

Proprietary

Alcimed

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USER GUIDE eMAP



Introduction

eMAP is a new web-based solution which replaces two older solutions, eVAL and MAP, used by the Market Access and Policy Country and Regional MER and CER colleagues, as well as by the Global Teams.

As its preceding solutions, eMAP stores public information about most of the National Immunization Programs from Europe, with the purpose of providing a quick, one-stop shop access to user-defined filtered information, used for guiding strategic business analysis and decisions for Vaccines franchise.

The information is being provided by designated country Points of Contact from Market Access or Policy teams.

eMAP is accessible to all MSD employees through web navigators* for viewing the information. A username and a password, allocated by the eMAP administrator, are required to edit the information, with different levels of access privileges: Admin (Edit all), Super-users (Country Points of Contact can edit only own country data)

Features

A) Landing page

The landing page consist of an interactive **map view** with filtering options.



Landing page content and features:

1. **Hovering over a country** provides access to generic information about it, such as population and healthcare expenditures. Clicking on a country opens a new page called "**Country Card**". This mode is accessible also by clicking on "**Country Cards**" button on the right-side panel (see Chapter A, point 4)



2. Clicking on "**Filters**" button on the upper left corner of the screen, provides access to a **Filtering Panel**, containing five main categories of filters (Program information, cohort details, recommendation details, public funding and delivery framework). Each category can be expanded to display filtering options. Applied filters are cumulative and will highlight the corresponding countries on the **Map View** and provide vaccination programs details in the **Table View**.

- a) Program information: Country Name, **Disease**, Country Population
- b) Cohort details: Age Range (sliding bar), Gender (drop-down list), Cohort Type (drop-down list), Risk Factors (search by key words)
- c) Recommendation details: **Vaccines names** (drop-down list), Number of doses (drop-down list), Ongoing recommendation (drop-down list), HTA decision (drop-down list), Recommendation body (drop-down list), Type of recommendation (drop-down list)
- d) Public Funding: **Public funded** (drop-down list), Public Funding source (drop-down list), Funding Level (sliding bar)

- e) Delivery framework: Point of Vaccination (multiple-choice drop-down list), Procurement Type (drop-down list)

Filters can be cleared by clicking on “Clear Filters” button on the top of the Filtering Panel.

- 3. A toggle button, on the upper right corner, allows switching from the Map View to a Table View, containing all vaccination programs** data (see details in chapter B), and back.

Program Information			Cohort Details				Program Details				References
ID	Country	Disease	Age Start	Age End	Gender	Type of Cohort	Vaccines Recommended	Public Funded	Public Funding Source	Procurement Type	Last update
101	Belgium	Diphtheria tetanus, pert	0	2	All	Primary	Hexyon	Yes	Regional Payer	Regional tender	Last updated by fanu... More
102	Belgium	Diphtheria tetanus, pert	0	2	All	Primary	Vaxelis	No		Out-of-Pocket	Last updated by fanu... More
103	Belgium	Diphtheria tetanus, pert	0	2	All	Primary	Vaxelis	Yes	Regional Payer	Regional tender	Last updated by fanu... More
104	Belgium	Diphtheria tetanus, pert	0	2	All	Primary	Hexyon	No		Out-of-Pocket	Last updated by fanu... More
105	Belgium	Diphtheria tetanus, pert	5	6	All	Booster	dTap-IPV	Yes	Regional Payer	Regional tender	Last updated by fanu... More
106	Belgium	Diphtheria tetanus, pert	15	16	All	Booster	dTap	Yes	Regional Payer	Regional tender	Last updated by fanu... More
107	Belgium	Diphtheria tetanus, pert	13	nan	All	Booster	dTap	Yes	National Payer	National reimbursement	Last updated by fanu... More
108	Belgium	Diphtheria tetanus, pert	13	nan	All	Booster	dTap	Yes	Regional Payer	Regional tender	Last updated by fanu... More
109	Belgium	Diphtheria tetanus, pert	13	nan	All	Booster	dTap	No		Out-of-Pocket	Last updated by fanu... More
110	Belgium	Diphtheria tetanus, pert	0	nan	Females	At-risk	dTap	Yes	Regional Payer	Regional tender	Last updated by fanu... More

- 4. Clicking on “Country Cards” button opens a new page called "Country Card". This mode is accessible also by clicking on any green** country in the map.

