



mSupply Pilot Evaluation

FOR LMIS AGGREGATION TOOL
IMPLEMENTATION IN 15 TOWNSHIPS

March 2017

The Three Millennium Development Goal Fund



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RSCS Team, Myanmar

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About PFSCM

The Partnership for Supply Chain Management (PFSCM) is a nonprofit organization established in 2005 by two of the leading international health consultancy organizations in the U.S.— Management Sciences for Health (MSH) and JSI Research and Training Institute, Inc. (JSI), both also nonprofits. To deliver its services, PFSCM draws on the capabilities and experience of four organizations that are among the most trusted names in international public health and development, with each offering unique capabilities, including procurement, freight forwarding and data visibility. In Myanmar, PFSCM implements the Regional Supply Chain Strengthening (RSCS) project, funded by 3MDG.

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About RSCS

The RSCS project assists the MOHS in improving supply chain management in public sector health systems at the regional and lower levels through system improvements and capacity building. The project design is based on the findings of the National Supply Chain Baseline (NSCB) Report; the recommendations of the SCMS Procurement Options Analysis Report; and the work of a team of experts who visited Myanmar in September 2014 and developed the initial RSCS Project Charter. RSCS project activities are implemented in Bago, Magway and Ayeyarwaddy regions.



PFSCM is a partnership of JSI and MSH



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Acronyms

3MDG	Three Millennium Development Goal Fund
CME meeting	Continuous Medical Education (monthly meeting at township level)
DOPH	Department of Public Health
DOMS	Department of Medical Services
HFSR	Health Facility Stock Report
LMIS	Logistic management information system
LMU	Logistic Management Unit
MOHS	Ministry of Health and Sports
RHC	Rural health center
RSCS	Regional Supply Chain Strengthening project
S-RHC	Sub-rural health center
TMO	Township Medical Officer
UPS	Uninterrupted power supply

Executive summary

In recent years, the Ministry of Health and Sports (previously: Ministry of Health) has gone through many changes. MOHS budgets have quadrupled and are still increasing. The Department of Health has been separated into two new departments: Department of Public Health and Department of Medical Services. Procurement budgets have been decentralized from central to regional level and separated for each department. Due to these changes, it has become more important to implement and strengthen supply chain procedures and capacity at all levels of the supply chain.

As part of the RSCS workplan activities, RSCS has implemented a paper-based LMIS form (Health Facility Stock Report) at all basic health facilities (approx. 3,700) in all 79 townships of 3 regions: Bago, Magway, and Ayeyarwaddy regions. Each month, this HFSR is reported and submitted to the township level.

RSCS has implemented an LMIS data aggregation tool (mSupply) in order to collect and enter all data from the HFSR forms into a computerized aggregation system.

Phase 1 of the LMIS aggregation tool implementation was a pilot implementation in 15 townships (5 in each region) to check the user acceptance, functionality of hardware and software, and skills of mSupply users, and to collect general feedback, suggestions, and opinions from the users regarding mSupply. These issues would be checked by conducting an evaluation in the 15 pilot townships and the 3 regional offices to:

1. Review completeness of reporting in mSupply for December 2016 and January 2017 (months that LMIS data was entered by pilot townships).
2. Check consistency of data in paper reports from health facilities and data entered in the mSupply system.
3. Explore user experience and feedback in terms of overall satisfaction and/or challenges in data entry, data utilization, and technical assistance support.
4. Assess availability and functionality of hardware and software.

A detailed explanation of the methodology and analyses of the above-mentioned evaluation criteria are described in the sections below, but the overall summary of the evaluation is as follows:

1. Completeness of reporting in mSupply

As of December 2016, the total number of operational health facilities in 15 townships of the 3 regions was 713. For December 2016, a total number of 706 (99.0 percent) LMIS reports were entered and validated in mSupply, and for January 2017 the number of reports submitted and entered was 710 (99.6 percent) (see Table 1). We can consider this a very high and successful reporting rate.

2. Data consistency check on HFSR reports

Overall the accuracy of data reported and entered in mSupply is very high. Correct heading information of the form and opening balance matching with previous month's closing balance is respectively 93 percent and 96 percent accurate and complete.

The stock transaction data reported and entered in mSupply was 71 percent accurate and complete, mainly caused by township entry staff not entering the number of days out of stock as reported on the HFSR form. This issue has been addressed during follow-up CME meetings and we expect to see an improvement in the coming period.

The main issue with data accuracy is that health facilities significantly under-report on Number of Days Out of Stock as well as the Quantity Requested. This makes it very difficult to determine the real stockouts and gaps in the supply chain.

Not every health facility requires every item that is preprinted on the HFSR form; it varies for every clinic. It is therefore difficult to determine, when an item has zero stock, whether it is because the facility has consumed its last stock and truly faces a stockout or it just doesn't need (or staff think they don't need) that particular item.

We have addressed these issues and will continue to do so at the monthly township CME meetings. Health staff at facilities need to understand how to report on number of days out of stock and quantity requested for items that are needed but are not in stock.

In the coming period, our teams will continue to attend CME meetings, visit townships offices, and conduct support visit to health facilities, and will focus more on data quality using a data quality checklist.

3. User experience and feedback

Overall, the feedback received from township, regional, and central users was very positive. Their detailed feedback is listed in the section "User experience and feedback."

Townships users

The township users are the prime mSupply users. They enter the data from the paper-based HFSR from (from the facilities) into mSupply. RSCS has provided the townships with the necessary computer hardware.

The township users found the HFSR form with preprinted commodities useful and relevant. They mentioned that the commodities list needs to be reviewed periodically to make sure that relevant items are included and non-relevant items taken out. We have also recommended that the Department of Public Health periodically conduct a review of the essential commodity list. There have been some issues with the quality of the self-copying paper. We will address with the print shop when printing extra HFSR form books.

All users reported that the computer hardware is working well and that there have been no problems. The data entry and upload process is easy and no major problems have been reported. The township users report that it is easy to generate the standard reports and most users have downloaded and used most of the reports.

RSCS Baseline Study Results

Some users requested that it would be useful to have a separate report for received commodities. For the time being the received commodities are reported in the “Stock Status Report” but we will consider adding more standard report after complete roll-out of mSupply to remaining townships.

Some also mentioned that it would be useful to have expiry date reports. We agree that at a higher level this would be useful, but at health facilities expiry dates are not reported to township level so for the time being it is not possible to report expiry dates. It should also be considered whether or not it would be practical to have all facilities manually report on expiry date given the high number of facilities in this country.

The township users mentioned that the information from the standard report is very useful for forecasting (and tendering) procedures, as well as for reallocating stock between townships. It will also help reduce wastage and stockouts.

