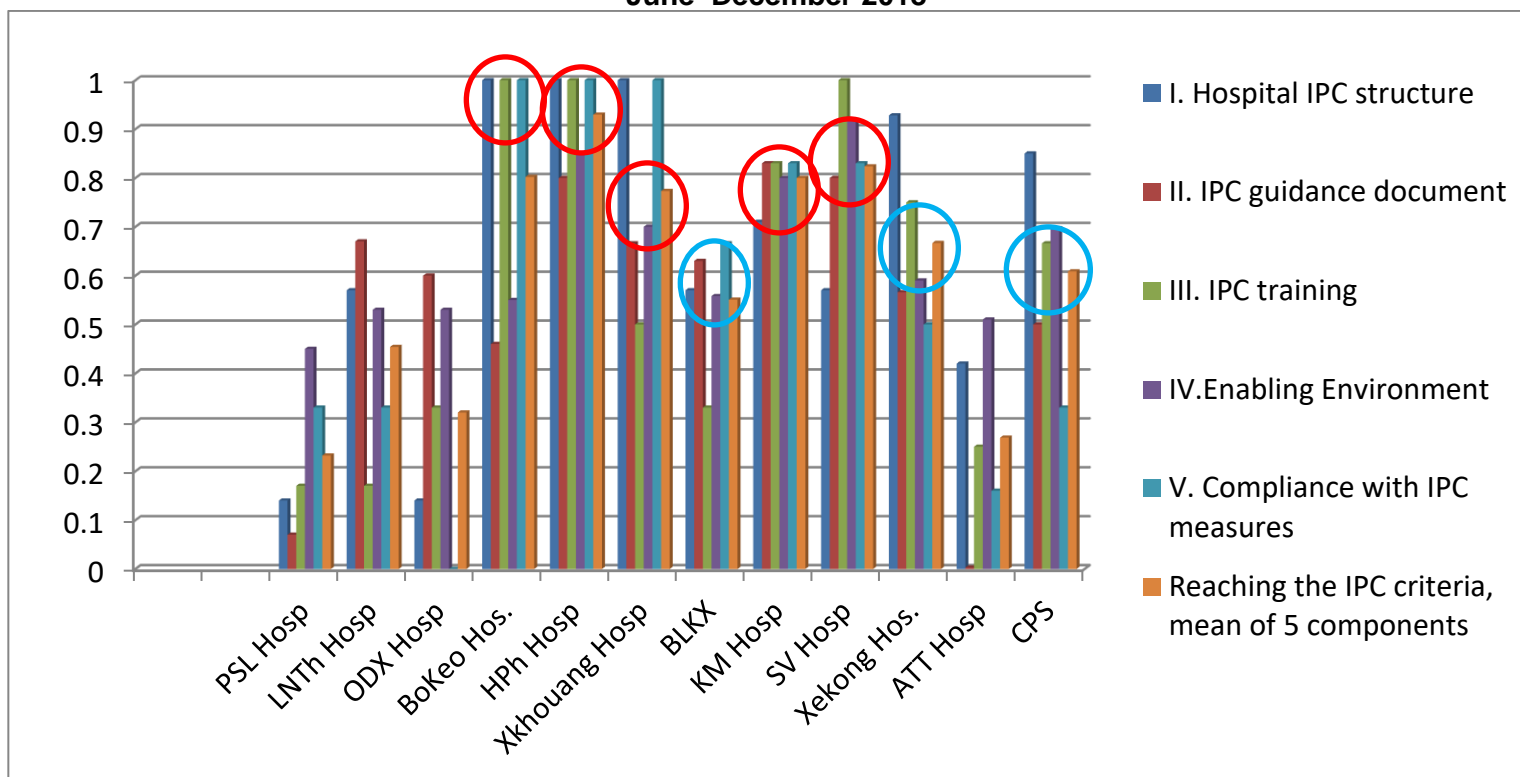


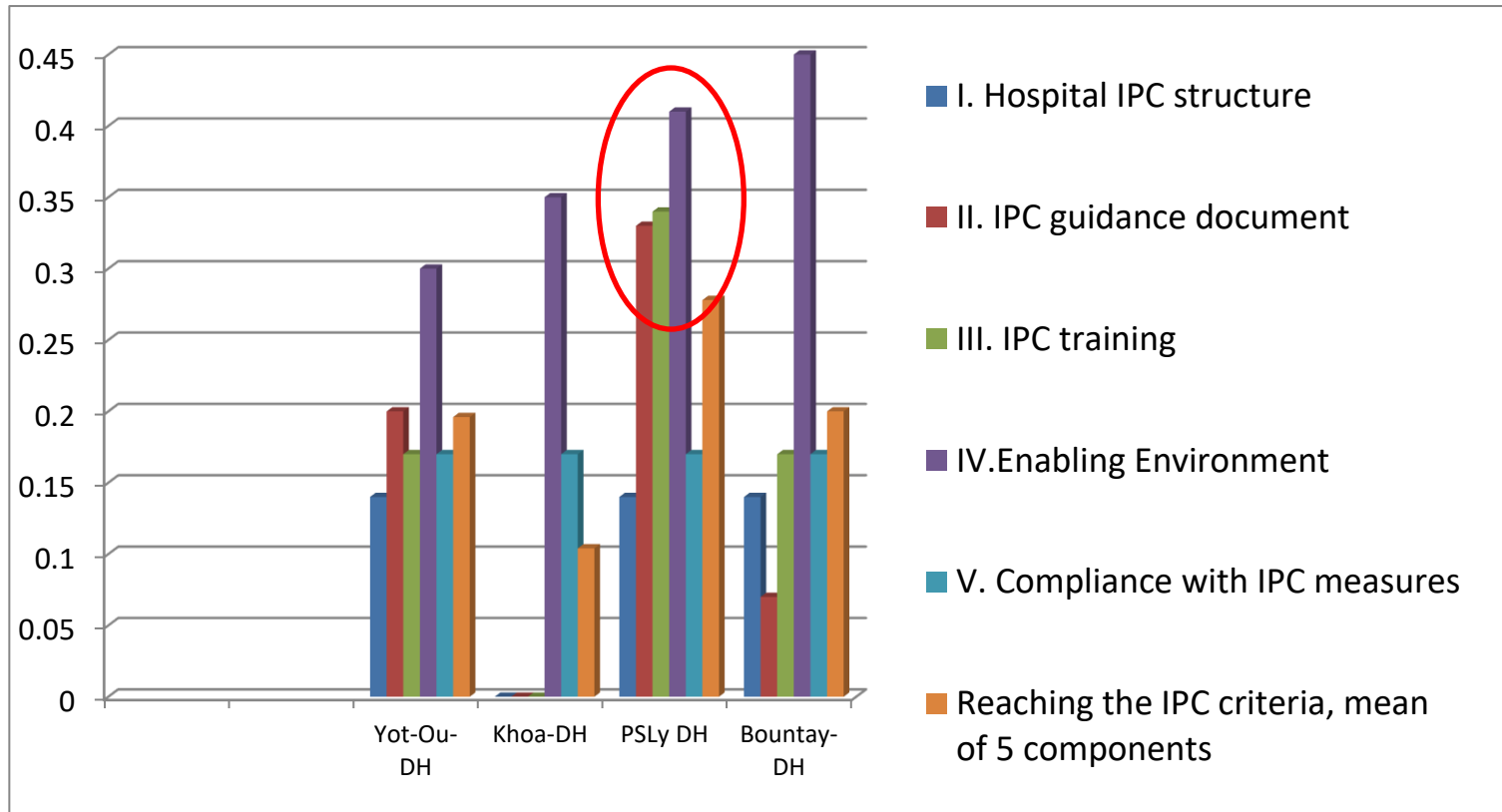
Infection Prevention and Control (IPC)
 Assessment Findings, from June–December 2018
 (50 Hospitals, 12 Provincial and 38 District Hospitals)

