Clinical Data Requirements in Southeast Asia

A Foundational Requirement to a Rapidly Growing Industry

January, 2008

UnitedHealth International

A Foundational Requirement to a Rapidly Growing Industry

By Ori Karev

In 2010, the Asia Pacific region will be home to more than 45 percent of the world's population. The economies of this region are growing at a breathtaking rate. History has shown that as the wealth of a country increases, so, too, does the demand for medical care. Several Southeast Asian countries have sophisticated health care capabilities, but accesses to these often are available to a select few. As more people have disposable income to spend on health care, and as governments earmark additional revenues for health services, the overall demand for quality care will increase.

Many Southeast Asian countries possess significant health care assets that have great potential for development. Physician talent and supply in India is substantial; the Philippines have an exceptional supply of trained nurses; managerial talent across the region is deep and highly competent, and primary as well as tertiary hospital facilities continue to grow. And yet, some foundational processes that will ensure the long-term success of these growing health care endeavors are still lacking. Specifically, most countries in the region lack basic clinical data and the ability to analyze it. As these countries' health care systems grow, and as demand grows, they will require health care intelligence to make good decisions about care delivery, resource allocation and treatment of chronic conditions.

Robust analysis of clinical data translates into positive health outcomes. Clinical data analysis can prevent mega illnesses, improve preventive care, predict with a high level of accuracy which treatments have higher likelihood of success, reduce mortality rates and create a healthcare environment that is based on data, outcomes and best practices employed in other countries. As citizens of the global economy, we have a keen interest in making clinical data tools and analysis readily available where they are not today, to ensure the development of rational, high-quality health care systems in these countries.

Clinical analysis, predictive modeling and evidence-based medicine are all manifestations of the rising need to manage healthcare from an economic perspective. This is not to say "to reduce the cost of healthcare", but only to allocate resources in the proper direction.

What is clinical data analysis?

Clinical data analysis is the imposition of statistical analysis and measurement tools to medical events for the purpose of evaluating efficiency (the equation of resource applied and the results obtained) to be able to predict outcomes. As we look at individuals from a clinical diagnostic perspective, each one of us is likely to encounter medical challenges arising from current health conditions, wellness activities, our gene pool and our surrounding environment. Assuming we are able to categorize and catalogue such information or data from the outset, we would then have a medical or clinical profile of each person. Armed with that data, we can now begin to track various medical procedures and treatments on both macro and micro levels in connection with the person's life.

Provided we collect data in a timely, accurate and complete manner, we could then begin and routinely continue a process of obtaining successful outcomes with various clinical profiles. Assuming again that our data is comprehensive, we may be able to identify clinical behavior patterns that fit certain profiles. This ongoing process of data aggregation, analysis and utilization has a tremendous economic potential when dealing with large populations.

Why is the issue so relevant in the Asia Pacific region? First and foremost, most Asian Pacific countries do not apply basic clinical data analysis and evaluation tools to their population. What is at stake is that more people within their economies will have greater voice in demanding (or participating in) healthcare; i.e., the explosive growth of their economies will lead to explosive growth in the demand for healthcare. Consequently, Asian Pacific economies must become aware of clinical data analysis tools which can harness the vastly unknown or unpredictable impact a sharp increase in healthcare participation may have on their economies. As the pendulum of healthcare systems moves from universal participation in basic care to more sophisticated and costly private healthcare, these economies are presented with an enormous opportunity to leapfrog into the future.

What is leapfrogging?

On the continuum of healthcare systems, data collection and analysis is often perceived as the mundane chore health practitioners need to undertake. From a healthcare eco-system point of view, that data — precisely and completely aggregated — can provide economies with the comfort of intelligent predictability. Take for example a country with a population of hundreds of millions of people that can predict which illness or diseases or medical treatment would be needed by its population in years to come! Imagine now that country, after collecting and analyzing the data in a manner that can accurately draw conclusions, ascertains that its population will suffer from cardiology related diseases more than any similar country. By focusing on how to address this projected trend, it can promote health related behavior modification, education, incentivize its private sector to seek advanced degrees or establish dedicated care facilities — all designed to address the cardiology related needs of its citizens.

As you can see from this example, given the across-the-board risk in healthcare costs, countries still pondering whether to build a clinical data aggregation and analysis capabilities must instead ask themselves “how soon can we implement?”

However, before clinical data analysis can be deployed, infrastructure capabilities and attributes must be in place. These 'costs of entry' include the establishment of coding mechanisms as well as routine elective data storage and transferability. Development of a more robust infrastructure also must include the active participation of the clinical establishment (doctors, governments and third-party administrators).

In attempting to embark in such initiative a country should ask itself three questions:

1. Is this the type of activity that is suitable for public-private partnerships? (regardless if the economy is a universal healthcare coverage economy);

2. What might be the minimum infrastructure needed to make this undertaking successful?; and
3. Why it is different from simply engaging a global consulting firm?

Public – Private Partnership

The optimal condition for private-public partnership exists when the private sector helps the public sector in charting a sustainable path in a prompt and efficient manner. Because most universal healthcare systems tend to 'keep within' the management of their healthcare economy, utilizing a firm which is involved in clinical data formation, aggregation and analysis on a grand scale (both for its own account and for the public sector) can be a tremendous benefit to a country. However, to achieve success, the private firm that is selected for this partnership must also draw upon the public sector's knowledge of their country's cultural, ethnic and social knowledge.

Furthermore, only a country's public healthcare management systems or agencies have the ability to mandate that health care providers produce and distribute the kind of clinical raw data that is required to make sound public health decisions.

Minimum Infrastructure

If all countries' healthcare procedures were electronically documented pursuant to an agreed- upon standard of coding, the only missing link to begin the arduous task of categorizing and analyzing would be an Electronic Data Interface (EDI). Alas, in many countries, these basic infrastructures do not yet exist. Accordingly, a country wishing to leapfrog into the future comfort of predictable healthcare needs and expenditure must undergo a revision of its clinical data generation and workflow infrastructure to establish data that is ready for analysis.

Why a Specialized Healthcare Company is needed.

Countries that aspire to collecting and analyzing health outcome data — and improving their health care infrastructures based on the findings—cannot achieve results by simply restructuring, reorganizing or re-categorizing. This is not an exercise of organizational streamlining or anecdotal process review. For such an undertaking to succeed, a country must partner with an entity that can see the big picture, help define the deliverables, and plan the process in light of desired health outcomes (as opposed to organizational reviews and revision.) Finally, as part of such undertaking, many consultants and advisors will be engaged in providing advice to governments. However, because these undertakings require clinical know-how above any other skill set, countries should only engage those private health care partners that can demonstrate success in improving the quality and effectiveness of care on a large scale.

About the author:

Ori Karev *is the CEO of UnitedHealth International, a UnitedHealth Group company. In this capacity, he is responsible for leading UnitedHealth International's growth and advancing its position as the leading global health and Well-being Company. Under his leadership, Ori ensures that the company actively pursues its local and global potential in its various market segments: global health insurance, third-party administration, health care management consulting and global health solutions for leading benefit plan sponsors. Mr. Karev holds a BA in Political Science and Labor Studies, an MBA in Finance*

and International Marketing and a Juris Doctor degree in Law. He is a member of the legal bar of the states of New York and Connecticut.

###

For additional information, please contact:

Nancy Calderon
Marketing Consultant
UnitedHealth International
+1 860 702 6614
nancy_calderon@uhc.com