Most users agreed that it would be useful if all townships used mSupply as a data aggregation tool.

Seventy-three percent of the users rated mSupply as “good” and 23 percent as “very good.”

A list of all comments is included in section “Written feedback from township mSupply users.”

Regional users

The regional users can access the mSupply data via the cloud server. RSCS has provided the regional departments of public health with the necessary computer hardware.

The regional users agreed that the HFSR form is useful and relevant but mentioned that the preprinted commodity list needs to be reviewed and kept up to date annually. The computer hardware and accessories provided are working well. The mSupply software is easy to use and useful for their purpose, and the online system and standard reports are useful and meet their expectations.

They liked that the system provides real-time consumption and stock status data, which allows the TMO to make adjustments by re-allocating stock between facilities. The consumption data overview is useful for forecasting and procurement.

They were worried about the extra workload for the township level but said that it is easy to use at the regional level. They have to get used to the generic commodities’ names (brand names are still often used), which may lead to confusion.

They recommend using the LMIS aggregation system in all townships in the regions but also in all regions of the country.

Sixty-seven percent of the users rated the mSupply as “good” and 33 percent as “very good.”

A list of all comments is included in the section “Written feedback from regional mSupply users.”

Central users

Central users can access the mSupply data via the cloud server.

Central user found the HFSR useful and relevant. The preprinted commodity list needs to be reviewed and kept up to date. The software is easy to use and the standard reports easy to generate and useful. The use of the LMIS system is still in its early stages, so it is difficult to say if the mSupply report meets the DoPH's expectations.

The annual cost of the mSupply system will be an important factor for the sustainability and use in the future, if and when it is handed over to the MOHS.

One concern is that mSupply is not an open source software and therefore requires the outside vendor to provide technical support and maintenance.

However, it is recommended to be implemented in the other townships of the three regions.

The overall rating of the system is "very good."

A list of all comments is included in section "Written feedback from central mSupply user"

System administrator

The System Administrator is an RSCS staff and responsible for providing in-country technical assistance and maintenance to the mSupply system and its users. He also has direct contact with the technical staff of the software vendor (Sussol).

The hardware and software is working well and easy to use and maintain. The USB modem works well but the internet speed is not as fast in all locations. For uploading LMIS data to the server, internet speed is not a problem, but for generating some of the online reports, internet speed can sometimes be a challenge. The software company has made significant improvements to the download speed of the LMIS report from the server.

The advantage of mSupply is that the LMIS data entered at the township level is uploaded and synchronized with the central database automatically, as soon the township connects to the internet. Furthermore, the users can generate their own reports offline. The system has an automatic backup function and data can be restored when necessary.

The technical support from Sussol is very good.

One point of concern is the online report generation speed. With the expansion to other townships and possibly other regions, more data will be entered, which may affect the download speed of the online report. We have already discussed this with Sussol, which assured us that the download speed will remain within an acceptable time.

The overall rating of the system is "very good."

A list of all comments is included in section "Written feedback from mSupply System Administrator."

4. Assess availability and functionality of hardware and software

The RSCS teams visited all 15 townships and 3 regional offices, and a 3MDG representative accompanied our team to 2 townships.

Hardware and software

All hardware at each location was installed and functioning properly. The login and data entry process in mSupply was done correctly by the users. All users were able to generate the requested report successfully.

All users stated that it is easy to operate the mSupply system and that they have received sufficient training. A few interviewees mentioned that a refresher training could be useful.

Refresher training is part of our 2017 workplan, which will focus particularly on data quality and use of LMIS data reports for supply chain management (forecasting, procurement, stock management, etc.).

In the townships in Magway and Bago region, it takes approx. 2-3 days for one data entry officer to enter all HFSRs in mSupply each period. In Ayeyarwaddy region, it takes approx. 3-4 days due to the higher number of health facilities.

Challenges

Some of the challenges faced by township staff are related to human resources. The data entry is currently done by medical staff who also have other duties. There is a high turnover of staff, which requires continuous training of new staff.

Other challenges are reliable internet connection, resupply of ink cartridges, and a lack of experience to analyze the mSupply reports.

RSCS will continue to give support to mSupply users and will resupply the townships with ink cartridges and prepaid phone card to top up the USB modem. Additional refresher training is planned during 2017.

Troubleshooting and support

No major problems were reported by township users during the pilot phase. Some minor issues, such as login problems, poor connection to internet, and questions on how to generate different reports, were reported and easily solved by referring to the standard operation procedures or through direct technical support by the RSCS team.

Overall opinion of mSupply

The overall opinion of the users of the mSupply LMIS system is that it is working well, easy to use, and relevant because it provides consumption and stock data for all health facilities. It is recommended to be rolled out to other townships.

A list of all comments is included in section “Feedback follow-up interviews at pilot townships and regional office.”

Recommendation

After conducting this evaluation, we consider the pilot implementation of mSupply in 15 townships successful.

The users at township, regional, and central level have provided positive feedback regarding the use of LMIS system and stated that it will provide them with useful information in order to improve supply chain management activities, such as identifying needs, re-allocation of stock, forecasting, and procurement. It will help reduce stockouts and wastage. Most, if not all, users recommend using mSupply in all townships in the three regions.

It is important that all 79 townships in the regions use the mSupply data aggregation tool in order to provide a complete consumption and stock data set for forecasting purposes. The complete LMIS data reports will provide the township, regional, and central levels with better control over the need for and availability of essential health commodities in their geographical areas.

Until now, RSCS staff have entered the HFSR data of the other 64 townships into mSupply in order to provide the Regional DoPH with a complete LMIS data overview of all facilities, but this is not sustainable and they will not be able to continue to do so in the future.

It is important that all townships start using the LMIS system in order to gain as much experience as possible and to be able to use the LMIS data for upcoming forecasting and tender procedures. We therefore recommend rolling out the mSupply data aggregation tool to the remaining 64 townships.

Introduction

Background

The RSCS project aims to improve supply chain management within the MOHS in three regions (Bago, Magway, and Ayeyarwaddy). The main mechanisms for achieving this are:

- Implementation of a harmonized LMIS.
- Creation of a Logistics Management Unit (LMU) in each region.
- Consolidation of procurement for generic essential medicines.
- Strengthening of the procurement and contract management capabilities.
- Strengthening data management and stock management at the township and lower levels.

The RSCS project has implemented a paper-based standardized LMIS reporting system for all essential medicines and health commodities used in basic health facilities. All basic health facilities in 79 townships of the 3 regions are now reporting their consumption and stock data to their township public health departments using the paper-based, standardized HFSR form.

