treatment, not only treatment is required like other diseases, but it also requires management, monitoring of treatment results, quality assessment and assurance, etc., so the management of medical records by year does not create conditions for treating doctors to monitor and evaluate the patient's treatment results over time. In addition, due to the lack of detailed instructions on how to manage patients under health insurance, the clinics had to grope for implementation in the first year of transfer.

### Hospital autonomy and financial and human constraints

Transfer of HIV treatment and care services takes place in the context of hospitals having to be financially self-sufficient. Due to the reduction of funding sources for HIV/AIDS treatment and care services, when transferring to a certain unit of the hospital, that clinic must also be organized according to the hospital's autonomous management mechanism, of the hospital's management system. Due to the decrease in the number of patients, the clinic is also smaller in size. The number of health workers decreased and worked under a part-time, rotating regime not based on the number of patients, leading to overcrowding in some clinics with large patient size. Health workers also change and fluctuate over time while the skills and approaches are peculiar and require more time to train. In that context, the leaders of the clinics wanted a staffing policy to have a basis for proposals to solve difficulties related to human resources.

### Difficulties in training and developing human resources for HIV/AIDS prevention and control

Training activities play an important role in helping health workers update information quickly because treating doctors and health workers are also afraid to update information themselves. This is even more important in the context of changing human resources in the field of HIV/AIDS treatment and care, replaced by a new and inexperienced team of health workers. Some difficulties related to the training and development of human resources after the transfer include: less training time and training frequency; In some areas, people sent to training were not the correct ones, or with the right expertise; choose a self-training solution on the spot to get people to work.

### Difficulties related to the receipt, purchase, use, and payment of health insurance

Some difficulties related to the receipt, purchase, use, and payment of health insurance are shared by the research subjects (health workers and patients), including: health insurance for poor households and support for HIV patients may not be timely distributed; procedures for purchasing voluntary health insurance are still complicated and not suitable with the characteristics of HIV patients; insurance is not available throughout the hospital, causing difficulties and hardships for HIV patients who are at high risk of many OIs; and some difficulties related to using health insurance cards to get treatment at different hospitals at the same time....

### Difficulties in drug management under health insurance

Insurance is not yet available in the hospital, so some common drugs within the doctor's treatment range are not included in the list of drugs provided by insurance right at the department, making it difficult for patients that they have to go to the hospital to check and receive medicine at another time. The drug dispensing process is strict, difficult and not suitable for the current characteristics of HIV patients. Bidding for drugs in the hospital also needs to be cautious, paying attention to the stability of the drugs being used to avoid causing disturbances, changes in drugs, and affecting the psychological and physical health of patients.

### Difficulty in machinery and equipment

Some areas have not been proactive or have available equipment for high-tech tests (CD4 and viral load). This causes difficulties related to the increased cost of transporting samples in the context of financial difficulties, having not found a payment mechanism for long-distance transportation, or having to depend on the condition of machinery of the service providers, the clinic also lacks initiative with their plan.

### Communication activities for patients about the transfer are not timely

In the early stages of the transfer process, many patients react negatively because they did not understand the mechanism or had to deal with difficult problems related to paperwork (must buy insurance cards, have to get a hospital transfer certificate, have sufficient documents to buy an insurance card or transfer to a local hospital for examination and treatment, etc.), there were even patients who were worried that the district level would not have treatment. Before the negative reaction of the patient, the health staff at the clinic took the time to advise, explain and guide the patient to help them gain more understanding and confidence in this transfer and cooperation process.

### The stigma in the community still remains

Patients still have experiences related to stigma in the community, in hospitals (mostly district hospitals). This makes them afraid of information disclosure when transferring to a lower level, do not dare to use the company's health insurance card, and worry that their children will not be able to go to school if their information is disclosed. Fear of information disclosure can be a decisive factor in patients not wanting to be transferred to a lower-level hospital.

# RECOMMENDATIONS

## 1.1. Ministry of Health

Continue to improve regulations and guidelines to assist in solving difficult problems that clinics are facing during the transition. Specifically:

Provide guidelines on the structure of integrating clinics in the hospital, including the orientations that the clinic should be integrated into the Department of Infectious Diseases on the basis of which it will be more convenient to coordinate personnel and expertise for monitoring the patients more closely, matching the characteristics of HIV disease.

Develop guidelines on staffing according to patient size so that clinics have a basis to propose to hospital leaders on personnel, in order to reduce work load, ensure the interests of clinic staff and sufficient staff force to provide better quality services.

There should be guidelines to deal with the issue of drug supply for HIV patients in general which is flexible and in line with the reality and progress of the patient in HIV/AIDS treatment, and especially the issue of drug dispensingfor patients in prison, 05, 06 center.

Work with the social insurance agency to have a more convenient mechanism for the patient. Issues to be resolved such as communication within the hospital, between medical examination and treatment departments; and communication between hospitals because patients may have to go to have many diseases checked at the same time (the insurance card is kept at this hospital, there is no card to go to another hospital, etc.) to avoid traveling, procedure affecting the adherence to treatment and medical care of HIV patients due to the fear of travel and interaction.

Specific considerations for HIV patients should be made to enhance adherence, treatment cooperation, and to be tailored to the characteristics of HIV patients. Evaluate the technical aspects of the necessary laboratory techniques in HIV treatment to work with the social insurance agency to list the necessary techniques for the specific HIV patient (eg, hepatitis B, screening for cancer in women…) while also monitoring for possible overuse of laboratory techniques.

There should continue to be instructions from all levels to hospitals on strengthening/improving the communication and behavior of health workers with patients undergoing HIV treatment to reduce stigma and discrimination towards this particular group of patients.

It is necessary to strengthen supervision and support to improve the quality of health services at the district level, especially the newly opened clinics in the transition period. This will make an important contribution to ensuring the sustainability of HIV/AIDS care and treatment programs in Vietnam.

- There is a need to strengthen monitoring, support monitoring and evaluation through a variety of measures to identify and promptly mitigate the short-term and long-term risks of the continued provision of this particular service due to the increase in patients who no longer feel like seeing anyone when they go to the doctor, which is a very important indicator to ensure sustainability in the management, care and treatment of HIV patients. Therefore, it is necessary to monitor and evaluate in order to improve and enhance the quality of service delivery and

communication between health workers (especially doctors) and patients to ensure that the next team is trained, create and inherit the attitudes and good practices of health workers during the project period. This process needs more attention in district hospital clinics because patients tend to be less satisfied with services here in general, particularly with the behavior of doctors, nurses, and other health workers in 2019 compared to previous years and at the provincial level.

- Priority should be given to monitoring the implementation of social insurance payments for current and new patients to ensure that access to HIV service packages and the insurance system is flexible and responsive to the needs of this particular patient group.

- Create conditions to further strengthen the capacity of high-risk groups to express their needs and access information and services, and promote participation in the development of an enabling policy and program environment. through community mobilization activities. Consider a mechanism so that HIV patients can choose a suitable treatment place according to their wishes on the basis of ensuring their interests so that they can feel secure and adhere to treatment.

- Continue to improve information systems in the area of HIV/AIDS, with particular priority given to the establishment of a case-based surveillance system to monitor patients from diagnosis to the entire process. The treatment process helps to monitor the epidemic and the use of data to evaluate patient care performance. The improvement of the information system needs to ensure convenience and ease of use to reduce the pressure on health workers involved in the collection and reporting of this data.