**Figure 1: Comparison of IPC Components by Provincial Hospitals,
 June–December 2018**



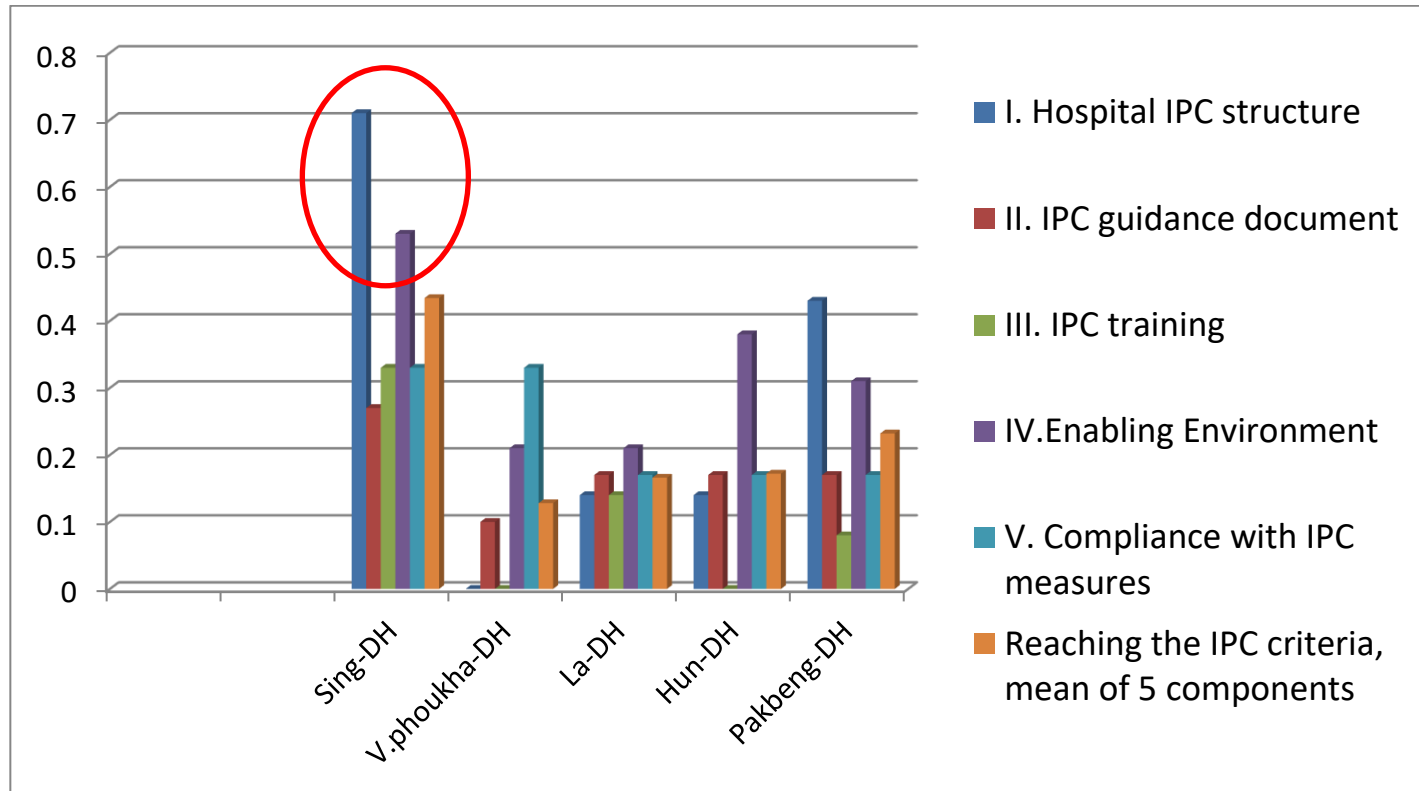
Interpretation: Of 5 IPC components, each component of assessed provincial hospitals varied from hospital to hospitals. These findings from assessed provincial hospitals can be classified into 3 categories, High (mean of 5 IPC components => 70%), Medium (mean of 5 IPC components =50%-69%) and Low (mean of 5 IPC components <50%). Bokeo, Houaphanh, Xiengkhoang, Khammouane and Saravane provincial hospitals classified as at high level of IPC readiness and practice. Borikhamxay, Xekong, Champasack provincial hospitals are at the medium; and Phongsaly, Oudomxay and Attapeu Provincial hospitals are at lower level of IPC preparedness and practice. Only 5 of 12 assessed provincial hospitals reached IPC criteria, the mean of 5 IPC components equal or over 70% (Bokeo, Houaphanh, Xiengkhouang, Khammouane and Saravane). Most of assessed provincial hospitals have IPC structure available.

Figure 2: Comparison of IPC Preparedness and Performance by Components of District Hospitals in Phongsaly Province, June–December 2018



