Vacancy:
Data Manager for Systematic Tracking of At-Risk Medicines (STARmeds)

Host entity   : Faculty of Pharmacy, Universitas Pancasila
Duty station   : Jakarta
Time requirement   : Five days a week (100%)
Language skills   : Indonesian and English
Start date   : 1 April 2021
Application deadline   : 22 March 2021

February 2021

Protecting society from poor quality medicines is a formidable task for national medicine regulatory authorities, especially in a resource-limited setting such as in Indonesia. Although post-market surveillance is a routine activity for medicine regulators, each country has different method in performing this task. To date, there are no globally recognised methods for estimating the prevalence of substandard and falsified medicines in a country, or for assessing their impact on health or the economy. With support from the UK government's National Institute for Health Research, the Faculty of Pharmacy at Universitas Pancasila (UP) will collaborate with Imperial College London and Erasmus School of Health Policy and Management (ESHPM) to pilot a sentinel surveillance system for medicine quality, and to develop methods for estimating the prevalence, health and economic impact of poor quality medicines.

The concept arose from earlier research into the factors that incentivise the production, trade or consumption of falsified or substandard medicines. Understanding which medicines are most likely to be of poor quality involves the collection of data from a large number of sources. Over the next three years, we plan to collect, manage, and develop a large dataset to estimate the prevalence, health and economic impact of poor quality medicines in Indonesia.

Some of the data are in the public domain, and can be scraped; others are in less useable formats such as pdfs, and require extraction. In addition, we have data use agreements in place with a number of government agencies and private suppliers. Data supplied under these agreements come in a variety of formats, not all of them standardised or well structured. We further plan to run large field surveys in a number of districts. Though we will use electronic data capture as much as possible, we anticipate that this work will generate primary data which will also need managing

and cleaning. Data from these disparate sources will have to be merged into a single database for integrated analysis. Because data will be updated over time, ingest and cleaning processes must be automated to the extent possible, and audit trails must be maintained.

To that end, we seek to engage a data manager to oversee a thorough data compilation process that include data cleaning, coding, standardization, and management to generate analysis-ready data for prevalence, health, and economic impact estimates. The data manager is required to maintain contact with the lead and team members of prevalence, health, and economic impact estimates, to manage and provide data needs for each of these working groups. The end result is to build a large standardized database from various datasets that can contribute to medicine quality assurance and improvement in Indonesia.

Scope of work

The selected candidate is expected to provide the following work:
- Ensure appropriate data access agreements and permissions are developed and in place (in coordination with assistant data manager)
- Acquire, clean, ingest and code data on an ongoing basis, maintain updated databases with clear data audit trails
- Support designs for field data collection (coordinate with IT assistant/epidemiologist)
- Map out the data fields in e-catalogue, pharmaceutical market, regulatory and other data that can be standardized and used to merge datasets
- Suggest which standard or ontology might be used in each of the mapped fields
- Plan and maintain data or cloud storage appropriate for the project, with a focus on maintaining confidentiality and access controls
- Compile and manage all quantative data from each work package
- Develop the standardized pharmaceutical database from various datasets
- Work closely with other partners with data interests (government and non-government) to support the development of a resource that, where possible, creates value for data contributors
- Facilitate "shadowing" or observation for assistant data manager to understand the basic process of data management
- Coordinate with assistant data manager, epidemiologist, health economist, and report to co principal investigators
- Provide a brief weekly report of data management progress for internal use

Qualifications

- Advanced coding a data management skills in statistical and database software packages (e.g. STATA, R, Phyton), including familiarity with management of string variables
- Experience with data scraping and other data acquisition techniques
- Familiar with Database Management Software (DBMS) architecture
- At least 3 years experience in working in the area of data management or database architechture,
- Ability to implement data security procedures and access controls; strong comittment to protecting data confidentiality.
- Familiarity with Indonesian health and welfare related data (BPJS, RisKesDas, IFLS, SUSENAS) a plus.
- Demonstrated interest in health information systems or pharmaceutical markets and experience of interaction with the stakeholders of Indonesian health system is a plus
- Interest and skills in data visualisation is a plus
- Good communication skills, a good team player, thorough, and very well organized
- Fluent in Indonesian language; a good command of spoken English is a plus.

For interested candidates, please send your CV and cover letter to: qualitymedicines_nihr@univpancasila.ac.id, cc: yn.nugrahani@ univpancasila.ac.id no later than 22 March 2021. Shortlisted candidates are required to pass an online test before the interview process.