In order to aggregate/ compile this LMIS data, an electronic data aggregation tool (mSupply software) is to be used for LMIS data aggregation and generating standard reports. These reports on logistics data will be used in forecasting and supply planning, and for monitoring stock levels, consumption, stockout, and stock excess. Using LMIS information, MOHS staff and managers can enhance their forecasting and quantification, procurement, and stock management to ensure stock security and effective use of funds.

mSupply pilot implementation

The implementation of mSupply in the three regions is planned in two phases:

Phase 1: Pilot implementation in 15 townships (5 in each region)

Two designated staff from each of the 15 townships will be trained on the use of the mSupply data aggregation tool, and computer hardware and software will be provided to each township. After the training, these townships will enter the LMIS data from all basic health facilities into mSupply (the data from the 64 remaining townships will be entered by RSCS data entry staff, pending the rollout to all townships). In February/March 2017, an evaluation will be conducted in order to determine the quality and user acceptance of the data aggregation software.

Phase 2: Roll out mSupply implementation to remaining 64 townships

After evaluation and successful completion of the pilot phase, mSupply will be rolled out to the 64 remaining townships in the three regions. All townships will be provided with computer hardware, accessories (such as a printer, cartridges, USB modem, and UPS power back-up system) installed with mSupply Software.

For overview of all townships, please refer to Annex A.

Methodology of the evaluation

The mSupply pilot evaluation has four main objectives including:

	Objectives	Methodology
1	Review completeness of reporting in mSupply for December 2016 and January 2017 (months LMIS data entered by pilot townships)	Desk review of data entered in mSupply - Report the number of reports received and entered in mSupply from pilot townships
2	Check consistency of data in paper reports from health facilities and data entered in the mSupply system	Random sampling of 2 health facilities of each pilot township Collect HFSR form copy of two consecutive months (Dec 2016 and Jan 2017) of 2 HF from each township (60 in total) <ul style="list-style-type: none"> ➤ Check correct heading info on HFSR form ➤ Check consistency between closing and opening balance ➤ Check if all data from paper is entered in mSupply (accurate and complete) ➤ Check if nr. of days of stockout is properly filled in
3	Explore user experience and feedback in terms of overall satisfaction and/or challenges in: <ul style="list-style-type: none"> 1) data entry 2) data utilization 3) technical assistance support 	Short questionnaire document to be filled out by focal person from township, regional, and central level. A sealed envelope will be provided. <ul style="list-style-type: none"> - Document will be translated in Myanmar language - Document will be distributed by RSCS team - Township focal point will fill questionnaire without staff presence - RSCS staff will collect questionnaire after a few days Follow-up interviews using a semi-structured interview guide with selected townships <ul style="list-style-type: none"> - RSCS staff will collect questionnaire from all 15 townships during which they can conduct the follow up interviews
4	Assess availability and functionality of hardware and software	Field visit to selected townships per Region. - RSCS staff will collect questionnaire from all 15 townships during which they can check functionality of hardware and software

Indicator definitions for data consistency check

Check correct heading info on HFSR form	
Purpose	This indicator measures the completeness of the heading information on the HFSR form. In total there are 5 info data to be filled out (name of facility, township, region, type of facility and reporting period). In total we have collected 60 forms resulting in 60 x 5 = 300 data points
Numerator	Number of correct heading data points from all collected HFSR forms
Denominator	Total number of heading data points of 60 forms; 60 x 5 = 300)
Data Sources	HFSR form collected from 15 townships (60 pcs)

Check consistency between closing and opening balance	
Purpose	This indicator measures the accuracy of matching opening and closing balances of stock items as reporting on the HFSR form for two consecutive months (December 2016 and January 2017)
Numerator	Number of matching opening / closing balances on collected HFSR forms
Denominator	Total number of items reported on collected HFSR forms
Data Sources	<ul style="list-style-type: none"> - HFSR form collected from 15 townships (60 pcs) - mSupply reports

Check if all data from paper is entered in mSupply (accurate and complete)	
Purpose	This indicator measures the accuracy and completeness of the item stock data as reporting on the HFSR form entered into mSupply
Numerator	Number of stock data entries reported on collected HFSR forms entered correctly in mSupply
Denominator	Total number of items reported on collected HFSR forms
Data Sources	<ul style="list-style-type: none"> - HFSR form collected from 15 townships (60 pcs) - mSupply reports

Check if number of days of stockout is properly filled in	
Purpose	This indicator measures if the Health Facilities properly report on No. of Days Out of Stock. Often we have seen that facilities do not report days out of stock despite the fact that have no stock balance but do require the item.
Numerator	Total number of items with QTY Required filled in but with Zero stock balance and No. of Days Out of Stock filled in (> 0)
Denominator	Total number of items with QTY Request filled in and with Zero stock balance
Data Sources	<ul style="list-style-type: none"> - HFSR form collected from 15 townships (60 pcs) - mSupply reports

Evaluation team

- RSCS Regional Team Bago
- RSCS Regional Team Magway
- RSCS Regional Team Ayeyarwaddy
- RSCS Team Yangon
- 3MDG representative(s)

Time framework

Activity	Timeline	Responsibility
Finalize study instrument (questionnaires and protocol)	17 February	RSCS
Distribute questionnaires to focal person at Township, Regional and Central level	20 February	RSCS
Collection of Questionnaires from focal persons	23 February	RSCS
Analyze results of questionnaires	27 February	RSCS
Desk review data completeness in mSupply (December 2016 and January 2017)	27 February	RSCS
Consistency check of data paper form with mSupply	27 February	RSCS
Field Visits (final schedule to be determined)	27 February	RSCS (+ 3MDG)
Finalize Evaluation Report	15 March	RSCS

Annex A: Overview Townships

	Region	Pilot townships (15)	Roll-out townships (64)	No. of facilities
1	Ayeyarwady	Myaungmya		79
2	Ayeyarwady	Kangyidaunt		44
3	Ayeyarwady	Kyonpyaw		47
4	Ayeyarwady	Thabaung		69
5	Ayeyarwady	Kyaunggon		48
6	Ayeyarwady		Bogale	78
7	Ayeyarwady		Danubyu	40
8	Ayeyarwady		Dedaye	63
9	Ayeyarwady		Einme	42
10	Ayeyarwady		Hinthada	58
11	Ayeyarwady		Ingapu	64
12	Ayeyarwady		Kyaiklat	43
13	Ayeyarwady		Kyangin	25
14	Ayeyarwady		Labutta	92
15	Ayeyarwady		Lemyethna	30
16	Ayeyarwady		Maubin	89
17	Ayeyarwady		Mawlamyinegyun	90
18	Ayeyarwady		Myanaung	55
19	Ayeyarwady		Ngapudaw	107
20	Ayeyarwady		Nyaungdon	52
21	Ayeyarwady		Pantanaw	59
22	Ayeyarwady		Pathein	56
23	Ayeyarwady		Pyapon	74
24	Ayeyarwady		Wakema	62
25	Ayeyarwady		Yegyi	50
26	Ayeyarwady		Zalun	42
27	Bago	Bago		56
28	Bago	Daik-U		43
29	Bago	Thanatpin		36
30	Bago	Kawa		52
31	Bago	Nyaunglebin		45
32	Bago		Gyobingauk	29
33	Bago		Htantabin	30
34	Bago		Kyaukkyi	22
35	Bago		Kyauktaga	58
36	Bago		Letpadan	38
37	Bago		Minhla (Bago)	33
38	Bago		Monyo	35
39	Bago		Nattalin	44
40	Bago		Okpho	42
41	Bago		Oktwin	29