- It is necessary to continue to coordinate with stakeholders (social organizations...) to mobilize funds for HIV/AIDS prevention in general and especially prevention services and activities (as SHI right now only cover treatment services).

## 1.2. Provinces

- Maintain and expand the provincial health insurance card support policy for patients. However, it should be carefully organized to ensure the confidentiality of information for the patient and should be issued in a timely manner so that the patient can use the card continuously during his or her treatment.

- In addition to supporting health insurance cards for patients with household registration in the locality, it is necessary to pay attention to the group of patients without household registration, especially in provinces with large industrial zones.

- The provincial health sector needs to strengthen monitoring, support and evaluation of care and treatment service provision at provincial and district hospitals, especially at district hospitals at mountainous areas in the group of provinces transferred in 2019. Maintain annual training for health workers in the field of HIV/AIDS prevention, especially new health workers who have just joined the network.

- Hospitals need to:

    - Strengthen supervision of drug dispensing, create conditions for patients to participate in the drug testing process, especially at district hospitals. Priority should be given to improving the satisfaction of HIV patients; focus on improving the quality of health

services at the district level to help patients trust and continue to use district health services, avoiding overloading provincial hospitals and create difficulties and waste for HIV patients.

- Focus on human resource development. In the current changing human resource context, human resource development should be even more important. Create conditions for clinic staff to be trained, to appoint the right people with expertise, and to have continuity; support and empower clinic leaders in sending people for training because the clinic's leaders know best the appropriateness of training content and training needs of the clinic.

- Pay attention to the working motivation of health workers in the field of infectious diseases in general and HIV/AIDS in particular through subsidies, recognition of roles, etc.

- Paying attention to the organization of clinics and providing services and referrals for patients to ensure convenience and friendliness for patients; ensuring privacy, confidentiality to help patients feel more secure every time they come to a medical facility for medical examination.

## 1.3. Sponsors

According to the successful transfer experience of countries around the world, donors should consider continuing to provide support for post-transfer care and treatment activities to priority areas and pay special attention to technical support, human resource development.

# APPENDICES

## Appendix 1: Informed Consent for ART patient survey

HANOI UNIVERSITY PUBLIC HEALTH

INFORMED CONSENT FOR ART PATIENT SURVEY

Study Title: Evaluation of the Sustainability of PEPFAR Supported programs post transition in Vietnam: Impact of PEPFAR Transition

Until recently, many of the services provided at this clinic including treatment for HIV/AIDS had been supported with financial contributions from CDC-PEPFAR. However, financial support from CDC-PEPFAR will stop and the financial responsibilities will be transferred to the provincial and national governments. PEPFAR will be transitioned out of providing direct support. In this study we would like to evaluate the impact of PEPFAR transition on HIV patients, and health systems in provinces supported by CDC with PEPFAR funding. One primary objective includes assessing the adequacy of HIV service provision, service utilization, and coverage and patient level health outcomes.

This study is implemented by Hanoi University of Public Health. It is funded by US Centers for Disease Control and Prevention, Vietnam office. You have been selected randomly from the clinic list. It is up to you whether you want to take part in this study. Taking part in this study is your choice. Please take your time to read this form so that you can better understand the study. You can ask us any questions about the study before you decide if you want to take part.

### How many people?

We plan to speak with a number of people in this clinic.

### What will happen if I take part in this study?

If you agree to participate a trained interviewer will ask a set number of questions about you, your health, your experience with the clinic, etc. We will also collect some information from your medical chart that is maintained by the clinic such as how long you have been on ART at this clinic, what medications you are prescribed and how often, what are your viral load status, etc.

### How long will the study take today?

The total study time is about 30 minutes.

## Are there benefits of being in the study?

The information you give us might help to improve HIV treatment and care services at this and similar other clinics in Vietnam and elsewhere.

## What risks do I have for being in the study?

There are no risks to if you participate in the study. All information that we collect rom you will be completely confidential.

## Can I stop being in the study?

Yes, you can decide to stop at any time. You can also decline to answer any question that you do not feel comfortable with.

## What if I do not take part in this study?

Taking part in this study is totally voluntary. If you decide not to take part in this study, there will be no penalty to you. You will not lose any benefits that this clinic routinely provides to you. You will continue to receive the care and services that you have been receiving.

## Will information about me be kept confidential?

Yes. We will make sure that all personal information gathered for this study is kept confidential. The interviews will take place in private locations. We will not ask you to give real name and address. When presenting findings of this study, no information will ever be linked to you.

However, participation in any research might result in a loss of privacy. On rare occasions, release of research records have been required by law. However, because we do not have your name on any of the data forms, the information you provide cannot be linked to you.

Organizations that may look at and/or copy your research records for research, quality assurance, and data analysis include the CDC Vietnam and the Institute of Review Board, Hanoi Medical University. These forms will not have your name on them and cannot be linked to you.

## What are the costs of taking part in this study?

You will not be charged for participating in the study.

## Will I be paid for taking part in this study?

In return for your time, effort and travel expenses, you will be paid 2USD Vietnamese Dong for taking part in the study at the completion of the interview.

## What are my rights if I take part in this study?

Taking part in this study is your choice. You may choose to take part or not in the study. You may stop the study at any time, even after agreeing to take part.

## Who can answer my questions about the study?

Our Project Director – Associate Professor Nguyen Thanh Huong, Hanoi University of Public Health is available to talk to you. Her office phone number is + (84 4) 6266 2406. If you wish to ask questions about the study or your rights as a research participant to someone other than the Project Director or if you wish to voice any problems or concerns you may have about the study, please contact Associate Professor Ha Van Nhu at the Hanoi University of Public Health Review Board at: 0978762802

## WRITTEN INFORMED CONSENT

Before you sign this form, we want to make sure that you are familiar with the study and your rights as a participant. Please indicate whether each statement below is either true (T) or false (F).

_____ My participation is voluntary and I can discontinue participation at any time.

_____ The study activities today will take approximately 30 minutes.

_____ My name will not appear on interview or other data collection forms. All study materials will use a unique identifier code number to protect my confidentiality.

_____ I am NOT required to answer every interview question in order to participate in the study

_____ All of the information discussed in the interview is strictly confidential, and it will not be given to any third party unless required by law.

_____ All written and published information from this study will be reported at a group level. I will never be personally identified.

_____ After today's study activities I will receive 2USD in compensation for my time.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You have the right to decline to be in this study, or to withdraw from it at any point without penalty or loss of benefits to which you are otherwise entitled.

If you wish to participate in this study, please provide consent and signature below. You will be given a copy of this consent form to keep.

## CONSENT

I have read and been explained adequately about the Study, and the risks and benefits of taking part in this study. The study team has given me all necessary information that I need to make a decision about taking part in the study. Hereby,

□ I am willing to take part in the study by answering survey questions and also agree to have data collected from the medical charts in the clinic.