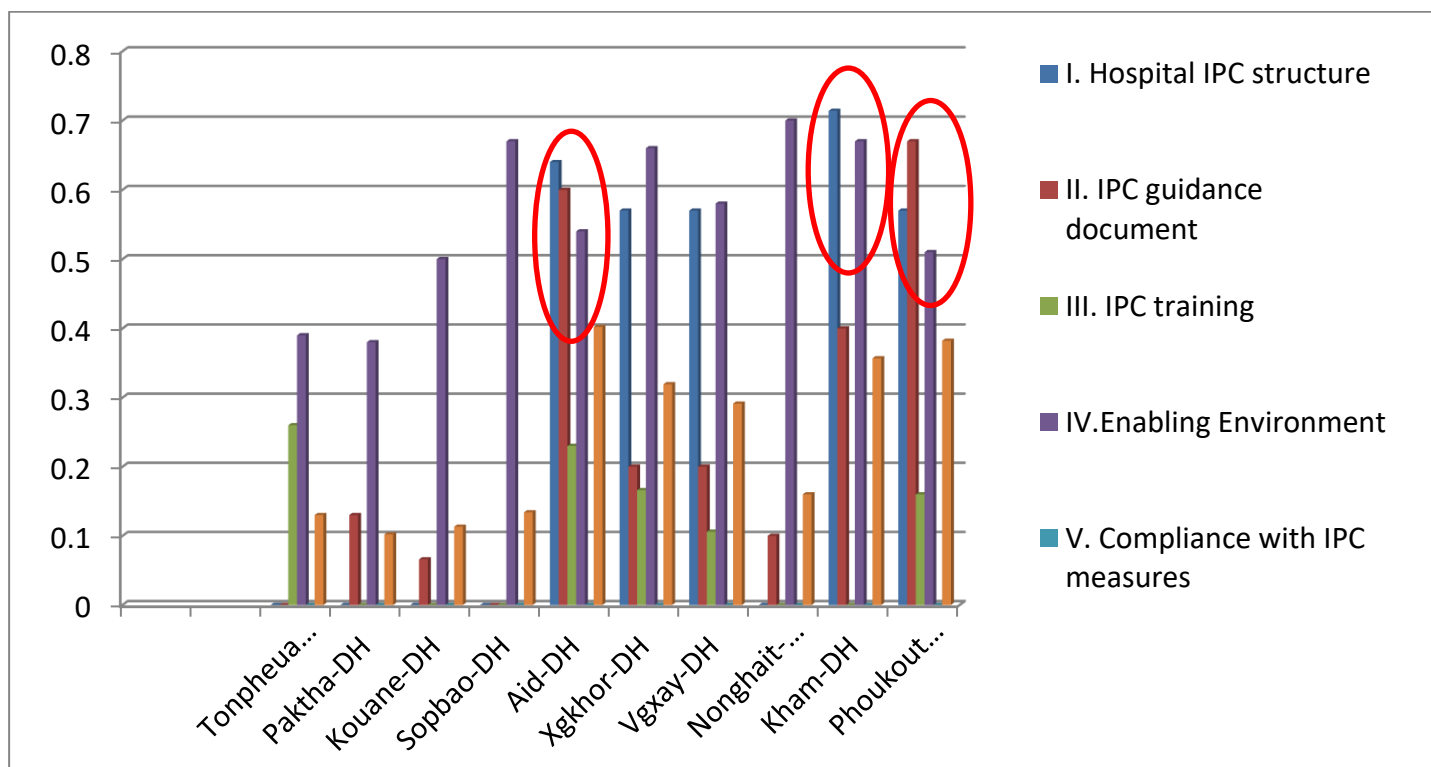
Interpretation: In general, Phongsaly District Hospital (Urban District) is better prepared for IPC readiness and practice than other districts among 4 assessed district hospitals, but interestingly, enabling environment for IPC practice is rather high ranging from 30%–45% (Figure 2).

Figure 3: Comparison of IPC Preparedness and Performance by Components of District Hospitals in Luangnamtha (1st 2) and Oudomxay (2nd 3) Provinces, June–December 2018