	Region	Pilot townships (15)	Roll-out townships (64)	No. of facilities
42	Bago		Padaung	32
43	Bago		Paukhkaung	46
44	Bago		Paungde	36
45	Bago		Phyu	51
46	Bago		Pyay	39
47	Bago		Shwedaung	43
48	Bago		Shwegyin	23
49	Bago		Taungoo	39
50	Bago		Thayarwady	39
51	Bago		Thegon	32
52	Bago		Waw	49
53	Bago		Yedashe	41
54	Bago		Zigon	18
55	Magway	Minbu		45
56	Magway	Yenangyaung		47
57	Magway	Natmauk		51
58	Magway	Minhla (Magway)		34
59	Magway	Magway		65
60	Magway		Aunglan	53
61	Magway		Chauk	53
62	Magway		Gangaw	45
63	Magway		Kamma	28
64	Magway		Mindon	37
65	Magway		Myaing	53
66	Magway		Myothit	43
67	Magway		Ngape	24
68	Magway		Pakokku	48
69	Magway		Pauk	53
70	Magway		Pwintbyu	36
71	Magway		Salin	61
72	Magway		Saw	48
73	Magway		Seikphyu	28
74	Magway		Sidoktaya	31
75	Magway		Sinbaungwe	37
76	Magway		Taungdwingyi	49
77	Magway		Thayet	33
78	Magway		Tilin	32
79	Magway		Yesagyo	60
				3732

Annex B: Detailed evaluation results

Review completeness of reporting in mSupply

Table 1. Number of LMIS reports per township and region

#	Region	Township	No. of sanctioned facilities	No. of operational facilities	Dec-16		Jan-17	
					No. of LMIS reports	Reporting %	No. of LMIS reports	Reporting %
1	Ayeyarwady	Kangyidaunt	44	42	42	100.0%	42	100.0%
2	Ayeyarwady	Kyaunggon	48	48	47	97.9%	48	100.0%
3	Ayeyarwady	Kyonpyaw	47	47	47	100.0%	47	100.0%
4	Ayeyarwady	Myanaung	55	55	54	98.2%	55	100.0%
5	Ayeyarwady	Thabaung	69	53	48	90.6%	53	100.0%
6	Bago	Bago	56	55	55	100.0%	53	96.4%
7	Bago	Daik-U	43	39	39	100.0%	38	97.4%
8	Bago	Kawa	52	51	51	100.0%	51	100.0%
9	Bago	Nyaunglebin	45	45	45	100.0%	45	100.0%
10	Bago	Thanatpin	36	36	36	100.0%	36	100.0%
11	Magway	Magway	65	65	65	100.0%	65	100.0%
12	Magway	Minbu	45	45	45	100.0%	45	100.0%
13	Magway	Minhla	34	34	34	100.0%	34	100.0%
14	Magway	Natmauk	51	51	51	100.0%	51	100.0%
15	Magway	Yenangyaung	47	47	47	100.0%	47	100.0%
	Total Facilities		737	713	706	99.0%	710	99.6%

Note: not all MOHS sanctioned facilities are operational yet (this explains the difference between 737 and 713 facilities).

Data consistency check on HFSR reports

Table 2. Data quality indicators

	Indicator	Numerator (correct data)	Denominator (total data)	Score	Remarks
1	Check correct heading info on HFSR form	280	300	93%	Good
2	Check consistency between closing and opening balance	2008	2098	96%	Good
3	Check if all data from paper is entered in mSupply (accurate and complete)	1490	2098	71%	Mainly caused by township data entry forgot to enter the actual reported Nr. of Days Out of Stock. This issue has been addressed during follow up CME meeting and we expect to see an improvement
4	Check if Nr. of days of stockout is properly filled in	767	1051	73%	Many Health Facilities do not report on Nr. of Days Out of Stock when they should. This issue has been and will continue to be addressed during follow up CME meeting and we expect to see an improvement

Note: regarding Indicator #4 “Nr. of Day of Stockout”, we find that most facilities are under reporting on ‘Nr. of Days of Stockout’ and also under reporting on ‘QTY Request’. We therefore suspect that the actual score will probably be significantly lower than 73%. We will need to follow up and address this issue during CME meeting and support visits to townships and health facilities.

User experience and feedback

Written feedback from township mSupply users

Thirty mSupply users (2 from each of the 15 pilot townships) provided feedback regarding the functionality of the LMIS system regarding the categories below:

A	Health Facility Stock Report	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The list of commodities on the HFSR form is relevant	0%	0%	0%	87%	13%
2	The HFSR forms received are clearly written and easy to read	0%	0%	0%	60%	40%
3	The HFSR report is a useful reporting tool for Health Facilities and Townships	0%	0%	0%	53%	47%

Additional comments:

- HFSR report is very useful for Logistics management of commodities.
- Some items distributed to RHC/Sub-RHC are not included in preprinted HRSR, and it is good if they are included.
- Headings in report columns should be printed in Bilingual (Myanmar and English).
- HFSR book is not good enough in quality because remaining paper get loose when the finished reports are taken out. Carbon less quality is not good enough.
- Please extend the commodity list for the item currently not included.
- Take out un-useful items and add useful items in the commodity list.

- Would like to get HFSR forms for all health facilities continuously in the future.

B	Computer hardware	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The computer hardware provided by RSCS is working all the time	0%	0%	0%	33%	67%
2	The UPS back up power supply is working well	0%	0%	0%	50%	50%
3	The computer equipment is easy to use	0%	0%	0%	53%	47%

Additional comments:

- Need a table for computer and its accessories.
- All in one PC system is very good.
- Easy to use.
- No problem in using.
- Computer hardware is good. There is a problem with electricity (power supply) in our township.
- The hardware is good and supportive in working.
- Recommend timely replacement of hardware when existing ones get problem.
- All OK.
- Hardware is OK in our township.
- Good.
- Computer hardware and accessories are good.