□ I am NOT willing to take part in the study and do NOT agree to have data collected from the medical charts in the clinic.

| | |
|---|---|
| Date | Participant's Signature for Consent |
| Date | Person Obtaining Consent |

Those who cannot read or not able to read:

The information in this document has been read to me and has been clearly explained

Participant agreed to be in the study:

YES_____NO:_____

Researcher Signature Date

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Witness Signature Date

## Appendix 2: Informed Consent for ART Patient focus group discussion

HANOI UNIVERSITY PUBLIC HEALTH

INFORM CONSENT FOR ART PATIENT FOCUS GROUP DISCUSSIONS

Study Title: Evaluation of the Sustainability of PEPFAR Supported programs post transition in Vietnam: Impact of PEPFAR Transition

Primary investigator: Associate Professor Nguyen Thanh Huong, Vice Rector, Hanoi University of Public Health; office phone number is + (84 4) 6266 2406

Purpose of the Research: Until recently, many of the services provided at this clinic including treatment for HIV/AIDS had been supported with financial contributions from CDC-PEPFAR. However, financial support from CDC-PEPFAR will stop and the financial responsibilities will be transferred to the provincial and national governments. PEPFAR will be transitioned out of providing direct support. In this study we would like to evaluate the impact of PEPFAR transition on HIV patients, and health systems in provinces supported by CDC with PEPFAR funding. One primary objective includes assessing the adequacy of HIV service provision, service utilization, and coverage and patient level health outcomes.

Description of Procedures: It is possible that you may have already been interviewed. At this time we will be having a group discussions about some of the issues that we would like to raise in a group setting and get all of your opinion. Notes will be written during the discussions. The discussion in the focus group will be tape recorded and transcribed following the sessions.

Duration of Procedures: The focus groups will last approximately 1 hour.

Participation: Participation is completely voluntary. You may withdraw and discontinue participation at any time without penalty or loss of benefits. You have the right to decline to answer any question or stop participating in the study without penalty or loss of benefits. In return for your time, effort and travel expenses, you will be paid 45,000 Vietnamese Dong for taking part in the focus group discussions.

Statement of Confidentiality: Researchers will take every precaution to maintain confidentiality of the data, however, the nature of focus groups prevents the researcher from guaranteeing confidentiality. Researchers will remind participants to respect the privacy of fellow participants and not repeat which is shared in the focus groups to others. Researchers will keep

your name or any information that may identify you confidential in any reports or transcripts. Researchers will store or archive data in a secure and locked file cabinet.

Contacts for questions: For any questions or concerns regarding this study, please contact the primary investigator (see above contact information).

I have read and understand the information provided.

□ I am willing to take part in the focus group discussions and also agree to be audio taped.

□ I am NOT willing to take part in the focus group discussions and do NOT agree to be audio taped.

| | |
|---|---|
| _____ | _____ |
| Participant Signature | Date |
| _____ | _____ |
| Researcher Signature | Date |

Those who cannot read or not able to read:

The information in this document has been read to me and has been clearly explained

Participant agreed to participate in the focus group discussions:

YES_____NO:_____

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Researcher Signature Date

---

Witness Signature Date

## Appendix 3: Informed Consent for health care workers qualitative interview

HANOI UNIVERSITY PUBLIC HEALTH

INFORMED CONSENT FOR HEALTH CARE WORKERS QUALITATIVE INTERVIEWS

Study Title: Evaluation of the Sustainability of PEPFAR Supported programs post transition in Vietnam: Impact of PEPFAR Transition

Until recently, many of the services provided at this clinic including treatment for HIV/AIDS had been supported with financial contributions from CDC-PEPFAR. In this study we would like to evaluate the impact of PEPFAR transition on HIV patients, and health systems in provinces supported by CDC with PEPFAR funding. One primary objective includes assessing the adequacy of HIV service provision, service utilization, and coverage and patient level health outcomes.

This study is implemented by Hanoi University of Public Health. It is funded by US Centers for Disease Control and Prevention, Vietnam office. While we will be interviewing a selected number of patients at the clinic we would also like to understand your roles and responsibilities at the clinic, how you work and what changes, if any you may have observed. You are not required to participate. It is completely voluntary. If you decide not to participate in the study it will not, in any way, impact your employment in the clinic.

### How many people?

We plan to speak with a few of the staff in this clinic.

### What will happen if I take part in this study?

If you agree to participate a trained interviewer will ask a set number of questions about you, your experience with the clinic, etc.

### How long will the study take today?

The total study time is about 30 minutes.

### Are there benefits of being in the study?

The information you give us might help to improve HIV treatment and care services at this and similar other clinics in Vietnam and elsewhere.

### What risks do I have for being in the study?

There are no risks to if you participate in the study. All information that we collect rom you will be completely confidential.

### Can I stop being in the study?

Yes, you can decide to stop at any time. You can also decline to answer any question that you do not feel comfortable with.

### What if I do not take part in this study?

Taking part in this study is totally voluntary. If you decide not to take part in this study, there will be no penalty to you.

### Will information about me be kept confidential?

Yes. We will make sure that all information gathered for this study is kept confidential. The interviews will take place in private locations. We will not ask you to give real name and address. When presenting findings of this study, no information will ever be linked to you.

However, participation in any research might result in a loss of privacy. On rare occasions, release of research records have been required by law. However, because we do not have your name on any of the data forms, the information you provide cannot be linked to you.

Organizations that may look at and/or copy your research records for research, quality assurance, and data analysis include the CDC Vietnam and the Institute of Review Board, Hanoi Medical University. These forms will not have your name on them and cannot be linked to you.

### What are the costs of taking part in this study?

You will not be charged for participating in the study.

However, In return for your time, effort and travel expenses, you will be paid 100,000 VND for taking part in the study at the completion of the interview.

### What are my rights if I take part in this study?

Taking part in this study is your choice. You may choose to take part or not in the study. You may stop the study at any time, even after agreeing to take part.

### Who can answer my questions about the study?

Our Project Director – Associate Professor Nguyen Thanh Huong, Hanoi University of Public Health is available to talk to you. Her office phone number is + (84 4) 6266 2406. If you wish to ask questions about the study or your rights as a research participant to someone other than the Project Director or if you wish to voice any problems or concerns you may have about the

study, please contact Associate Professor Ha Van Nhu at the Hanoi University of Public Health Review Board at: 0978762802.

## WRITTEN INFORMED CONSENT

Before you sign this form, we want to make sure that you are familiar with the study and your rights as a participant. Please indicate whether each statement below is either true (T) or false (F).

_____ My participation is voluntary and I can discontinue participation at any time.

_____ My name will not appear on interview or other data collection forms. All study materials will use a unique identifier code number to protect my confidentiality.

_____ I am NOT required to answer every interview question in order to participate in the study

_____ All of the information discussed in the interview is strictly confidential, and it will not be given to any third party unless required by law.

_____ All written and published information from this study will be reported at a group level. I will never be personally identified.

_____

PARTICIPATION IN STUDY IS VOLUNTARY. You have the right to decline to be in this study, or to withdraw from it at any point without penalty or loss of benefits to which you are otherwise entitled.

If you wish to participate in this study, please provide consent and signature below. You will be given a copy of this consent form to keep.

## CONSENT

I have read and been explained adequately the Study, and the risks and benefits of taking part in this study. The study team has given me all necessary information that I need to make a decision about taking part in the study. Hereby,

□ I am willing to take part in the study by answering survey questions.