Country cards content:

- a) An overview of the country's healthcare systems and vaccination policies

[Back to the map](#)

- Overview
- Vaccine Calendars
- Access Archetype
- Best Practices

France

Select countries for comparison...

France

The healthcare system in France is decentralized and based on a universal health insurance system, funded through contributions from employees, employers, and the government. The government is responsible for overall regulation and supervises the French health insurance funds, while regional authorities manage and fund healthcare facilities and services.

Healthcare services are highly accessible and are largely provided by private medical practitioners and hospitals. Patients are free to choose their primary care physician.

France's vaccination system is one of the most comprehensive in the world, offering vaccines free of charge to all residents. Certain vaccines, such as those for children under 2 years old, are mandatory, while other vaccines are recommended across the life course for a variety of vaccine-preventable diseases.

Vaccines are administered by healthcare professionals, including doctors, nurses, and pharmacists, in various settings such as hospitals, clinics, community health centers, schools, and pharmacies.

Healthcare Expenditure Per Capita: 3807.0 €

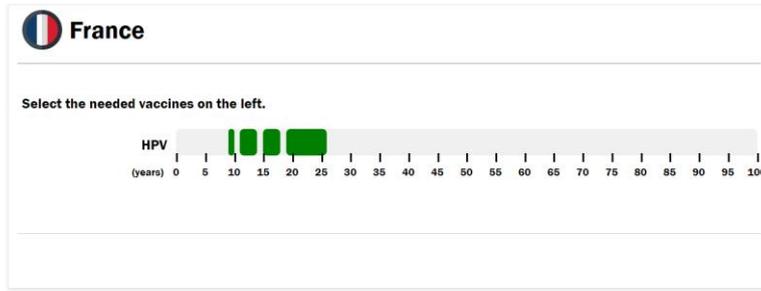
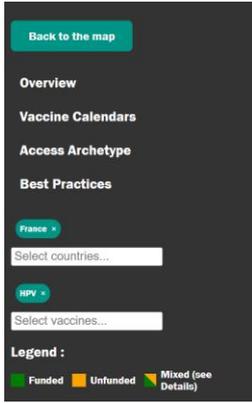
Total Healthcare Expenditure: 281,065 billions €

Healthcare Expenditure (% GDP): 0.122 %

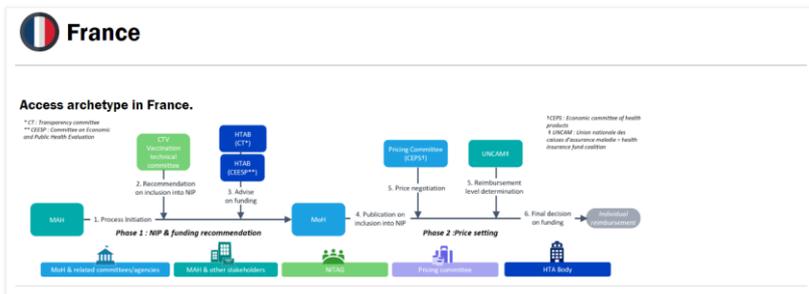
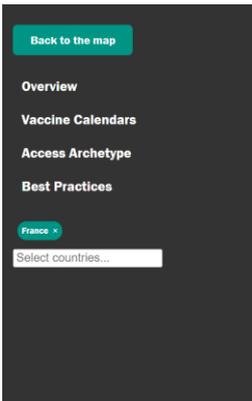
Preventive Healthcare Expenditure: 5119 millions €

Immunization Budget: Immunization funding per capita: 9,72€;
Proportion of healthcare budget dedicated to immunization budget or expenditure: 0,32%

- b) Vaccine calendars, allowing for comparison of different diseases and countries, with a high level indication of funding (for details related to funding, access the Filtering panel on the landing page):



c) Access archetype, describing countries' access pathways for vaccines:



d) Best practices, describing initiatives, access or policy measures which are considered examples of interventions driving public health outcomes through immunization. Users can submit use cases using “Submit Best Practice” button, which will be reviewed and approved by the system administrator.

5. By clicking on “Contact us” button, a **contact form** is available to send inquiries to the tool admin
6. “User guide” button will provide access to the current User Guide document

B) Table view

In table view, users will find the raw data on which the tool is based. This is also where updates can be made to specific data or entire programs.