C	Data entry process	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The mSupply Software is easy to understand and use	0%	0%	0%	73%	27%
2	The data entry process from paper form to mSupply system is easy	0%	0%	0%	63%	37%
3	There is enough time to enter all HFSR data in mSupply system	0%	0%	7%	53%	40%

Additional comments:

- It is easy to enter the HFSR data into mSupply system.
- There are some delays in data entry because we have other office tasks.
- It is easy to enter the data.
- Reports submitted sometimes include the data in wrong item line (wrong alignment between upper roll and lower roll).
- Some item names are not included in the original preprinted report form.
- No problem with time for data entry.
- Normally we have enough time for data entry. However, if it is late if we have to correct wrong data reported by health facilities.
- We have enough time.
- Good.
- Data entry process is simple and useful.
- Data Entry is OK.

D	Data upload process	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The data upload procedure is easy to understand and use	0%	0%	0%	67%	33%
2	The data upload process works well	0%	0%	0%	63%	37%
3	The USB modem provided by RSCS works well	0%	0%	0%	57%	43%
4	The WIFI prepay card provided by RSCS is sufficient to access the internet	0%	0%	4%	53%	43%

Additional comments

- Sometimes the internet connection is bad and takes a long time to upload the data.
- Data upload process is OK.
- Data upload is slow in the morning. But it is quick at noon and afternoon.
- All is OK.

E	Report generation process (offline user)	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Is the report generation in mSupply easy to understand and use?	0%	0%	3%	67%	30%
2	Are the standard reports from mSupply useful for your department?	0%	0%	0%	63%	37%
3	Do the standard reports from mSupply meet your expectation?	0%	0%	6%	47%	47%
4	Please mark the report that you have used or generated from mSupply up to now					
Type of report				Total users	Total used	%
- Number of LMIS Reports per Facility and Type				30	29	97%
- LMIS Reports Submission and Processing time per Facility				30	23	77%
- Stock Status Report per Facility				30	25	83%
- Stock Status Report per Township				30	30	100%
- Consumption Report per Facility				30	24	80%
- Consumption Report per Township				30	26	87%
- Item Status Report per Facility				30	23	77%

Additional comments

- It would be better if the standard report titles are able to be understood by Sub Center level.
- Very good
- Good
- Reports can provide information about Stock Balances in the township.
- It's OK.

5 Is there another report that you would like to add to the standard reports:

- Recommend the report for commodity received by individual health facility.
- It will be better if separate report can be generated for received commodities.
- Expired Date Report

F	General use and support	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The mSupply system will help improve the availability of health commodities	0%	0%	3%	50%	47%
2	It easy to communicate with RSCS team for technical support or questions	0%	0%	4%	43%	53%
3	The training and support from RSCS team is sufficient	0%	0%	3%	60%	37%
4	I feel confident using the mSupply software	0%	0%	0%	67%	33%
5	I would recommend other townships to use the mSupply system	0%	0%	3%	37%	60%
		very bad	bad	neutral	good	very good
6	What is your overall rating of the usefulness of the LMIS system	0%	0%	0%	77%	23%

Additional comments

- It would be very helpful for "Tender Procurement" if all townships are using the system. It will also help the re-allocation of stocks between townships.
- I recommend the system for other townships because it is very useful for stock management at township level.
- It helps to consume the commodities before expiry.
- mSupply collects accurate data and very easy to use. The data can be uploaded with mobile internet connection.
- I want other townships to have the same aggregation tool which helps us to collect and review the data very easily and quickly.
- Can review stock on hand and months of stock data by facility.
- Can calculate the commodity needed for the whole year.
- Can transfer/reallocate the commodities between facilities.
- By entering the LMIS data into the system, township, regional and central levels can forecast and quantify for procurement. It can also provide data/information to prevent stock-out and wastage of commodities.
- Timely Information will be available if the system is implemented in all townships.
- It is time saving to send reports to higher levels because the hard copies of reports will be sent via postal service which is time consuming.
- Accurate and timely information reduces the wastage, damage, loss and stockout.
- Multiple Stock Ledger Book system is stopped and integrated Stock Ledger Book (only one-book) system is started.
- LMIS system can provide Township and Regional level with the information of health commodities at all basic health facilities.
- Reduce Stockout and Stock Excess
- Other townships need to do the same system.
- Using database enhance the supply chain activities. Township focal person can know strength and weakness easily.
- Using mSupply system is easy, time saving and accurate.
- We can know the consumption data of different health facilities in our township in a short time. It is supportive to prepare Stock Balances and Forecasting of health commodities.
- All necessary materials for mSupply system are provided and this make time saving. It is good we can generate and analyze the reports in a short time if we have the technical skill.
- mSupply software is easy to use and it should also be used by other townships.

- We can know the monthly requirement of commodities by RHCs SHUs and Sub-RHCs. We can also know that they have Stockout situation (or) not, Stock Excess (or) not and Stock security.
- mSupply system gives the opportunity to monitor Stockout and Stock Excess of RHCs/Sub-RHCs and effective use of health commodities.
- I recommend to use mSupply system in other townships because we can easily know stock status of health commodities, do forecasting, have better distribution, reduce wastage of commodities.
- mSupply can provide reports quickly and those reports can be reviewed anytime.
- If mSupply system is used in all townships, they can know Stock Balances, make forecasting for request, and reduce Stockout and Wastage.

G What do you like about the mSupply LMIS system?

- Satisfied
- The LMIS system saves time and energy as I can easily review the monthly stock reports very easily and quickly in the system. I also think it is a suitable system for MOHS as it can provide all necessary information in one click.
- Auto-populating of previous closing balance as current month opening balance, auto calculation of consumption based on entered receipt, adjustments and closing balance.
- Getting accurate received, consumed and stock on hand data. Timely reporting for LMIS information.
- Item Status Report per Facility
- Highlighting with red color for mismatch between previous closing balance and current opening balance, very easy to review entered data.
- Reporting generation and printing based on user preference and it is easy to adjust.
- Report generating without internet connection.
- Accurate data/information and warning system for inaccurate data.
- Providing accurate stock on hand, consumed quantity
- It is good as the system can be used offline.
- Opportunity to know Stock Balances.
- Opportunity to see reports of the entire township.
- Opportunity to see reports of individual health facility (RHC/Sub-RHC).
- Opportunity to see the status of individual item.
- Data entry, storage and uploading procedure is quick and good.
- Can provide information we would like to know.
- Offline data entry, user friendliness, ability to know consumption and stock status of health facilities, ability to manage stockout and excess across the health facilities.
- Opportunity to monitor consumption and stock balance of health commodities
- All OK.
- Ability to use offline. User friendliness of mSupply.
- I like the system because data from HFSRs of RHCs/Sub-RHCs can be easily entered into the mSupply system and the system can make automatic aggregation and calculations.
- It is not time consuming.
- Easiness for data entry and printing the reports.
- mSupply LMIS system is simple and useful for health commodity information.
- Stock information can be easily computer online system and necessary adjustment can be made.
- I am pleased with mSupply system. Data are useful.
- It is time saving and accurate for health commodity management.
- Excess stock from one health facility can be shared with the other as Stock level of all health facilities is seen.
- Data is stored in local computer.