□ I am NOT willing to take part in the study

| | |
|---|---|
| _____ | _____ |
| Date | Participant's Signature for Consent |
| _____ | _____ |
| Date | Person Obtaining Consent |

## Appendix 4: Epidemiologic and Program Data Collected Routinely

CHECKLIST TABLE

Epidemiologic and Program Data Collected Routinely

(PROVINCE AND DISTRICT)

Time: 2017-2019 (Quarter 1,2,3,4)

| _Province 06T | Indicators | Source | Level |
|---|---|---|---|
| *1.* | Number of new identified HIV positive people/ current alive HIV positive people | Case reporting system | Existing province data/ report |
| *2.* | Key population estimation and HIV prevalence | Mapping exercise and HIV sentinel surveillance data | Existing province data/ report |
| *3.* | Service mapping (PE, HTC, TB/HIV, MMT, PMTCT, OPC) | (Decision C03) | By district and by intervention type |
| *4.* | Turnover rate among health workers who directly provide HIV/AIDS services (by program area (to estimate TA need) | (C03) | |
| *5.* | HTC: Number of individuals who received HIV Testing and Counseling (HTC) services for HIV and received their test results, by key populations and test results | PreventHIV system | Database share with still applying HIVpreven system or detail report by site |
| *6.* | TB/HIV: Percentage of registered new and relapsed TB cases with documented HIV status. | Program report | By district |
| *7.* | MMT: Number of individuals receiving MMT service (current number and stable for at least 6 months) | Program report | By district, by site. |
| *8.* | PMTCT: Percentage of pregnant women with known status (includes women who were tested for HIV and received their results) – by test result | C03 | By district |

| _Province 06T | Indicators | Source | Level |
|---|---|---|---|
| | | | |
| *9.* | PMTCT: Percentage of HIV-positive pregnant women who received anti-retrovirals to reduce risk for mother-to-child-transmission (MTCT) during pregnancy and delivery – by regimen | C03 | By district |
| *10.* | Ped: Percentage of infants born to HIV-positive women who had a virologic HIV test done within 12 months of birth – by test result | C03 | By district |
| *11.* | Number of individual who registers in OPC program (new registered, transfer in/ out, lost follow up, dead and current number of patients – by sex/ age groups) | Program data | By site and total number in province |
| *12.* | Number of individual who receiving ART (new initiated, transfer in/ out, lost follow up, dead and current number of patients – by sex/ age groups) | Program data | By site and total number in province |
| *13.* | Percentage of adults and children known to be alive and on treatment 12 months after initiation of antiretroviral therapy | Program data | By site and total number in province |
| *14.* | Number of patient received routine Viral load testing in the reporting period<br>Number of patient received VR testing result less than <1000 copies/ml in the reporting periods | Program data | By site and total number in province |

## Appendix 5: Quality Improvement Indicators for Adult OPCs

Quality Improvement Indicators for Adult OPCs

| _Province 06T | Indicators | Time | Results | Note |
|---|---|---|---|---|
| *1.* | Proportion of new patients registered for treatment during the assessment period were tested for CD4 for the first time within 15 days | 2017-2018-2019 | | |
| *2.* | Proportion of new patients registered for treatment during the assessment period (last 12 months) meet criteria for IPT was described with IPT | 2017-2018-2019 | | |
| *3.* | Proportion of ARV patients came back the OPC for the medical visit as arranged at the last appointment | 2017-2018-2019 | | |
| *4.* | Proportion of ARV patients who are assessed for medication compliance in the last medical visit | 2017-2018-2019 | | |
| *5.* | Proportion of patients started on ART within 15 days of clinical eligibility | 2017-2018-2019 | | |
| *6.* | CD4 counts of patients at initiation of the ARV treatment | 2017-2018-2019 | | |
| | CD4 < 100 | | | |
| | CD4 100 - <250 | | | |
| | CD4 250-<350 | | | |
| | CD4 350-<500 | | | |
| *7.* | Proportion of qualified patients were prescribed with CTX or DAPSONE at the last medical visit | in the last visit? (2017-2018-2019) | | |

| | | | | |
|---|---|---|---|---|
| *8.* | Proportion of patients screened for TB in the last medical visit | in the last visit? (2017-2018-2019) | | |
| *9.* | Proportion of patients are tested for CD4 at least once in last 6 months | In last 6 months (2017-2018-2019) | | |
| *10.* | Proportion of patients received Viroload testing after 6 months on ARV initiation | 2017-2018-2019 | | |
| *11.* | Proportion of patients received Viroload testing after 6 months on ARV initiation with VL result less than 1000 copies | 2017-2018-2019 | | |
| *12.* | Proportion of patients on ARV at least 12 months received VL testing at least 1 time in the last 12 months | 2017-2018-2019 | | |
| *13.* | Proportion of patients on ARV at least 12 months received VL testing at least 1 time in the last 12 months with result less than 1000 copies /ml | 2017-2018-2019 | | |
| *14.* | Proportion of ARV patients who were lost follow up within last 12 months | 2017-2018-2019 | | |

## Appendix 6: Clinic Patient Individual Interview Questionnaire

### Clinic Patient Individual Interview Questionnaire

## PART A. Respondent Information

A1. Clinic ID:

| | | | | | |
|---|---|---|---|---|---|
| *1. BN01* | *2. VL01* | *4. AG01* | *7. ST01* | *9. TB01* | *11. HB01* |
| | *3. VL02* | *5. AG02* | *8. ST02* | *10. TB02* | *12. HB02* |
| | | *6. AG03* | | | |

A2. Respondent ID (Based on the medical records or the patient code in the medical records):_____

A3. Observed gender:

1. *Male*
2. *Female*

A4. What is your date of birth? |____|____|____|
dd|mm|yyyy

A5. How old are you? _____ Age in Years

A6. Ethnicity:

1. *Kinh*
2. *Other (……)*

A6. In which province you were born?

1. *Bac Ninh*
2. *Vinh Long*
3. *An Giang*
4. *Soc Trang*
5. *Thai Binh*
6. *Hoa Binh*

7. Other (……)
8. Don't know
9. Refused to answer

A6.1. In which province do you live?

1. *Bac Ninh*
2. *Vinh Long*
3. *An Giang*

7. Other (……)
8. Don't know

4. *Soc Trang*
5. *Thai Binh*
6. *Hoa Binh*

9. Refused to answer

A7. What is the highest level of education you have completed?

1. *Illiterate*
2. *Primary (Grade 1-5)*
3. *Secondary (Grade 6-9)*
4. *High school (Grade 10-12)*
5. *College, University (>12 years)*

7. Don't know

8. Refused to answer

A8. What is your current marital status?

1. *Not married*
2. *Married*
3. *Separated*
4. *Divorced*

5. Widowed

6. Living together but not married

8. Refused to answer

A9. What is your main career (job that occupies the most time or earns the most money)?

_____

A10. What is your secondary career (job that earns less money or seasonal job…)?

_____

A11. Are you on social health insurance?

1. *Yes* ➔ *move to A11a*
2. *No* ➔ *move to A11b*

7. Don't know ➔ move to A12

8. Refused to answer ➔ move to A12

A11a. If yes, how long have you been on social health insurance?

Number of months_____

A11a.1. If yes, did you use your health insurance card for HIV treatment during your last visit?