1. A **toggle** allows user to switch between a **Minimal view** of the main information and a **complete view**, with full database details.

ID	Country	Region	Disease	Age Start	Age End	Gender	Type of Cohort	Geographical Distribution	Risk Factors	Size of Cohort	Point of Vaccination	Immunization Recommendation Body	Rec
379	France	EU 5	HPV	11	14	All	Primary cohort	National		1	GP, Pharmacy	MoH	
380	France	EU 5	HPV	15	18	All	Catch-up	National		1	GP, Pharmacy	MoH	
381	France	EU 5	HPV	19	26	Males	At-risk	National	MSM	1	GP, Pharmacy	MoH	
382	France	EU 5	HPV	9	10	All	At-risk	National	Children candidates for More	1	GP, Pharmacy	MoH	
383	France	EU 5	Pneumococcal Disease	0	1	All	Primary cohort	National		1	GP, Pharmacy	MoH	
384	France	EU 5	Pneumococcal Disease	0	0	All	Catch-up	National		1	GP, Pharmacy	MoH	
385	France	EU 5	Pneumococcal Disease	1	0	All	Catch-up	National		1	GP, Pharmacy	MoH	
386	France	EU 5	Pneumococcal Disease	0	0	All	At-risk	National	Prematured children	1		MoH	

Minimal View Export to Excel

2. For all users, **right-clicking on any data** will allow them to flag a mistake and send an inquiry to the tool Admin with an enclosed comment.

General			Cohort Details				Immunization Recommendation Body		Val
ID	Country	Disease	Age Start	Age End	Gender	Type of Cohort	Immunization Recommendation Body	Val	
721	Norway	HPV	12	13	All	Primary cohort	Public Health Institution	G9	
800	Poland	HPV	11					G4	
801	Poland	HPV	13					G4	
813	Poland	HPV	15					G4	
814	Poland	HPV	18					G4	

Flag a mistake
Describe the mistake...
Submit Mistake

3. **Hovering over the table header** will display definitions of the respective field:

Program Information			Cohort Details				Program Details				References
ID	Country	Disease	Age Start	Age End	Gender	Type of Cohort	Vaccines Recommended	Public Funded	Public Funding Source	Procurement Type	Last update
0	Albania	Pneumococcal Disease	0	1	All	Primary				National tender	By s_sulente on the 3... More
1	Albania	Pneumococcal Disease	64	100	All	Age-based				Out-of-Pocket	By farut_morosan on... More
30	Austria	Pneumococcal Disease	0	1	All	Primary				National tender	By farut_morosan on... More
31	Austria	Pneumococcal Disease	0	2	All	Catch-up				National tender	By farut_morosan on... More
45	Austria	Human papillomavirus (HPV)	9	11	All	Primary	G9	Yes	National Payer	National tender	By farut_morosan on... More
46	Austria	Human papillomavirus (HPV)	12	17	All	Catch-up	G9	Yes	National Payer	National tender	By farut_morosan on... More
47	Austria	Human papillomavirus (HPV)	18	21	All	Catch-up	G9	Yes	National Payer	National reimbursement	By farut_morosan on... More
48	Austria	Human papillomavirus (HPV)	22	27	All	Catch-up	G9	No		Out-of-Pocket	By farut_morosan on... More
49	Austria	Human papillomavirus (HPV)	27	45	All	Catch-up	G9	No		Out-of-Pocket	By farut_morosan on... More
50	Austria	Human papillomavirus (HPV)	18	45	Females	At-risk	G9	Yes	National Payer	National reimbursement	By farut_morosan on... More

Complete View Export to Excel

4. **“Edit Table”** button enable access to Super-User mode
5. **“Exported to Excel!”** button: an Excel file will be generated with the data displayed corresponding to the current filtering options