- Stock Status Report per Facility and Township. Consumption Report per Facility and Township.

H What do you NOT like about the mSupply LMIS system?

- Working very well.
- If the finalized data is wrong, it is not easy to change.
- Amount of expired drugs are not clearly identified in the reports.
- Unable to report expired drugs in HFSR.
- It will be better if the reporting frequency is changed from monthly to quarterly.
- System is a little bit slow in the initial using.
- Slow at the start of the system.
- Unable to change finalized files.
- Worry about internet strength as data are uploaded to the server.

I Other comments, feedback or suggestions

- It would be better if the system could cover for Department of Medical Services including station Hospitals.
- Working well.
- A new column should be included to report expired drugs.
- The system can reduce waste of health commodities.
- Only required items and amount can be reported.
- Do not need to use multiple Stock Books.
- It will be a better reporting system if the expired commodities and amount can be reported in separate column.
- RHC/Sub-RHC should be provided with necessary equipment and the system should be done even at that level.
- Item list in HFSR form should be extended more than 205 items.
- mSupply can facilitate necessary management based on timely data of quantity received, consumed and balance. Therefore, mSupply system should be rolled out to other townships.
- We have some items that are not included in 205 item list of HFSR. So it should be considered as necessary.
- mSupply system should be improved to enter data for quantity request. Now it cannot be entered and quantity request does not appear if the item does not have opening balance.
- It is good if the system can facilitate the items that are not included in 205 item list of HFSR.
- LMIS multiplier training should be organized for Basic Health Staff of the townships.
- LMIS system should be used long term. Support should be sustained. Keep in touch with township people monthly or regularly.
- Quick replacement when the computer hardware is in problem.
- What is the future of the system after end of RSCS project?
- It will be better if the commodities supplied by the department are the same with the commodity list in HFSR. For example- the department supplied Furamin BC while the report form includes Ferrous Sulphate/Folic Acid.
- It should be implemented in all townships as the system is user friendly.
- The system is useful for other townships and should be used in all 28 townships of Bago region.
- As MPT internet service is not good in Thanatpin Township and recommend to change to Ooredoo mobile sim card.
- Recommend to include expiry date. Recommend to implement in Department of Medical Services as well.

- Data entry process is OK and the system should be sustained in the future.
- Hope to sustain the system.

Written feedback from Regional mSupply users

Six mSupply users (2 from each of the 3 regions) provided feedback regarding the functionality of the LMS system regarding the categories below:

A	Health Facility Stock Report	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The standard list of 205 commodities is relevant for basic health centers	0%	0%	17%	50%	33%
2	The HFSR report is a useful reporting tool for Health Facilities and Townships	0%	0%	0%	17%	83%
3	It is necessary to collect all this data from all Health Facilities	0%	0%	0%	17%	83%
4	It is useful to combine data of all health commodities in one report	0%	0%	0%	17%	83%
5	Vertical program items should be combined in one standard report	0%	0%	0%	67%	33%

Additional comments

- Items should be reviewed yearly.
- Ability to know timely and accurate information about consumption, stock balance.
- New commodities should be added to standard list.

B	Computer hardware	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The computer hardware provided by RSCS is working all the time	0%	0%	0%	33%	67%
2	The UPS back up power supply is working well	0%	0%	0%	33%	67%
3	The computer equipment is easy to use	0%	0%	0%	33%	67%

Additional comments

- It is OK with computer hardware.

C	mSupply software	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The mSupply Software is easy to understand and use	0%	0%	0%	17%	83%
2	mSupply is a useful tool for LMIS data collection	0%	0%	0%	33%	67%

Additional comments

- Software system is good and useful.

D	Connection to mSupply	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The USB modem provided by RSCS works well	0%	0%	0%	33%	67%
2	The wifi prepaid card provided by RSCS is sufficient to access the internet	0%	0%	0%	33%	67%
3	It is easy to connect to the mSupply online program	0%	0%	0%	33%	67%

Additional comments

- Online system can provide timely information.

E	Report generation process (online user)	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	The report generation in mSupply is easy to understand and use	0%	0%	0%	33%	67%	
2	The standard reports from mSupply are useful for our department	0%	0%	0%	17%	83%	
3	The standard reports from mSupply meet our expectation	0%	0%	17%	0%	83%	
4	Please mark the report that you have used or generated from mSupply up to now						
	Type of report				Total users	Total used	%
	- Number of LMIS Reports per Facility and Type				6	6	100%
	- LMIS Reports Submission and Processing time per Facility				6	6	100%
	- Stock Status Report per Facility				6	6	100%
	- Stock Status Report per Township				6	6	100%
	- Consumption Report per Facility				6	6	100%
	- Consumption Report per Township				6	6	100%
	- Item Status Report per Facility				6	6	100%

Additional comments

- No comments added

F	General use and support	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The mSupply system will help improve the availability of health commodities	0%	0%	0%	17%	83%
2	It easy to communicate with RSCS team for technical support or questions	0%	0%	0%	33%	67%
3	The training and support from RSCS team is sufficient	0%	0%	17%	33%	50%
4	I feel confident using the mSupply software	0%	0%	16%	17%	67%
5	I would recommend other townships to use the mSupply system	0%	0%	0%	17%	83%
		very bad	bad	neutral	good	very good
6	What is your overall rating of the usefulness of the LMIS system	0%	0%	0%	67%	33%

Additional comments

- Stock re-allocation between townships
- By using mSupply at every township, the overview of stock status can be seen by TMO, and he/she can make adjustment for each facilities.
- It is cloud system and software is easy to use.

G What do you like about the mSupply LMIS system?

- The system provides logistic information (Consumption, stock on hand) of commodities for all townships.
- Can review stock on hand and consumption information easily and quickly.
- Timely and detail information about health commodities at the RHCs, Sub-RHCs and Townships is supportive and useful for Regional Health Department to do procurement and distribution.
- It is very helpful and relevant for eHMIS system. It is very simple to use and it can make our staff happy and satisfied.
- It is cloud system and easy to use. The reports are clear. RSCS supply team is helpful for our department.
- Easy to use.