1. *Yes* ➔ *move to A12*
2. *No* ➔ *move to A11a.2*

7. Don't know ➔ move to A12

8. Refused to answer ➔ move to A12

A11a.2. If not, why did you not use your health insurance card?

1. *Afraid that the results was sent to the office, so not dare to use health insurance card*
2. *Have not received health insurance card due to new purchase/renewal*
3. *Register health insurance card at hometown, and working far away from home so unable to come back home for treatment*
4. *Other reasons (……)*

A11b. If not, why are you not on social health insurance?

1. *I cannot afford it*
2. *I do not need it*
3. *I was never told about it*

7. Don't know

8. Refused to answer

A12. How do you compare the economic condition of your family to other families in the community that you live?

1. *Very rich*
2. *Wealthier*
3. *Normal*
4. *Poverty*
5. *Much poverty*

7. Don't know

8. Refused to answer

## PART B. ACCESSING AND USING TREATENT SERVICES AT OUT PATIENT CLINIC

B1. How long have you been on ART treatment?

1. *< 12 months ➔ End*
2. *>12 months < 3 years*
3. *>3 years < 5 years*
4. *>5 years <10 Years*
5. *>10 years*
6. *Don't Know*

8. Refused to answer ➔End

B2. How long have you been on ART treatment at this clinic?

1. *< 12 months*
2. *>12 months < 3 years*
3. *>3 years < 5 years*
4. *>5 years <10 Years*
5. *>10 years*
6. *Don't Know*

8. Refused to answer ➔End

B3. To see a doctor or a nurse or to receive your HIV medication at the clinic, do you have to make an appointment in advance?

1. *Yes* ➔ *Move to B4*
2. *No, appointments are not needed* ➔ *Move to B5*
3. *Appointments have already been made by the nurse during my last visit ➔ Move to B5*

B4. if yes, was it easy to make an appointment to see a doctor or a nurse or receive your HIV treatment medication?

1. *Easy*
2. *Difficult*
3. *Very difficult*

B5. During your last visit, how long did you have to wait before you could see a doctor or a nurse?

1. *Wait within 15 minutes after my arrival*
2. *Wait about 15 - 30 minutes*
3. *Wait about 30 minutes – an hour*
4. *Wait more than an hour*

7. Don't Know /don't remember

8. Refused to answer

B6. How do you feel about the waiting time before you could see a doctor or a nurse?

1. *Too long*
4. *Not long*

2. *Long*
3. *Relatively long*

7. Don't Know

8. Refused to answer

B7. How satisfied are you with the waiting time at the clinic?

1. *Extremely Dissatisfied*
2. *Very Dissatisfied*
3. *Satisfied*
4. *Very Satisfied*
5. *Extremely Satisfied*

7. Don't Know

8. Refused to answer

B8. How satisfied are you with the service that you have received at the clinic?

1. *Extremely Dissatisfied*
2. *Very Dissatisfied*
3. *Satisfied*
4. *Very Satisfied*
5. *Extremely Satisfied*

7. Don't Know

8. Refused to answer

B9. How satisfied are you with the consultation, explanation and advice you have received from the doctor at the clinic?

1. *Extremely Dissatisfied*
2. *Very Dissatisfied*
3. *Satisfied*
4. *Very Satisfied*
5. *Extremely Satisfied*
6. *Never received any advice*

7. Don't Know

8. Refused to answer

B10. How satisfied are you with the consultation, explanation and advice you have received from the nurses at the clinic?

1. *Extremely Dissatisfied*
2. *Very Dissatisfied*
3. *Satisfied*
4. *Very Satisfied*
5. *Extremely Satisfied*
6. *Never received any advice*

7. Don't Know

8. Refused to answer

B11. How satisfied are you with the consultation, explanation and advice you have received from other health care workers?

1. *Extremely Dissatisfied*
2. *Very Dissatisfied*
3. *Satisfied*
4. *Very Satisfied*
5. *Extremely Satisfied*
6. *Never received any advice*

7. Don't Know

8. Refused to answer

B12. How satisfied are you with the responsiveness of the doctors, nurses or health care workers to your questions and requests?

1. *Extremely Dissatisfied*
2. *Very Dissatisfied*
3. *Satisfied*
4. *Very Satisfied*
5. *Extremely Satisfied*
6. *I have no questions or requests for them*
7. *Don't Know*
8. *Refused to answer*

B13. How satisfied are you with the confidentiality of your status at the clinic?

1. *Extremely Dissatisfied*
2. *Very Dissatisfied*
3. *Satisfied*
4. *Very Satisfied*
5. *Extremely Satisfied*
7. Don't Know
8. Refused to answer

B14. Since the beginning of the year have you seen or experienced any changes in the services that are offered at the clinic?

1. *Seen/experienced a lot of changes in the services* ➔ *Move to B14a*
2. *Seen/experienced some changes in the services* ➔ *Move to B14a*
3. *Seen/experienced very little changes in the services* ➔ *Move to B14a*
4. *Seen/experienced not changes in the services* ➔ *Move to B15*

B14a. How is the change in service compared to the past?

1. *Much better than before*
2. *Better than before*
3. *Not as good as before*
4. *Very not good than before*
7. Don't Know
8. Refused to answer

B15. Since the beginning of the year have you noticed any changes or experienced any changes how the doctors, nurses or other health care workers treated you?

1. *Noticed/experienced a lot of changes*
2. *Noticed/experienced some changes*
3. *Noticed very little changes*
4. *Noticed no change at all* ➔ *Move to B16*
7. Don't Know ➔ Move to B16
8. Refused to answer ➔ Move to B16

B15a. Since the beginning of the year have you noticed any changes or experienced any changes how the doctors treated you?

1. *Noticed/experienced a lot of changes*
2. *Noticed/experienced some changes*
3. *Noticed very little changes*
4. *Noticed no change at all* ➔ *Move to B15b*
7. Don't Know ➔ Move to B15b
8. Refused to answer ➔ Move to B15b

B15a1. How do you feel about the change in how the doctors treated you compared to the past?

1. *Much better than before*
2. *Better than before*
3. *Not as good as before*
4. *Very not good than before*
7. Don't Know
8. Refused to answer

B15b. Since the beginning of the year have you noticed any changes or experienced any changes how the nurses treated you?

1. *Noticed/experienced a lot of changes*
2. *Noticed/experienced some changes*
3. *Noticed very little changes*
4. *Noticed no change at all* ➔ *Move to B15c*
7. Don't Know ➔ Move to B15c
8. Refused to answer ➔ Move to B15c

B15b1. How do you feel about the change in how the nurses treated you compared to the past?

1. *Much better than before*
2. *Better than before*
3. *Not as good as before*
4. *Very not good than before*
7. Don't Know
8. Refused to answer

B15c. Since the beginning of the year have you noticed any changes or experienced any changes how the other health care workers treated you?

1. *Noticed/experienced a lot of changes*
2. *Noticed/experienced some changes*
3. *Noticed very little changes*
4. *Noticed no change at all* ➔ *Move to B16*

7. Don't Know ➔ Move to B16

8. Refused to answer ➔ Move to B16

B15c1. How do you feel about the change in how the other health care workers treated you compared to the past?