C) Super-User mode

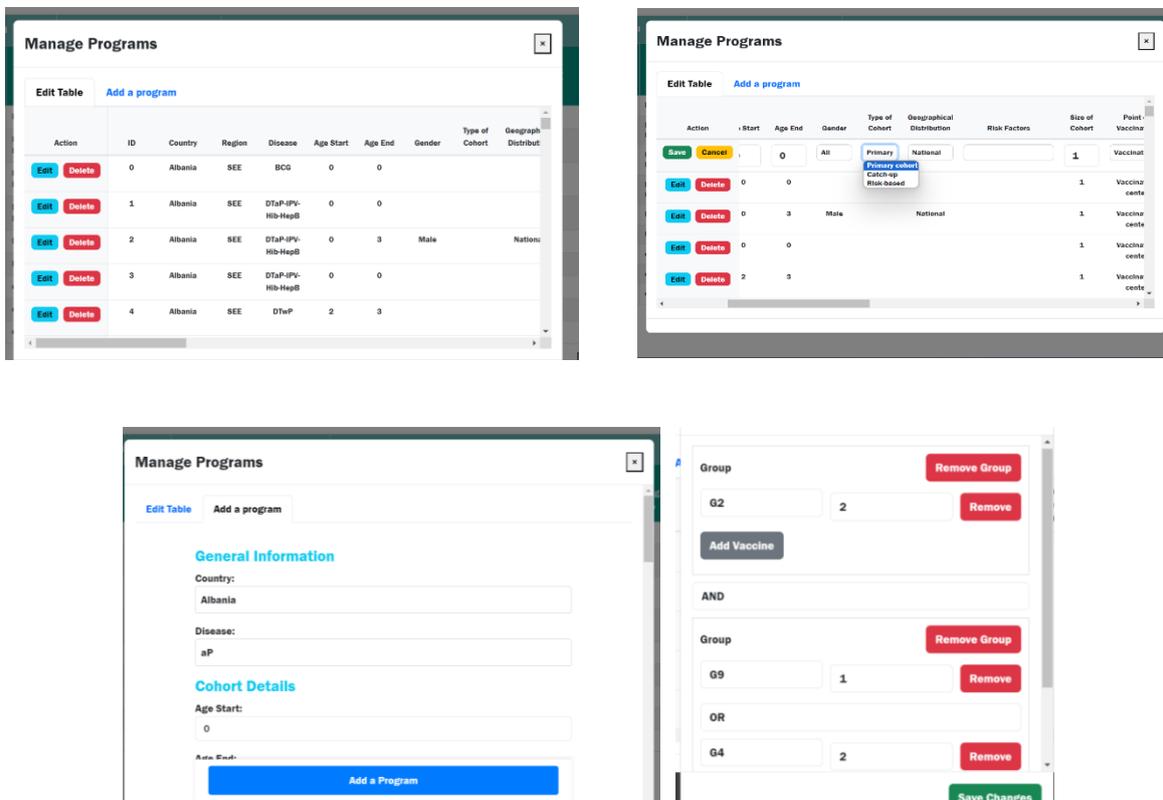
The interface for data editing is accessible to Super-Users only, by clicking the **“Superuser interface”** button.

Access credentials (username - under the form of the MSD email address - and password) are requested.

The initial password will be communicated by the Admin. The Super User will be prompted to change the initial password at first login.

Super-users can **edit, add, or delete** a program by toggling to the **Table view** and then by clicking on the **“Edit Table”** button.

They are responsible for the quality and accuracy of the input data. Each modification is tracked and requires approval from the tool Admin before being updated into the main table.



When a modification is approved or rejected by the tool Admin, the super-user receives a notification visible in the bell icon on the homepage.

Minimum data fields required when **adding a new program** appear marked in red when attempting to save incomplete information.

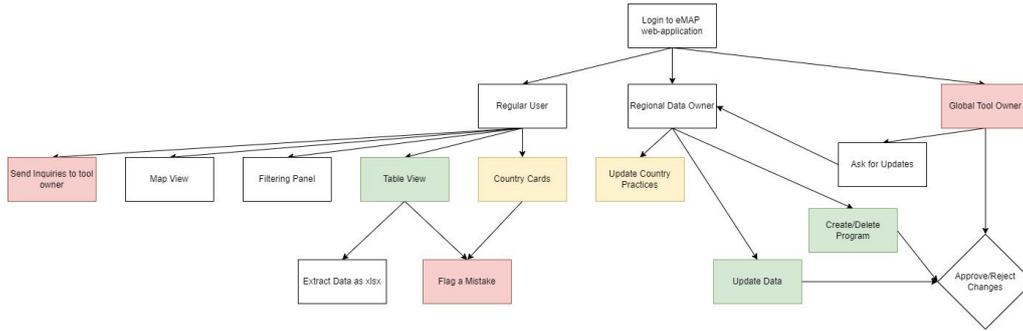
It is the responsibility of the super-user to regularly update the country’s best practices on the country card page.