H What do you NOT like about the mSupply LMIS system?

- It seems like there will be extra workload for township level, and it is very easy to work at regional level. But it is fine.
- It is difficult to know where to report for some commodities because the system is using Generic name for items. It can also be differed with townships based on their understanding.
- Centralized control system on edition of item list.
- Some steps are difficult for me to remember.

I Other comments, feedback or suggestions

- For future consideration, suggest covering not only for specific regions, but also for the whole country.
- Suggest to cover for the whole country

Written feedback from Central mSupply user

One mSupply user from central level provided feedback regarding the functionality of the LMS system regarding the categories below:

A	Health Facility Stock Report	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The standard list of 205 commodities is relevant for public health centers			3		
2	The HFSR report is a useful reporting tool for Health Facilities and Townships					5
3	It is useful to combine data of all health commodities in one report					5
4	Vertical program items should be combined in one standard report				4	

Additional remarks about the Health Facility Stock Report	
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B	mSupply software	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The mSupply Software is easy to understand and use				4	
2	mSupply is a useful tool for LMIS data collection				4	
Additional remarks about the mSupply Software		MOHS should be informed with the recurrent and license cost of the software to be able to plan for sustained use.				

C	Connection to mSupply	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	It is easy to connect to the mSupply online program				4	

Additional remarks about the Connection to mSupply	
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D	Report generation process (online user)	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The report generation in mSupply is easy to understand and use				4	
2	The standard reports from mSupply are useful for our department				4	
3	The standard reports from mSupply meet our expectation			3		
4	Please mark the report that you have used from mSupply up to now					
	- Number of LMIS Reports per Township	yes				
	- Number of LMIS Report per Region	yes				
	- Stock Status Report per Township	yes				
	- Stock Status Report per Region	yes				
	- Consumption Report per Township	yes				
	- Consumption Report per Region	yes				
	- Item Status Report per Township	yes				
	- Item Status Report per Region	yes				
	- Average Consumption Report Per Township	yes				
	- Average Consumption Report Per Region	yes				
5	Is there another report that you would like to add to the standard reports:	Hospital LMIS				

Additional remarks about the Report generation process	none
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E	General use and support	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The mSupply system will help improve the availability of health commodities				4	
2	It easy to communicate with RSCS team for technical support or questions			3		
3	The training and support from RSCS team is sufficient				4	
4	I feel confident using the mSupply software				4	
5	I would recommend other townships to use the mSupply system				4	
		Very bad	Bad	Neutral	Good	Very good
6	What is your overall rating of the usefulness of the LMIS system					5

F What do you like about the mSupply LMIS system?

- Easy to understand and operate. Useful for Data aggregation. Currently FOC.

G What do you NOT like about the mSupply LMIS system?

- Not well known software for pharmaceutical LMIS. Not open source software.

H Other comments, feedback or suggestions

- None

Written feedback from mSupply System Administrator

The mSupply system administrator provided feedback regarding the functionality and technical support of the LMS system regarding the categories below:

A	Health Facility Stock Report	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	It is easy to add or modify items in the master database				4	
2	It is easy to add or modify facilities in the master database				4	
3	It is easy to modify , add or delete lists of commodities				4	

Additional remarks about the Health Facility Stock Report	
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B	Computer hardware	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The computer hardware provided by RSCS is working all the time					5
2	The UPS back up power supply is working well					5

Additional remarks about the Computer Hardware	
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C	mSupply software	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The mSupply Software is easy to understand and use				4	
2	mSupply is a useful tool for LMIS data collection					5

Additional remarks about the mSupply Software	
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D	Connection to mSupply	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	The USB modem provided by RSCS works well					5
2	It is easy to connect to the mSupply online program				4	5
3	It is easy to control/restrict mSupply user access to the LMIS data				4	

Additional remarks about the Connection to mSupply	
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E	Report generation process (online user)	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	the report generation in mSupply is easy to understand and use					5
2	The speed to generate online report is user friendly			3		

Additional remarks about the Report generation process	
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F	General use and support	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I can manage the normal system operations without support from Vendor					5
2	It is easy to provide remote support to mSupply users in the Townships			3		
3	It is easy to provide remote support to mSupply users at regional and central level				4	
4	MOHS will be able to manage this system without our support				4	
5	mSupply will be able to manage LMIS data aggregations in all States and Regions					5
		Very bad	Bad	Neutral	Good	Very good
6	How do you rate the quality of support from the Vendor (Sussol)?				4	
7	What is your overall rating of the of the mSupply LMIS system?					5

F What do you like about the mSupply LMIS system?

Townships can generate reports offline and users can save the data entry as "in process" and finalize only when the entered data is correct. Users can also review the data for each facility very easily. The internet connection doesn't need to be good to send the data to the server. mSupply system can send the data to the server with the internet speed of 10KB/s. The system also creates back-up automatically and it is easy to get the data back if there is a problem with the computer.

G What do you NOT like about the mSupply LMIS system?

I think mSupply is the best LMIS aggregation tool at township level. I have nothing which I don't like with the system working at township level. But for regional and central levels, the report generation speed needs to be faster and the navigator icon (customer) should be customized to fit with Myanmar context.

H Other comments, feedback or suggestions

mSupply is now providing LMIS data/information to be used for supply chain decision making. It is also important facilities report accurate LMIS information and township staff enter the data into the system correctly. I can't say that the data now being available from the system is ready to be used but it is good to practice using these data for supply chain activities and I will also try to improve the data quality and mSupply system functionalities.

Assess availability and functionality of hardware and software

Feedback follow-up interviews at pilot townships and regional office

Follow-up visits were conducted at all 15 pilot townships offices as well as the 3 regional offices that have been provided with computer hardware and mSupply software. The question and checks are related to the functioning and use of the hardware and software as well as some general feedback from the users regarding the usefulness and user friendliness of the hardware and mSupply software

1 Desktop

Is the Desktop properly setup (connected to printer and UPS)?

Does the Data Entry Officer have easy access to the Desktop?

Yes	No	Remarks
18	0	
18	0	

2 Printer

Is the printer properly setup?

Ask the data entry officer to print out 'Number of LMIS Reports per Facility and Type' from mSupply.

Did the report print out properly?