1. *Much better than before*
2. *Better than before*
3. *Not as good as before*
4. *Very not good than before*

7. Don't Know

8. Refused to answer

B16. For your ARV treatment and care who would you prefer to see and speak with?

1. *Doctor*
2. *Nurse*
3. *Counselor*
4. *No preference*

7. Don't know

8. Refused to answer

B17. In the clinic, are you able to talk or meet a doctor or a nurse in private (directly meet or have conversation through mobile)?

1. *Yes*
2. *No*

7. Don't know

8. Refused to answer

B18. Have you ever had to go back to your home without receiving your prescribed medication?

1. *I always received full medication*
2. *I did not received medication when I'm late for appointment*
3. *I did not received medication for no reason*

7. Don't know/ don't remember

8. Refused to answer

## Appendix 7: Health Care Workers' In-depth Interview Guides

### Health Care Workers' In-depth Interview Guides

Clinic ID:

The goals of the long-term program are to describe from the clinical healthcare worker perspective:

- the adequacy of HIV service provision, service utilization, coverage and patient level health outcomes during and after transition
- the contextual factors surrounding the transition of HIV patients from the provincial/ national hospitals to district level service under Vietnam Social Health Insurance.
- the barriers and facilitators of providing HIV care & treatment
- the barriers and facilitators of HIV patients receiving care & treatment services from the healthcare workers perspective

| Type of Question | Purpose | Examples |
|---|---|---|
| Icebreaker question | The first question is the icebreaker, which allows each participant to speak and will help the interviewer to learn the language participants use for talking about their experiences | How is your life different as a healthcare provider because of your work with HIV patients? |
| Experience/behavior questions | Intended to elicit descriptions of experiences, behaviors, actions, activities; what a person has done, seen, hear or thought | If I were present when a patient arrives at an out-patient clinic for your monthly visit in Vietnam, what would I see or hear?<br><br>How do you as a clinician introduced to the patient the idea of starting HIV treatment, adhering to treatment? |
| | Assess barriers to and facilitators of providing adequate HIV care | When it comes to providing adequate HIV care & treatment services, what seems to work |

| | | |
|---|---|---|
| | & treatment services at the district hospital | well for you and what gets in the way?<br><br>About how often do those things that get in the way keep you from providing adequate HIV care & treatment services? Is it for all aspects of the service that you provide (clinical examination, patient counseling on treatment adherence, interpreting lab results, prescribing medication) or does it depend?<br><br>What is the most challenging part of providing HIV care & treatment services? How often would you say these challenges keep you from providing adequate HIV services? Is it for all aspects of the service (clinical examination, patient counseling on treatment adherence, interpreting lab results, prescribing medication) or does it depend?<br><br>What would you say are the main things that get in the way from you providing adequate HIV services to your patients? How often do these things affect your job satisfaction? |
| Opinion/ Value questions | Aimed at how people interpret specific events or issues, answers reflect a decision-making process and may reveal goals, opinions, norms, intentions, desires and values | When patients changed from receiving treatment services at the provincial level to the district level (your clinic), what is your opinion about how this process took place? Difficulties? Challenges? Positives? |

| | | |
|---|---|---|
| | | In your opinion, who should have the final say in determining where a patient should receive HIV treatment services? |
| Feeling questions | Probes emotional responses to experiences. Typically spontaneous, often not the result of a decision, often non rational. May emerge in response to other kinds of questions | How did you feel when you learned that you would be receiving HIV patients transferring from the provincial hospital?<br><br>How do patients react to situations where they are not receiving good quality health service for their HIV condition? |
| Knowledge questions | Intended to discover what people consider factual information – what people think is true. Interviewer records but does not correct misinformation, except at the end of the interview. | Tell me about some ways that you assess the quality of care that you provide to HIV patients.<br><br>Tell me about some of the ways that you stay up to date on the latest HIV treatment guidelines or other literature specific to caring for HIV patients.<br><br>What are some ways that the health care workers explain the importance of treatment adherence? |

## Phụ lục 8: A Sample Clinic Patient Focus Group Discussions Guide

### A Sample Clinic Patient Focus Group Discussions Guide

Clinic ID:

The goals of the long-term program are to describe from the patient perspective:

- the adequacy of HIV service provision, service utilization, coverage and patient level health outcomes during and after transition
- the contextual factors surrounding the transition of HIV patients from the provincial/ national hospitals to district level service under Vietnam Social Health Insurance.
- the barriers and facilitators of receiving HIV care & treatment

| Type of Question | Purpose | Examples |
|---|---|---|
| Icebreaker question | The first question is the icebreaker, which allows each participant to speak and will help the interviewer to learn the language participants use for talking about their experiences | How is your life different because of your HIV infection? |
| Experience/behavior questions | Intended to elicit descriptions of experiences, behaviors, actions, activities; what a person has done, seen, hear or thought | If I were present when you arrive at an out-patient clinic for your monthly visit in Vietnam, what would I see or hear?<br><br>How were you introduced to the idea of starting HIV treatment, adhering to treatment? |
| | Assess barriers to and facilitators of receiving adequate HIV care & treatment services at the district hospital | When it comes to being satisfied with HIV care & treatment services, what seems to work well for you and what gets in the way?<br><br>About how often do those things that get in the way keep you from being satisfied with the HIV care & |

| | | |
|---|---|---|
| | | treatment services that you receive? Is it for all aspects of the service (e.g. appointment setting, timeliness of staff, quality of care, pharmacy pick-up, etc.) or does it depend?<br><br>What is the most challenging part of receiving HIV care & treatment services? How often would you say these challenges keep you from being satisfied with the service? Is it for all aspects of the service (e.g. appointment setting, timeliness of staff, quality of care, pharmacy pick-up, etc.) or does it depend?<br><br>What would you say are the main things that get in the way from you being satisfied with the HIV service? How often do these things affect your satisfaction of the HIV service that you receive? |
| Opinion/ Value questions | Aimed at how people interpret specific events or issues, answers reflect a decision-making process and may reveal goals, opinions, norms, intentions, desires and values | When you changed from receiving treatment services at the provincial level to the district level, what is your opinion about how this process took place? Difficulties? Challenges? Positives?<br><br>In your opinion, who should have the final say in determining where you should receive HIV treatment services? |
| Feeling questions | Probes emotional responses to experiences. Typically spontaneous, often not the result of a decision, often non rational. May emerge in response to other kinds of questions | How did you feel when you learned that you would be transferred to a district hospital?<br><br>How do women/men react to situations where they are not |

| | | |
|---|---|---|
| | | receiving good quality health service for their HIV condition?<br><br>How have injecting drug users/MSM/FSW experienced HIV treatment services?<br><br>How have IDUs/MSM/FSW understood the information they have received about adhering to lifelong HIV treatment?<br><br>How do IDUs/MSM/FSW and their partners decide when they do or do not take their HIV medications? What influences this decision?<br><br>What has happened when IDUs/MSM/FSW have tried to access HIV testing or HIV treatment services at the district hospital?<br><br>How is this different from accessing testing or HIV treatment services at the provincial level? |
| Knowledge questions | Intended to discover what people consider factual information – what people think is true. Interviewer records but does not correct misinformation, except at the end of the interview. | Tell me about some different kinds of HIV medications you know<br><br>If a man who is sero-positive and a woman who is sero negative just had unprotected sex, is there anything he can do to avoid transmitting HIV to her?<br><br>What are some ways that the health care workers explain the importance of treatment adherence? |