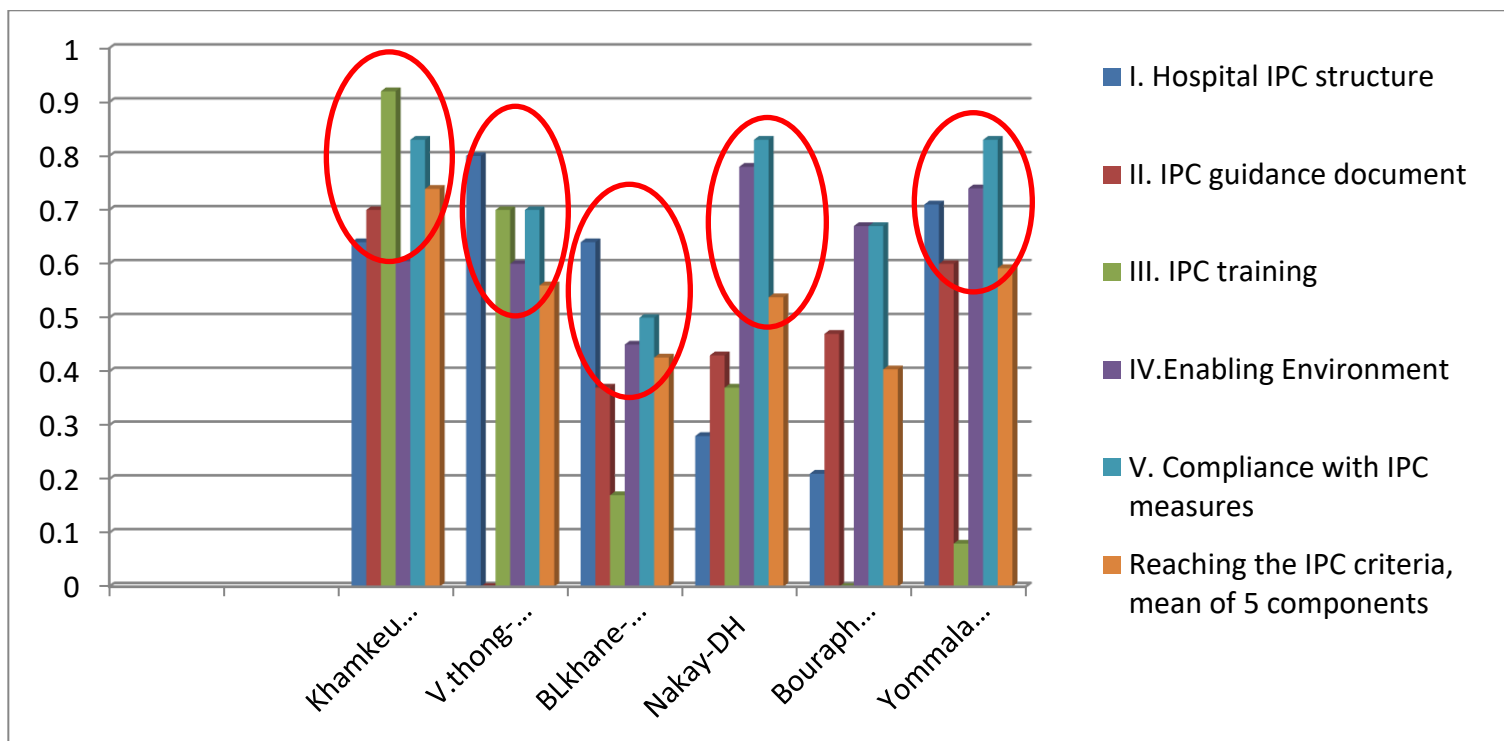
Interpretation: Of 2 districts of Luangnamtha Province’s district hospitals, Sing District Hospital is in better position for IPC readiness and practice, Hospital IPC structure is at 70%. The mean of 5 IPC components is 43.4%, enabling environment is at 53%., and another one assessed district hospital is still low for IPC readiness and practice. Of 3 district hospitals of Oudomxay Province, Pakbeng District Hospital is at medial to low level for IPC readiness reand practice, the hospital IPC structure is at 43 %, the highest among IPC components of Oudonxay Province’s District Hospital (Figure 3).

Figure 4: Comparison of IPC Preparedness and Performance by Components of District Hospitals in Bokeo (1st 2), Houaphanh (2nd 5) and Xiengkhouang Provinces (3rd 3), June–December 2018