D) Admin mode

The Admin has overall responsibility for the dataset on which the tool is based. They have full rights to the data and are responsible for approving or rejecting any changes made by a super-user.

Additionally, the Admin is responsible for regularly saving the data table by exporting it to Excel once

every six months.



System diagram

On the home page, the tool Admin receives notifications. By clicking on the details, they are directed to a backdoor administration page where it is possible to approve, disapprove, save, or delete any inquiry.



Site administration

AUTHENTICATION AND AUTHORIZATION

- Groups + Add Change
- Users + Add Change

MSD

- Contact messages + Add Change
- Mistake reports Change
- Pending additions + Add Change
- Pending best practices + Add Change
- Pending changes + Add Change
- Pending deletions + Add Change

Recent actions

My actions

- ✗ Addition by pbrussart on 2024-07-15 Pending addition
- ✗ Addition by guest1 on 2024-07-21 Pending addition
- ✗ Addition by guest1 on 2024-07-22 Pending addition
- ✗ Addition by guest1 on 2024-07-23 Pending addition
- ✗ Addition by guest1 on 2024-07-23 Pending addition
- ✗ Addition by guest1 on 2024-07-23 Pending addition
- ✗ Addition by guest1 on 2024-07-23 Pending addition
- ✗ Addition by guest1 on 2024-07-24 Pending addition

AUTHENTICATION AND AUTHORIZATION

- Groups + Add
- Users + Add

MSD

- Contact messages + Add
- Mistake reports
- Pending additions + Add**
- Pending best practices + Add
- Pending changes + Add
- Pending deletions + Add

Select pending addition to change

Action: [dropdown] Go 1 of 1 selected

<input checked="" type="checkbox"/>	USER	CREATED AT	APPROVED	REJECTED
<input checked="" type="checkbox"/>	m_hultstrand	Aug. 27, 2024, 9:12 a.m.	✗	✗

1 pending addition

ADD PENDING ADDITION +

FILTER

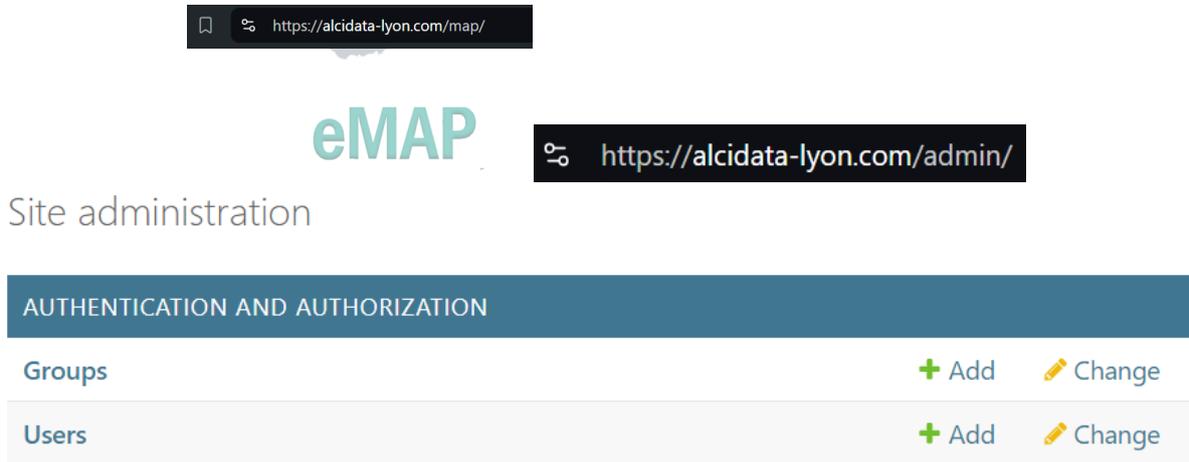
- By user
- All
 - b_sterner
 - e_dalakaki
 - f_susini_poulet
 - fanut_morosan
 - guest1
 - guest2
 - i_vasiluu
 - j_willingham
 - l_starc
 - lucija_starc
 - m_hultstrand

The tool Admin needs to regularly delete all pending modifications to remove them from the super-user notification system. Once a month is suitable, although initially, due to the initial data loading, the frequency may be higher to clear the interface.