## Appendix 9. Survey results - Information of study objects

Table 39: Demographics of patients over the period of survey

| Content | | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|---|
| | | N (%) | N (%) | N (%) |
| Age groups | 18 – 29 years old | 72 (14.1) | 67 (9.0) | 47 (6.3) |
| | 30 – 39 years old | 277 (54.2) | 327 (44.1) | 337 (44.9) |
| | 40 – 49 years old | 118 (23.1) | 289 (38.9) | 299 (39.9) |
| | >=50 years old | 44 (8.6) | 59 (8.0) | 67 (8.9) |
| | **Total** | **511 (100)** | **742 (100)** | **750 (100)** |
| | **Mean (range)** | 37.4 (19; 72) | 39.1 (18; 69) | 39.8 (18; 69) |
| Gender | Male | 310 (60.7) | 394 (53.1) | 407 (54.3) |
| | Female | 201 (39.3) | 348 (46.9) | 343 (45.7) |
| | **Total** | **511 (100)** | **742 (100)** | **750 (100)** |
| Ethnic | Kinh | 494 (97.1) | 664 (89.5) | 514 (68.5) |
| | Others | 15 (2.9) | 78 (10.5) | 236 (31.5) |
| | **Total** | **509 (100)** | **742 (100)** | **750 (100)** |
| | Missing | 2 | - | - |
| | Total | 511 | 742 | 750 |

Table 40: Birth place and living place

| Content | | N (%) | | |
|---|---|---|---|---|
| | | Year 2017 | Year 2018 | Year 2019 |
| Birth place | Bac Ninh | 54 (10.6) | 39 (5.3) | 19 (2.5) |
| | Binh Duong | 130 (25.5) | - | - |
| | Vinh Long | 126 (24.8) | 78 (10.5) | 45 (6.0) |
| | An Giang | - | 319 (43.0) | 166 (22.1) |

| Content | | N (%) | | |
|---|---|---|---|---|
| | | Year 2017 | Year 2018 | Year 2019 |
| | Soc Trang | - | 82 (11.1) | 42 (5.6) |
| | Thai Binh | - | 87 (11.7) | 47 (6.3) |
| | Hoa Binh | - | 66 (8.9) | 37 (4.9) |
| | Son La | - | - | 169 (22.5) |
| | Thanh Hoa | - | - | 164 (21.9) |
| | Other | 199 (39.1) | 71 (9.6) | 61 (8.1) |
| | **Total** | **509 (100)** | **742 (100)** | **750 (100)** |
| | Missing | 2 | - | - |
| | Total | 511 | 742 | 750 |
| Living place | Bac Ninh | 55 (10.8) | 39 (5.3) | 21 (2.8) |
| | Binh Duong | 295 (57.7) | - | - |
| | Vinh Long | 126 (24.7) | 86 (11.6) | 50 (6.7) |
| | An Giang | - | 340 (45.8) | 188 (25.1) |
| | Soc Trang | - | 84 (11.3) | 42 (5.6) |
| | Thai Binh | - | 93 (12.5) | 50 (6.7) |
| | Hoa Binh | - | 70 (9,4) | 39 (5,2) |
| | Son La | - | - | 182 (24.3) |
| | Thanh Hoa | - | - | 167 (22.2) |
| | Other | 35 (6.8) | 30 (4.0) | 11 (1.5) |
| | **Total** | **511 (100)** | **742 (100)** | **750 (100)** |

## Appendix 10. Survey results – Providing HIV/AIDS treatment and care

Table 41: The trend of changing provided services

| The trend of changing provided services | Year 2017 (N=330) | Year 2018 (N=242) | Year 2019 (N=267) |
|---|---|---|---|
| Much better than before | 19 (6.1) | 19 (8.5) | 34 (12.9) |
| Better than before | 163 (52.1) | 134 (60.1) | 167 (63.3) |
| Not as good as before | 122 (39.0) | 66 (29.6) | 56 (21.2) |
| Very not good than before | 9 (2.9) | 4 (1.8) | 7 (2.7) |
| **Total** | **313 (100)** | **223 (100)** | **264 (100)** |
| Missing | 20 | 17 | 3 |
| Total | 330 | 242 | 267 |

Table 42: Average score assesses the trend of change of services

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| | N | Mean (SD) | N | Mean (SD) | N | Mean (SD) |
| Patients at province leavel OPCs | 224 | 2.44 (0.667) | 188 | 2.28 (0.646) | 116 | 2.09 (0.618) |
| Patients at district/city leavel OPCs | 89 | 2.25 (0.570) | 35 | 2.06 (0.482) | 148 | 2.17 (0.684) |
| Total | 313 | 2.39 (0.646) | 223 | 2.25 (0.628) | 264 | 2.14 (0.656) |

Table 43: Patients' satisfaction about services at clinic

| Level of satisfaction | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|
| Extremely Dissatisfi-ed | 3 (0.6) | 2 (0.3) | 1 (0.1) |
| Very Dissatisfi-ed | 24 (4.7) | 6 (0.8) | 25 (3.4) |
| Satisfied | 299 (58.7) | 389 (52.8) | 462 (62.5) |
| Very Satisfied | 149 (29.3) | 265 (36.0) | 205 (27.7) |
| Extremely Satisfied | 34 (6.7) | 75 (10.2) | 46 (6.2) |
| **Total** | **509 (100)** | **737 (100)** | **739 (100)** |
| Missing | 2 | 5 | 11 |
| Total | 511 | 742 | 750 |

Table 44: The average score assesses the patient's satisfaction with care services and treatment at the level of care

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) |
| Patients at province leavel OPCs | 308 | 3.3 (0.7) (1-5) | 554 | 3.5 (0.7) (1-5) | 361 | 3.5 (0.7) (2-5) |
| Patients at district/city leavel OPCs | 201 | 3.4 (0.7) (1-5) | 183 | 3.6 (0.6) (3-5) | 378 | 3.2 (0.6) (1-5) |
| Total | 509 | 3.4 (0.7) (1-5) | 737 | 3.5 (0.7) (1-5) | 739 | 3.4 (0.7) (1-5) |

Table 45: Patients' satisfaction about the services and the consultation, explanation and advice of health care workers at clinic

| Level of satisfaction | Year 2017 n (%) | | | Year 2018 n (%) | | | Year 2019 n (%) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Doctor | Nurse | Other HCWs | Doctor | Nurse | Other HCWs | Doctor | Nurse | Other HCWs |
| Extremely Dissatisfi-ed | 3 (0.6) | 2 (0.4) | 3 (0.7) | 2 (0.3) | 2 (0.3) | 1 (0.1) | 3 (0.4) | 2 (0.3) | 1 (0.1) |
| Very Dissatisfi-ed | 24 (4.8) | 17 (3.5) | 12 (2.6) | 7 (1.0) | 4 (0.6) | 7 (1.0) | 22 (3.0) | 27 (3.7) | 20 (3.0) |
| Satisfied | 221 (44.2) | 213 (44.5) | 217 (47.7) | 271 (37.8) | 291 (41.3) | 339 (47.8) | 344 (46.7) | 380 (52.1) | 373 (55.9) |
| Very Satisfied | 180 (36.0) | 182 (38.0) | 169 (37.1) | 301 (42.0) | 290 (41.2) | 265 (37.4) | 285 (38.7) | 244 (33.4) | 217 (32.5) |
| Extremely Satisfied | 72 (14.4) | 65 (13.6) | 54 (11.9) | 135 (18.9) | 117 (16.6) | 97 (13.7) | 82 (11.1) | 77 (10.5) | 56 (8.4) |
| **Total** | **500 (100)** | **497 (100)** | **455 (100)** | **716 (100)** | **704** | **709 (100)** | **736 (100)** | **730 (100)** | **667 (100)** |
| Never received consultation / Don't know | 11 | 32 | 56 | 26 | 38 | 33 | 14 | 20 | 73 |
| Total | 511 | | | 742 | | | 750 | | |