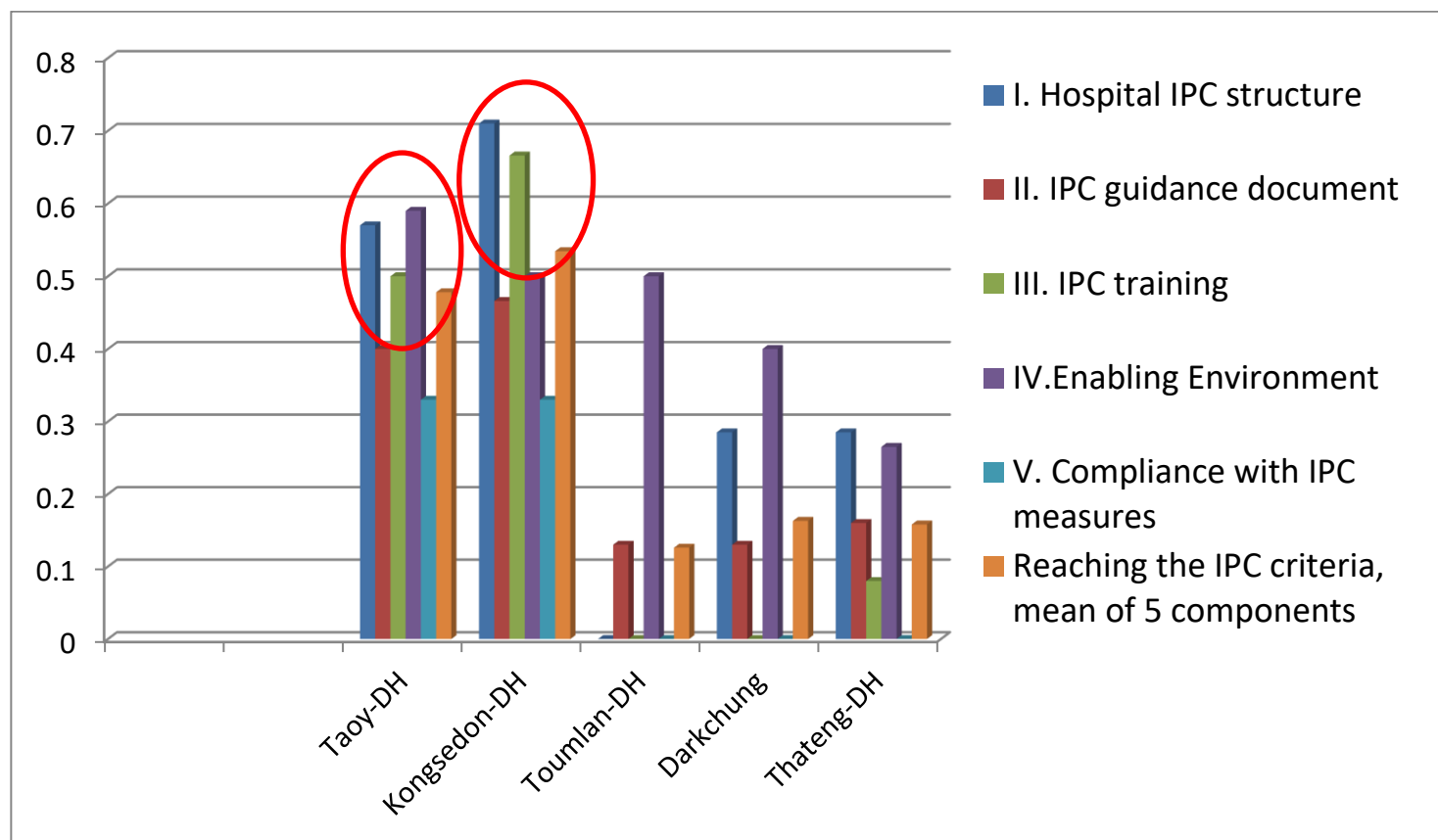
Interpretation: One of 4 assessed districts of Houphanh Province, Aid District is better than others for IPC readiness and practice, the mean of 5 IPC components is 40%. Similarly, 2 of 3 assessed districts of Xiengkhouang Province, Kham and Phoukout District is in better position for IPC readiness and practice, the mean of 5 IPC components is 35.6% and 38.2% respectively (Figure 4).

Figure 5: Comparison of IPC Preparedness and Performance by Components of District Hospitals in Borikhamxay (1st 3) and Khammouane (2nd 3) Provinces



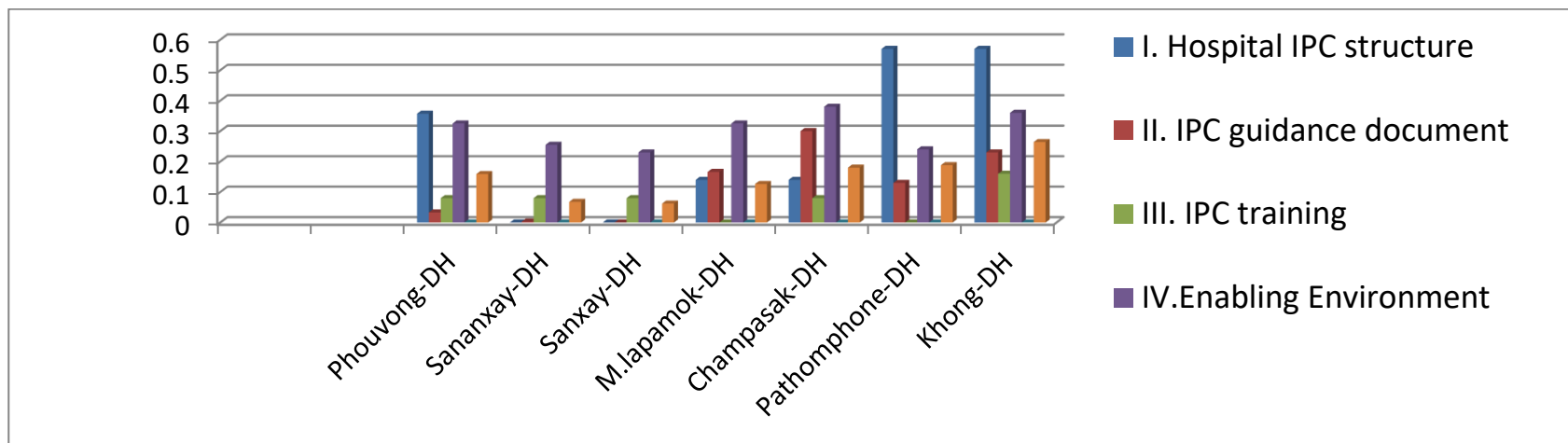
Interpretation: All three districts of Borikhamxay Province, Khamkeuth, Viengthong and Borikhane District Hospital are in better position for IPC readiness and practice, the mean of 5 IPC components of these 3 district hospitals are 73.9%, 56% and 42.6% respectively (Figure 5). The 3 assessed district hospitals of Khammouane Province, Nakay, and Yommalath District Hospitals are better than Bouarapha district hospitals in terms of IPC readiness and practice, the mean of these 2 district hospitals are 53.8% and 59.2% respectively, although only 37% and 8% of the staff of these 2 district hospitals have been trained on IPC respectively (Figure 5).