Yes	No	Remarks
18	0	
18	0	

3 UPS Backup power supply

Is the UPS properly setup (connected to Desktop)

Switch of the main power supply and check if UPS is working properly

Did the UPS work properly (ensure that desktop did not switch off)

Yes	No	Remarks
18	0	
18	0	

4 USB Modem

Ask data entry office to use USB modem to connect to the internet and connect to the 'Google website'

Is the USB Modem working properly?

After successful completion of this step he/she can disconnect the modem

Yes	No	Remarks
18	0	(1.85Mbps / 3.4 Mbps); 7.24 Mbps/ 4.5 Mbps

6 Data Entry process

Ask data entry officer to connect to mSupply and go through the first step of the data entry process

Was the login procedure successful?

Can the data entry officer create a new 'blank' HFSR form in mSupply?

Can the data entry office fill the heading information?
(they can choose any facility for this demonstration)

Yes	No	Remarks
18	0	
15		not relevant for RHPH (regional level)
15		not relevant for RHPH (regional level)

7 Report Generating process

Ask data entry officer to generate the following report: "Consumption Data per Township, for all items" in Print Pre-View (no need to print out)

Did he/she generate the report correctly?

After successful completion of these steps they can close mSupply.

Yes	No	Remarks
18	0	

8 General Questions

1. Based on the training you received, do you have enough capacity to operate/enter the data into mSupply?

- Yes, we have enough capacity (14 x)
- Well received but need more time to be familiar.
- We have enough capacity to operate/ enter the data into mSupply. But we need training at township level for BHS to understand the mSupply system.
- No, we need more refresher training for mSupply.
- I can enter the data and generate the reports from mSupply very smoothly and I don't need any additional training for mSupply.

2. If answer to question 1 = 'No', what additional area would you like to get training on?

- Overall about mSupply.

3. Approximately, how long does it take you to enter data from Health Facility Stock Reports from all health facilities in your township for 1 month?

- 2 - 3 days
- One and half days
- 2 days if there is no system error (OR) a lot of report errors.
- Data entry can be finished within 2 days if the HFSRs of Basic Health Facilities are correct.
- Normally 2 days.
- It takes about 3 days when we need to follow up (double check) with BHSs for their data inconsistency.
- Data entry process takes about 3 days for 1 month reports.
- It depends on available time for data entry. Mostly, it takes 3 to 5 days to enter data of 1 month.
- 3 days because I am also responsible for other office tasks of Township Health Department.
- 2 days. (Data entry for one day. Check and finalize the data for one day).
- One day.
- About 4 days. If the paper forms are not correct, it takes more than 4 days depending on the errors.
- It may take about 5 days for checking, analysis and confirmation about data quality with the facilities.
- It may take about 4 days.
- If the paper forms are not correct, it might take more than 4 days.
- 3 days, Maximum 4 days

- 2 days but sometimes it needs more time (3-4 days) to check the data.

4. What are the main challenges, if any, you have experienced using mSupply?

- Human Resources (one data entry person), Over burden for staff, Electricity cut down (at that time, can't do data entry), Take time in logging into computer.
- Nothing special. According to my experience using mSupply, I find that mSupply system is helpful in forecasting of the "Tender Procurement" by giving consumption for each facility.
- Human Resources (one data entry person).
- It takes time checking paper against data entry but this increases data accuracy and now the mistakes are being reduced month by month.
- We have no experience to analyze the reports.
- Internet connection and forgets password.
- Human resources difficulties such as shortage and no longer trained staff (turnover).
- Internet connection breakdown (sometimes). Human resources difficulties and overburden (Only one person has to do all kinds of computer work).
- It is difficult to correct the data after they have been submitted to the region (i.e. finalized).
- We need more persons to be trained about mSupply data entry process. (Human resources difficulties).
- If the data in HFSR form is not correct, we need to do a phone call to BHS to know the correct data and it makes the data entry process delayed.
- Internet connection is sometimes difficult to access.
- I think most of the data reported from facilities are not accurate because they are not very familiar with the system.
- I have no challenge with mSupply system.
- We have been using mSupply for three months and there has been no challenge with the system. We sometimes need to call to health facilities to confirm the data and some facilities are in remote area without mobile network and it can delay the data entry process.
- Running out of printer ink. (Will RSCS project refill or not?). Data Entry staff and focal person for mSupply system have not received LMIS training (the former focal person who received the training has already transferred). So they have some difficulties about BHS's questions on HFSR and SLB.
- Currently OK.
- Human resource problem for long term. [Currently, data entry staff (PHS 2) is not residing at township office. Focal person is also from DOMS side and she is helping with data entry process because HR is not enough in Township Public Health office]. We prefer laptop so that we can take and work at home when we are busy with other tasks at office.
- The only issue they found is the problem with internet modem. But it is now fixed and functional.

5. Think back to the last time you had issues with mSupply, how did you address it?

- I forgot how to generate item status report per facility and referred to SOP.
- No error identified during last three months.
- Language in printer properties cannot be seen in English. We found this issue during RSCS staff visit to Kawa.
- We sometimes use Ooredoo network when MPT network is slow for internet connection.
- No issue with mSupply. (11 x)
- The internet modem did not work well last week. So we contacted RSCS Bago team and then it was fixed.
- Issue resolved with RSCS Team
- In very first time, I can't connect to internet but called to RSCS office and solved it.

6. What is your overall opinion about mSupply?

- It is very good and we can get the information by facility and by township. It is better if the system can provide the information for RHC level with all data aggregated from its SCs.
- We thought it will be challenging for us after receiving mSupply training because we are not very familiar with computers. In reality, it is very easy and smooth to use the mSupply and I also think there will be no challenge if RSCS expands to other townships. I also like to request to provide HFSR forms and Stock ledger books for LMIS reporting because we can't proceed with the system without manual paper forms.
- mSupply software makes our activities (reporting) faster and easier.
- mSupply system is very good for Townships, States and Regions.
- mSupply system should also be quickly implemented in District, Township hospitals under DOMS.
- Easy to use.
- Nothing to say at this time.
- Very useful and need to be implemented in both DOPH and DOMS.
- Nothing
- I would like to suggest implementing mSupply in remaining townships.
- Good software for data entry.
- Data entry needs to be correct. All townships under each region should discuss and agree on the items which don't need to be reported.
- If mSupply system is rolled out in other townships, supply process can be improved.
- It is good software, but we would recommend adding one extra column for expired drugs.
- mSupply is useful to get proper data if it is provided (OR) filled correctly by health facilities. mSupply should be rolled out to other townships.
- It is easy to use. We can get stock data of all health facilities and this data can be seen at anywhere (such as Township, Region and Central).
- Working with mSupply is easy for me but the processing time is so long at the start of mSupply software.
- mSupply should be continued to roll out to other townships in Magway Region.

RSCS Project / PfSCM

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