Table 46: Satisfaction score about the services and the consultation, explanation and advice of doctors at clinic

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| | N | Mean (SD) (Min-Max) | N | Mean (SD) (Min-Max) | N | Mean (SD) (Min-Max) |
| Patients at province leavel OPCs | 307 | 3.6 (0.8) (1-5) | 544 | 3.8 (0.8) (1-5) | 355 | 3.7 (0.7) (1-5) |
| Patients at district/city leavel OPCs | 193 | 3.6 (0.8) (1-5) | 172 | 3.8 (0.7) (2-5) | 381 | 3.4 (0.7) (1-5) |
| Total | 500 | 3.6 (0.8) (1-5) | 716 | 3.8 (0.8) (1-5) | 736 | 3.8 (0.7) (1-5) |

Table 47: Satisfaction score about the services and the consultation, explanation and advice of nurses at clinic

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) |
| Patients at province leavel OPCs | 286 | 3.6 (0.7) (2-5) | 533 | 3.7 (0.7) (1-5) | 348 | 3.6 (0.7) (2-5) |
| Patients at district/city leavel OPCs | 193 | 3.7 (0.8) (1-5) | 171 | 3.8 (0.7) (2-5) | 382 | 3.4 (0.7) (1-5) |
| Total | 479 | 3.6 (0.8) (1-5) | 704 | 3.7 (0.7) (1-5) | 730 | 3.5 (0.7) (1-5) |

Table 48: Satisfaction score about the services and the consultation, explanation and advice of other health care workers at clinic

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) |
| Patients at province leavel OPCs | 294 | 3.6 (0.7) (1-5) | 533 | 3.6 (0.7) (1-5) | 302 | 3.6 (0.7) (2-5) |
| Patients at district/city leavel OPCs | 161 | 3.6 (0.8) (1-5) | 176 | 3.7 (0.7) (2-5) | 365 | 3.3 (0.6) (1-5) |
| Total | 455 | 3.6 (0.7) (1-5) | 709 | 3.6 (0.7) (1-5) | 667 | 3.5 (0.7) (1-5) |

Table 49: Satisfaction of patients about information confidentiality at the clinic

| Level of satisfaction | Year 2017 n (%) | Year 2018 n (%) | Year 2019 n (%) |
|---|---|---|---|
| Extremely Dissatisfi-ed | 3 (0.6) | 2 (0.3) | 2 (0.3) |
| Very Dissatisfi-ed | 14 (2.9) | 5 (0.7) | 17 (2.4) |
| Satisfied | 210 (43.8) | 284 (40.5) | 327 (46.4) |
| Very Satisfied | 197 (41.0) | 286 (40.8) | 297 (42.1) |
| Extremely Satisfied | 56 (11.7) | 124 (17.7) | 62 (8.8) |
| **Total** | **480 (100)** | **701 (100)** | **705 (100)** |
| Missing | 31 | 41 | 45 |
| Total | 511 | 742 | 750 |

Table 50: Satisfaction score of patients about information confidentiality at the clinic

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) | N | Mean (SD) (Min – Max) |
| Patients at province leavel OPCs | 285 | 3.5 (0.7) (1-5) | 524 | 3.7 (0.8) (1-5) | 341 | 3.7 (0.7) (2-5) |
| Patients at district/city leavel OPCs | 195 | 3.7 (0.8) (1-5) | 177 | 3.8 (0.7) (2-5) | 364 | 3.4 (0.6) (1-5) |
| Total | 480 | 3.6 (0.7) (1-5) | 701 | 3.7 (0.8) (1-5) | 705 | 3.6 (0.7) (1-5) |

Table 51: Waiting time for patients to see a doctor or a nurse or to receive your HIV medication at the clinic

| Waiting time for patients to see a doctor or a nurse | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|
| Wait within 15 minutes | 171 (33.5) | 200 (27.0) | 219 (29.3) |
| Wait about 15 - 30 minutes | 137 (26.8) | 206 (27.8) | 234 (31.3) |
| Wait about 30 minutes – an hour | 108 (21.1) | 138 (18.6) | 164 (21.9) |
| Wait more than an hour | 94 (18.4) | 197 (26.6) | 131 (17.5) |
| **Total** | **510 (100)** | **741 (100)** | **748 (100)** |
| Missing | 1 | 1 | 2 |
| Total | 511 | 742 | 750 |

Table 52: Feeling about the waiting time to see a doctor or a nurse

| Feeling about the waiting time to see a doctor or a nurse | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|
| Too long | 23 (4.5) | 6 (0.8) | 11 (1.5) |
| Long | 26 (5.1) | 42 (5.7) | 45 (6.0) |
| Relatively long | 68 (13.4) | 74 (10.0) | 91 (12.2) |
| Not long | 389 (76.9) | 616 (83.5) | 598 (80.3) |
| **Total** | **506 (100)** | **738 (100)** | **745 (100)** |
| Missing | 5 | 4 | 5 |
| Total | 511 | 742 | 750 |

Table 53: Satisfaction of patients about the waiting time at clinic

| Level of satisfaction | Year 2017 | Year 2018 | Year 2019 |
|---|---|---|---|
| Extremely Dissatisfi-ed | 5 (1.0) | 4 (0.5) | 2 (0.3) |
| Very Dissatisfi-ed | 49 (9.7) | 33 (4.5) | 43 (5.9) |
| Satisfied | 348 (69.2) | 424 (58.0) | 492 (67.0) |
| Very Satisfied | 88 (17.5) | 211 (28.9) | 173 (23.6) |
| Extremely Satisfied | 13 (2.6) | 59 (8.1) | 24 (3.3) |
| **Total** | **503 (100)** | **731 (100)** | **734 (100)** |
| Missing | 8 | 11 | 16 |
| Total | 511 | 742 | 750 |

Table 54: Satisfaction score of patients about the waiting time at clinic

| | Year 2017 | | Year 2018 | | Year 2019 | |
|---|---|---|---|---|---|---|
| | N | Mean (SD) | N | Mean (SD) | N | Mean (SD) |
| Patients at province leavel OPCs | 304 | 3.1 (0.6) | 549 | 3.4 (0.8) | 356 | 3.3 (0.7) |
| Patients at district/city leavel OPCs | 199 | 3.1 (0.6) | 182 | 3.5 (0.6) | 378 | 3.1 (0.5) |
| Total | 503 | 3.1 (0.6) | 731 | 3.4 (0.7) | 734 | 3.2 (0.6) |

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