Figure 6: Comparison of IPC Preparedness and Performance by Components of District Hospitals in Saravane (1st 3) and Xekong (2nd 2) Provinces, June–December 2018



Interpretation: Of 3 district hospitals of Saravane Province, Taoy and Khongsedonh District Hospitals are better for IPC readiness and practice the mean of 5 IPC components are 47.8% and 53.4% respectively. In contrast, two districts of Xekong Province (Darkchung and Thateng), both of them are at lower level for IPC readiness and practice, the mean of 5 IPC components are less than 20% (Figure 6).

Figure 7: Comparison of IPC Preparedness and Performance by Components of District Hospitals in Attapeu (1st 3) and Champasack (2nd 4) Provinces



Interpretation: Of 3 district hospitals of Attapeu Province (Phouvong, Sanamxay, and Sanxay District Hospital), all of them are at low level for IPC readiness and practice, the mean of 5 components are less than 20%. Similarly, in Champasack Province, three district hospitals (Champasack, Pathoumphone and Khong District Hospital) are at lower level, the mean of 5 IPC components in 2 of 3 is less than 20%, that is Champasack and Pathoumphone, the 0mean of 5 IPC components of Khong District is 26.4% (Figure 7).

Detailed Descriptions of District Hospitals' Assessment Findings:

1. Phongsaly Province's District Hospitals

Phongsaly District Hospital (urban district hospital) is more prepared and practiced than other 4 assessed district hospitals. Interestingly, enabling environment for IPC readiness and practice is rather high ranging from 30%–45%, but still below the IPC criteria level.

2. Luangnamtha Province's District Hospitals

Of 2 district hospitals in Luangnamtha Province, Sing District Hospital is in better position for IPC readiness and practice. This hospital's IPC structure is at 70%, mean of 5 components is 43.4%, enabling environment is 53%, and another one assessed district hospital (Viengphoukha District Hospital) is still low for IPC readiness and practice.

3. Oudomxay Province's District Hospitals

Of 3 district hospitals in Oudomxay Province, Pakbeng District Hospital is at medial to low level for IPC readiness and practice. This hospital IPC structure is at 43 %, the highest among IPC components of Oudomxay Province's District Hospitals (Figure 3).

4. Houaphanh Province's District Hospitals

One of 4 assessed district hospitals in Houaphanh Province, only Aid District is better than others for IPC readiness and practice, the mean of 5 IPC components is 40%. The mean of other district hospitals of Houaphanh Province (Kouane, Sopbao, Xiengkhor and Viengxay district) is at very low level for IPC readiness and practice (Figure 4)

5. Xiengkhouang Province's District Hospitals

Two of 3 assessed district hospitals in Xiengkhouang Province, Kham and Phoukout District hospitals are in better position for IPC readiness and practice; the mean of 5 IPC components is 35.6% and 38.2% respectively. Another district hospital, the Nong Hait District Hospital (remote district) has very low level for IPC readiness and practice.

6. Borikhamxay Province's District Hospitals

All three district hospitals in Borikhamxay Province, namely Khamkeuth, Viengthong and Borikhane District hospitals are in better position for IPC readiness and practice; the mean of 5 components are 73.9%, 56% and 42.6% respectively. Interestingly, every district hospital is in compliance with IPC measures (Figure 5).