Adding super users

The tool Admin can create new superusers on demand (possibly coming from the “Contact us” button from the homepage).

To do so, just change tool web address from **/map/** to **/admin/** and get redirected toward main side administration page where user gestion is handled.



Then simply **Add** a new user first with username and password then with regional options.

The image shows a 'Add user' form. On the left, there are three input fields: 'Username' with a note 'Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.', 'Password' with notes 'Your password can't be too similar to your other personal information.', 'Your password must contain at least 8 characters.', 'Your password can't be a commonly used password.', and 'Your password can't be entirely numeric.', and 'Password confirmation' with a note 'Enter the same password as before, for verification.'. On the right, there is a 'PROFILE' section with 'Profile: #1' and a checked box for 'Must change password'. Below that is a 'Countries:' section with a list of checkboxes for various regions: Albania - SEE, Austria - MER6, Belgium - MER6, Bulgaria - SEE, Croatia - SEE, Cyprus - MER6, Czech Republic - CEE, Denmark - Nordics, Estonia - Baltics, Finland - Nordics, France - EU 5, Germany - EU 5, Greece - MER6, Hungary - CEE, and Ireland - EU 5.

GUIDELINES & DEFINITIONS

* The Brave browser presents some incompatibilities with the tool; please try not to use

** Program: in eMAP programs are the way to describe vaccine policies. A program is a list of data including:

- **Program information:** country, disease, and population
- **Cohort details:** age, gender, type of cohort, geographical distribution, and risk factors
- **Recommendation details:** vaccines, number of doses, ongoing status, HTA decision, immunization recommendation body, type of recommendation, starting year of the recommendation, last update of the recommendation
- **Public funding:** public funded, public funding source, public funding level, ongoing funding
- **Delivery framework:** Point of vaccination, and procurement type

COHORT	A group of individuals described by age or risk factors, for which vaccination against a disease is recommended with a schedule of one or more vaccines and doses
ID	A unique identification number automatically allocated to each cohort / entry in the database
AGE START	The lowest age at which individuals are eligible to receive the first dose of a vaccine schedule
AGE END	The highest age at which individuals are eligible to receive the last dose of a vaccines schedule
PRIMARY	Routine vaccination of individuals targeted to receive a specific vaccine schedule for the first time
CATCH-UP	Vaccination of individuals who missed primary vaccination
BOOSTER	Vaccination of individuals targeted to receive additional doses of a vaccines schedule, after receiving the primary vaccination
AT-RISK	Groups of individuals with an increased likelihood of exposure or development of a disease. Typically including chronic disease
HIGH-RISK	Groups of individuals, a subset of at-risk groups, who are at a particularly high risk of severe outcomes and often require more urgent or specialized preventive measures. Typically including immunocompromise
AGE-BASED	Vaccination of individuals defined only based on age, other than Primary
GEOGRAPHICAL	The administrative-territorial public health authority issuing the recommendation
RISK FACTORS	Factors which increase the risk of developing a disease or the severity of the disease
POINT OF VACCINATION	Type of institution where the vaccine is administered
IMMUNIZATION RECOMMENDATION BODY	The type of institution which issued the vaccination recommendation
VACCINES RECOMMENDED	A vaccination schedule comprises one or more doses of vaccine, administered in a particular order and interval. Alternative vaccination schedules are available when two or more different vaccines (or combinations thereof) can be used interchangeably. Brand names are available to select for diseases for which an MSD vaccine exists (e.g. Rotarix, Rotateq), and generic vaccines names are used for the rest (e.g. dTaP-IPV)

DOSES RECOMMENDED	The number of doses of each vaccine in the recommended schedule
ONGOING RECOMMENDATION	Defines if a vaccination recommendation is current
PUBLICLY FUNDED	Reimbursement or funding from public sources (national or subnational)
HTA DECISION	Specifies whether a recommendation and/or funding was supported by an HTA typically submitted by the manufacturer of a given product
PUBLIC FUNDING SOURCE	The type of institution providing the funding of the recommended vaccination schedule
PUBLIC FUNDING LEVEL	The % of the cost of the vaccination scheme which is funded from public sources
PROCUREMENT TYPE	The predominant method for procurement of publicly funded vaccine

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