

OpenRIMS. Importing Legacy Data

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Glossary

NMRA – National Medicines Regulatory Authority – Government agency responsible for the most aspects of medical products turnover at a country level

Motivation

The legacy data is computer-readable data collected by the previous information system or manually by the MS Excel table. This data is vital for Pharmadex 2 operations, and thus should be available to the Pharmadex 2 users.

Usually, the structure, format, quality, and semantics of the legacy data do not allow the direct import to the Pharmadex 2 data structure. Nevertheless, it is possible to import the essential part of legacy data to some uniform data structure and, then, apply to it the most appropriate usage pattern.

Below is an explanation of uniform data structure, the procedure of legacy data import, and the known usage patterns.

Uniform data structure

The Pharmadex 2 manages two categories of the data –products, and sites. The products are medicines and other products under NMRA regulation responsibility. The sites are facilities under NMRA responsibility - pharmacies, warehouses, manufacturers, etc. The product data structure is standardized by HL7/FHIR. The site's data is less standardized.

Nevertheless, it is possible to represent the legacy data by such a uniform data structure:

#	Data field	Semantic	
		Product	Sites
1	Name ¹	Marketing name	Full official name
2	Alternative name ²	INN	Also known under this name or alternative name
3	Register number	The unique number in the national register	
4	Register date	Date of the national register	
5	Expiry register data	Date until this entity is valid in the national register	
6	Description	Any necessary textual data	

This data structure allows create the legacy data import feature and apply common legacy data usage patterns.

Universal Legacy Data Import Feature

Steps to execute

1. Import the legacy data to the MS Excel workbook. It is possible for any computer-readable data.
2. Run the Administrate- Data Import - Legacy Data feature and execute the import.

The MS Excel workbook

The example of the workbook is below.

	A	B	C	D	E	F	
1	Pharmacy Name English	Pharmacy Name Nepali	Registration number	reg date	exp date	Notes	1
2	KANCHAN MEDICAL AND DIAGNOSTIC CENTER P LTI	कनचन मेडिकल एण्ड डायग्नोस्टिक सेन्टर	3711213090457	01.04.2015		Kathmandu/ALLOPATHY	
3	MANABIYATA PHARMACY	मानवियता फार्मसी	3711215063850	01.04.2015		Kathmandu/ALLOPATHY	
4	OASIS MEDICAL HALL	ओएसिस मेडिकल हल	3711218061723	02.04.2015		Nawalparasi/ALLOPATHY	
5	ASTHA	अस्थ	3720217060030	31.05.2015	14.04.2018	Kathmandu/ALLOPATHY	
6	LAXMI AUSHADHI PASAL	लक्ष्मी औषधि पसल	3720218010151	01.06.2015		Kaski/ALLOPATHY	
7	LAXMI AUSHADHI PASAL	लक्ष्मी औषधि पसल	3720218011212	01.06.2015	14.04.2018	Kaski/ALLOPATHY	
8	PALPA MEDICAL STORES	पाल्पा मेडिकल स्टोर्स	3720218170906	01.06.2015		Rupandehi/ALLOPATHY	
9	PREM MEDICAL HALL	प्रेम मेडिकल हल	3720224051447	30.08.2016	07.07.2022	Dhading/ALLOPATHY	
10	BISHNU VETARINARY CENTER	विष्णु भेतेरिनरी सेन्टर	3720224052605	25.02.2021	31.01.2023	Dhading/VETERINARY	
11	ISHU PHARMACY	इशु फार्मसी	3720224053740	28.08.2016	17.06.2022	Dhading/ALLOPATHY	
12	RUPA MEDICAL HALL	रुपा मेडिकल हल	3720224092450	02.08.2021	23.09.2022	Dhading/ALLOPATHY	
13	LAXMANA AYURVEDIC AUSHADHALAYA	लक्ष्मणा आयुर्वेदिक औषधालय	3720224092953	12.12.2021	11.12.2022	Dhading/AYURVEDIC	
14	RESHUNGA MEDICAL HALL	रेसुङ्गा मेडिकल हल	3720224093710	07.06.2015		Gulmi/ALLOPATHY	
15	OHM MEDICAL HALL	ओम मेडिकल हल	3720224094106	07.06.2015		Gulmi/ALLOPATHY	
16	SHREEJANA MEDICAL HALL	सिर्जना मेडिकल हल	3720224094328	10.12.2020	10.08.2022	Gulmi/ALLOPATHY	
17	ABISHKAR MEDICAL HAL	आविस्कार मेडिकल हल	3720224095235	07.06.2015		Gulmi/ALLOPATHY	
18	MANAKAMANA MEDICAL HALL	मनकामना मेडिकल हल	3720224095426	08.10.2020	14.07.2022	Gulmi/ALLOPATHY	

Figure 1. MS Excel workbook that has been used to import Nepal specific legacy data

1. Should be filled six columns from A to F.
 - 1.1. The column headers should be.
 - 1.2. Text in a header doesn't matter

¹ <https://www.w3.org/TR/skos-reference/#prefLabel>

² <https://www.w3.org/TR/skos-reference/#altLabel>

- Columns D and E should be filled by dates. In case if a cell of these columns does not contain date, the whole row will not be imported
- The name of a sheet should be a URL of the data on this sheet. This URL intends to distinct each other categories of legacy data. In the example above - retailers from wholesalers. This URL will be used for transition application data configuration.

