



# USING DATA ANALYTICS TO MONITOR HEALTH PROVIDER PAYMENT SYSTEMS

*A Toolkit for Countries Working Toward Universal Health Coverage*

[www.jointlearningnetwork.org/resources/data-analytics-for-monitoring-provider-payment-toolkit](http://www.jointlearningnetwork.org/resources/data-analytics-for-monitoring-provider-payment-toolkit)

The Joint Learning Network for Universal Health Coverage (JLN) convened representatives from 13 countries in 2015 and 2016 to share experience, expertise, and challenges related to monitoring health provider payment systems. With support from a facilitation team, they collaboratively produced this toolkit, which offers step-by-step guidance on using data analytics to monitor health provider payment systems, identify trends, track whether payment systems are supporting health system objectives, and get timely information on any unintended consequences.

Achieving universal health coverage is a challenge confronting many countries. To sustain progress toward universal health coverage, governments must generate resources for expanding coverage, distribute the resources equitably, and use them efficiently to achieve the most benefit in terms of meeting health care needs, ensuring quality of care, and protecting users from financial hardship due to out-of-pocket payments.

## WHY A TOOLKIT?

Nearly every country that is working toward universal health coverage is developing or improving strategic provider payment systems. It is important to collect information about the implementation of provider payment systems. Claims data and other routine administrative data that are generated by the implementation of provider payment systems should be the main sources of this strategic information. Many countries do not use these routine data to their fullest potential, however, particularly to determine whether provider payment systems are achieving their objectives or leading to unintended consequences. These data are often underutilized because of a lack of capacity within the purchasing agency, weak or underdeveloped data systems, or fragmentation in information sources.

This toolkit seeks to address the gap in data utilization by providing guidance and tools based on practical experience to help countries implement provider payment monitoring systems that use claims and/or other routine administrative data.

## HOW WAS THE TOOLKIT DEVELOPED?

The toolkit was created through in-person and virtual discussions among participants from Ghana, India, Indonesia, Kazakhstan, Kenya, Malaysia, Mali, Moldova, Mongolia, Nigeria, the Philippines, and Vietnam. Vietnam, the Philippines, and Ghana each hosted an in-person meeting that showcased their country's efforts in implementing and monitoring provider payment systems and provided an opportunity for countries to share experience and progressively build the toolkit. JLN technical facilitators from Results for Development (R4D), PATH, and PharmAccess Foundation collected and synthesized the shared lessons and guidance and combined them with global expertise in provider payment and data analytics to produce the toolkit.

This effort was a joint activity of the JLN's Provider Payment Mechanisms (PPM) Initiative and Information Technology (IT) Initiative.

## ABOUT THE JLN

*The Joint Learning Network for Universal Health Coverage (JLN) is an innovative network of practitioners and policymakers from around the globe who collaboratively develop practical tools to help countries work toward universal health coverage. More information is available at [www.jointlearningnetwork.org](http://www.jointlearningnetwork.org).*

## PART 1

### IDENTIFYING POLICY QUESTIONS AND MONITORING INDICATORS

#### STEP 1 – IDENTIFY THE POLICY QUESTIONS



Word  
table

**Tool 1** – List of Common Objectives and Potential Unintended Consequences of Provider Payment Methods

#### STEP 2 – SELECT THE INDICATORS



Excel  
spreadsheet

**Tool 2** – Menu of Indicators



Word  
template

**Tool 3** – Indicator Scoring Template

## PART 2

### COLLECTING AND ANALYZING THE DATA

#### STEP 3 – IDENTIFY DATA SOURCES



Word  
template

**Tool 4** – Indicator Definition Template



Web  
application

**Tool 5** – Open Health Data Dictionary



Word  
template

**Tool 6** – Data Mapping Template

#### STEP 4 – MONITOR AND IMPROVE DATA QUALITY



Word  
table

**Tool 7** – Data Quality Checklist

#### STEP 5 – ANALYZE AND REPORT THE DATA



Word  
template

**Tool 8** – Reporting Requirements Template



Word  
template

**Tool 9** – Indicator Summary Template

## PART 3

### USING THE DATA FOR DECISION-MAKING

#### STEP 6 – PRODUCE THE ROUTINE MONITORING REPORT AND INTERPRET THE RESULTS



Word  
table

**Tool 10** – Sample Provider Payment Monitoring Report Outline

#### STEP 7 – ASSESS OPTIONS FOR ACTION



Word  
document

**Tool 11** – Exercises in Using Data for Decision-Making

## TOOLKIT CONTENTS

The toolkit's six-step framework includes templates, checklists, exercises, and other easy-to-use tools to help countries achieve their provider payment monitoring goals.

## THE TOOLKIT'S SEVEN-STEP FRAMEWORK



## DOWNLOAD THE TOOLKIT AT:

[www.jointlearningnetwork.org/resources/data-analytics-for-monitoring-provider-payment-toolkit](http://www.jointlearningnetwork.org/resources/data-analytics-for-monitoring-provider-payment-toolkit)