7. Khammouane Province's District Hospitals

The 3 assessed district hospitals of Khammouane Province, Nakay and Yommalath District Hospital are better than Bouarapha District Hospital for IPC readiness and practice. The mean of these 2 district hospitals are 53.8% and 59.2% respectively, although only 37% and 8% of staff have been trained on IPC concepts in Nakay and Yommalath district hospitals respectively (figure 5).

8. Saravane Province's District Hospitals

Two district hospitals of Saravane Province, namely Taoy and Khongsedonh are better in IPC readiness and practice; the mean of 5 IPC components are 47.8% and 53.4% respectively (Figure 6).

9. Xekong Province's District Hospitals

Two district hospitals of Xekong Province, namely Dackchung and Thateng are at lower level for IPC readiness and practice; the mean of 5 components is less than 20%. Other components are very low, but enabling environment is available at 50% and lower (Figure 6).

10. Attapeu Province's District Hospitals

Three district hospitals of Attapeu Province (Phouvong, Sanamxay and Sanxay District Hospital) are all at low level for IPC readiness and practice. The mean of 5 components is less than 20%. Almost all 5 IPC components of Attapeu Province are low (Figure 7).

11. Champasack Province's District Hospitals.

Three district hospitals of Champasack Province were assessed, namely Champasack, Pathoumphone, and Khong Districts. All these 3 district hospitals are at lower level. The mean of 5 components in 2 (Champasack and Pathoumphone) of 3 district hospitals is less than 20% but the IPC structure of these 2 district hospitals is available. Khong District Hospital is also weak in IPC readiness and practice; the mean of 5 components of Khong District Hospital is 26.4%,

You may have noted that, Bar Charts have been made in combination with districts of other provinces; this is to make the charts and variables going to the same side, nice looking, and easy to interpret.

Conclusions:

A total of 12 ADB HSP target provincial and 38 district hospitals were assessed for Infection Prevention and Control (IPC) readiness and practice during June and December 2018. Border and remote hospitals of ADB HSP target provinces and districts were selected as assessment sites.

Among 12 Provincial Hospitals

Of 12 provincial hospitals, five (41.7%) were found having mean of 5 IPC components over 70%. These are Bokeo, Houapahnh, Xiengphouang, Khammouane and Savannakhet Provincial Hospitals, three northern (Bokeo, Houapahnh, Xiengphouang provincial hospitals) and 2 provincial hospitals at the central part of the country (Khammouane and Savannakhet Hospital), Xekong and Champasack (16.6%) have mean of 5 IPC components between 60%–70% (66.6% and 60.8%). The rest of assessed provincial hospitals have 5 IPC components lower than 50%, except Borikhamxay Provincial Hospital which has 50.08%.

Among 38 District Hospitals

Among 38 district hospitals, most of them have 5 IPC components lower than 70%, except Khamkeuth District Hospital of Borikhamxay Province which has 5 IPC components 73.9%.

Overall, only 5 of 12 provincial hospitals and only one of 38 assessed district hospitals reached IPC criteria of having mean of 5 IPC components equal to and over 70%.

IPC Components of assessed provincial and district hospitals varied from hospital to hospitals. The target mean of 5 IPC components is reaching criteria of 70% and over.

Recommendations.

It is recommended that:

1. Attention and prioritization should be given to provincial hospitals of the following provinces:
 - 1.1. Phongsaly,
 - 1.2. Luangnamtha,
 - 1.3. Oudomxay,
 - 1.4. Borikhamxay,
 - 1.5. Attapeu,
 - 1.6. Xekong,
 - 1.7. Champasack

In addition, attention should be given to district hospitals with low IPC readiness and low performance. If funds are limited, district hospitals should be prioritized.

2. IPC good practice in 5 following provincial hospitals should be maintained and enhanced: Bokeo, Houapahnh, Xiengphouang, Khammouane and Savannakhet Provincial Hospitals;
3. IPC Committee should be established and functioning at every provincial and district hospital;
4. Terms of Reference (ToR) of IPC Committee should be developed and disseminated;
5. Basic IPC practice curriculum should be integrated into the curriculum of all Medical Colleges;
6. Refresher training on IPC should be conducted to solve the problems of IPC officers turn overs;
7. IPC training should be widely conducted for all IPC committee members and responsible hospital officers;
8. IPC equipment with instructions for use and consumable supplies should be provided to each hospital;
9. Self-monitoring and evaluation on IPC performance should be done regularly;
10. Monitoring and supervision on IPC performance by DHR IPC Focal Point should be done regularly; and
11. Manuals and Standard Operation Procedures (SOP) on IPC performance should be distributed to target hospitals.