SaveRemoveCancel

varName
legacy
varNameExt
Additional information

Select a pharmacy from the ones registered before

Class

1
legacy

Minimal OffsetMaximal Offsetrequiredmult

00YesNo

screenposition

rowcolord

0020

Auxiliary Data

urldictUrl

pharmacies.registered.legacylegacy.pharmacies2

auxUrlreadOnlyunique

NN

The pattern for the field or file names3

name_nepali

Figure 2. An example of legacy data component configuration in a data transition application

- Component class is “legacy”
- The dictUrl configuration field contains a name of a sheet in the workbook
- The second column will be copied to a data field “name_nepali”

The Data Import form

To use the legacy data import feature you should:

- Log in as a Supervisor
- Open Administrative-Data Import-Legacy Data form
- Upload the workbook
- Press “Save” to start the data import process.

The data import process may take up to 20 minutes. Thus, after the process will be started, the on-screen form will be closed, however the data import process will be executed in the background mode by the server.

It is possible to track the execution by open or refresh the form periodically. At the end of process, the form will allow to download the list of import errors in form of MS Excel workbook.

This workbook contains the same data as an original one and a sheet that contains all records that have not been imported.

	A	B	C	D	E	F	2	G
1	KANCHAN MEDICAL AND DIAGNOSTIC	कन्चन मेडिकल एण्ड डायग्नोस्टिक सेन्टर प्रा	3711213090457	01.04.2015		Kathmandu/ALLOPATHY	legacy.pharmacies	
2	MANABIYATA PHARMACY	मानवियता फार्मसी	3711215063850	01.04.2015		Kathmandu/ALLOPATHY	legacy.pharmacies	
3	OASIS MEDICAL HALL	ओएसिस मेडिकल हल	3711218061723	02.04.2015		Nawalparasi/ALLOPATHY	legacy.pharmacies	
4	LAXMI AUSHADHI PASAL	लक्ष्मी औषधि पसल	3720218010151	01.06.2015		Kaski/ALLOPATHY	legacy.pharmacies	
5	PALPA MEDICAL STORES	पाल्पा मेडिकल स्टोर्स	3720218170906	01.06.2015		Rupandehi/ALLOPATHY	legacy.pharmacies	
6	RESHUNGA MEDICAL HALL	रेसुङ्गा मेडिकल हल	3720224093710	07.06.2015		Gulmi/ALLOPATHY	legacy.pharmacies	
7	OHM MEDICAL HALL	ओम मेडिकल हल	3720224094106	07.06.2015		Gulmi/ALLOPATHY	legacy.pharmacies	
8	ABISHKAR MEDICAL HAL	आविष्कार मेडिकल हल	3720224095235	07.06.2015		Gulmi/ALLOPATHY	legacy.pharmacies	
9	RUDRADEVI MEDICAL HALL	रुद्रदेवि मेडिकल हल	3720224095608	07.06.2015		Gulmi/ALLOPATHY	legacy.pharmacies	
10	DINESH SHIVA PHARMACY	दिनेश शिव फार्मसी	3720224095831	07.06.2015		Gulmi/ALLOPATHY	legacy.pharmacies	
11	SHUVA VET PHARMA	शुभ भेट फार्मा	3720224105328	07.06.2015		Sindhuli/VETERINARY	legacy.pharmacies	
12	SAIMAN AUSHADHI PASAL	साईमन औषधी पसल	3720224111110	07.06.2015		Sindhuli/ALLOPATHY	legacy.pharmacies	
13	KISAN VET CENTRE	किसान भेट सेन्टर	3720224112427	07.06.2015		Sindhuli/ALLOPATHY	legacy.pharmacies	
14	JOSHI MEDICAL HALL	जोशी मेडिकल हल	3720225042640	08.06.2015		Kavrepalanchowk/ALLOPATHY	legacy.pharmacies	
15	KRISHANT MERI STORE	कृशान्त मेरी स्टोर	3720225043015	08.06.2015		Kavrepalanchowk/ALLOPATHY	legacy.pharmacies	
16	JOTI MEDICAL HALL	ज्योती मेडिकल हल	3720225045635	08.06.2015		Nuwakot/ALLOPATHY	legacy.pharmacies	
17	SURYA AUSHADHI PASAL	सुर्य औषधि पसल	3720225050205	08.06.2015		Nuwakot/ALLOPATHY	legacy.pharmacies	
18	PRATIVA MEDICAL HALL	प्रतिभा मेडिकल हल	3720225051108	08.06.2015		Nuwakot/ALLOPATHY	legacy.pharmacies	

Figure 3 An example of import errors

Legacy data usage use cases

Common

For the legacy system data of medicinal products, the following approach is recommended:

1. Collecting the data in MS Excel workbook
2. Importing the collected data into the tree legacy.system.medicines
3. Use the importing data as an additional data source for the Marketing Authorized Medicines Register, limited by the Registration Expiration

For the first registration renewal, it will be a good idea to use the Certification Application, because of the necessity to collect additional data. To simplify the Registrar job, the “legacy” component should be in the common Certification Application form. The filling data in this component should not be mandatory required. A Moderator of the workflow will see if it is an existing or new registration and, thus can decide on the following activities.

The approach above is strongly recommended to import data from the simple Regulatory Information systems based on MS Excel, MS Access, or similar.

Paper-Based Legacy Systems

Sometimes, the regulatory information exists only in a paper. The recommended way is the usage of the current implementation described above. Collecting data into MS Excel Workbook from paper-based registers will require effort. However, these efforts seem minimal compared to any other approach.

If it is possible to collect electronic copies of paper certificates easily, these certificates may be placed in a common file exchange service. The links to them can be added to the “description” field.

As described above, the usage of the Certification Application for the first registration renewal will be necessary, because of the necessity to collect additional data.

Advanced legacy systems

A Regulatory Authority may require more data from the legacy system. The recommended approach is:

1. Importing the legacy data using the current implementation
2. Using the legacy system database as an additional data source for electronic registers, limited by the Registration Expiration

The direct data import is not realistic for now, thus implementation of it is strongly unrecommended.