CLIVER WYMAN

HOW MUCH COULD THE WORLD SAVE THROUGH INNOVATIVE HEALTHCARE DELIVERY MODELS?

Three key innovations from forward-looking U.S. healthcare providers could cut the global medical bill by almost half a trillion dollars a year.

Over the past few years, the Health and Life Sciences practice of Oliver Wyman has spent a great deal of time helping United States (U.S.) and United Kingdom (U.K.) healthcare providers improve the quality of the care they deliver and reduce its cost. Our approach has combined a change in the way care is paid for and new care models targeted at the needs of specific patient groups. The process has achieved some startling successes, successes that naturally raise a larger question: What would happen if the most effective innovations of the best U.S. healthcare organizations were implemented throughout the world?

On its surface, the very question may seem unlikely. After all, the U.S. has the most expensive healthcare system in the world, producing mediocre results while spending double what many of its peer nations spend. At the same time, it is our experience that all mature healthcare systems, including single-payer systems, suffer from the same fundamental issues: lack of care coordination, failure to standardize medical practice, and a dearth of incentives for providers to manage costs or seek optimal outcomes. With a few exceptions such as France, which has improved care coordination through the institution of a national electronic health record system, the opportunity to reduce unnecessary spend through fundamental improvements in care delivery is just as high in non-U.S. Organization for Economic Cooperation and Development (OECD) countries as in the U.S.

And how high is that? We decided to calculate the savings, not of every care model we've worked with, but of the three that are most broadly applicable and address the most significant sources of waste and inefficiency. They are:

Advanced Primary Care: This coordinated, rationalized approach to primary care for healthy, at-risk, and early-stage chronic patients ensures that preventive care is provided consistently and efficiently and that care is coordinated across multiple settings when necessary. Primary care physicians in this model are supported heavily by nurse practitioners and physician assistants to manage large panels of relatively low acuity patients.

Intensive Outpatient Care Program (IOCP): This model focuses on patients with late-stage or multiple chronic diseases requiring significant management. IOCP uses a broad care team to ensure patients' full clinical needs are met and that navigation through the system is facilitated. Primary care physicians operating in this model have a relatively small panel



of patients and are supported by a multidisciplinary clinical team (e.g. behavioralists, nutritionists, social workers, etc.) to ensure that they can address the full set of needs of these patients.

Extensivist Model: Intended for the neediest patients, the extensivist model surrounds them with a comprehensive care team that can address the full range of medical and social issues these patients face. Separate full-service clinics are set up to serve targeted patients exclusively, and extensivist physicians – who also follow the patients to other care settings as needed – have very small panels (<250 patients) to allow deep focus.

Oliver Wyman estimates that if these three primary care clinical models were applied to the full populations of the U.S., the U.K., and the remainder of the OECD countries, the savings would be approximately \$440 billion per year at maturity, representing more than 13 percent of addressable healthcare spend, defined as the spend on the provision of medical care. (See Exhibit 1.) Applying specialty care models, or models focusing on the large amount of elective care that is unnecessary, is likely to yield even greater savings. We discuss specific methodologies below. In general, though, it was necessary to consider two factors in estimating possible savings:

- Health status and demographics: Non-U.S. OECD countries tend to perform better on health indicators than the U.S. In practice, sicker patients provide more opportunities for savings, so the youngest and healthiest populations (such as in Mexico and Turkey) provide fewer opportunities than older populations (such as in Japan and Germany).
- 2. Existing reform: Though real healthcare reform is not far advanced worldwide, there are countries that have introduced programs that are already reducing costs. We have accounted for them in our calculations.

METHODOLOGY

United States: A proprietary clinical segmentation was applied to databases containing national samples of commercial and Medicare insurance claims. This clinical segmentation divides patients into several categories, ranging from healthy, to at risk, early stage chronic, late stage chronic, and catastrophic/

EXHIBIT 1: OLIVER WYMAN OECD CARE MODEL SAVINGS SUMMARY

If these three primary care clinical models were applied to the full populations of the U.S., the U.K., and the remainder of the OECD countries, the savings would be approximately \$440 billion per year at maturity, representing more than 13 percent of addressable healthcare spend.

	ADVANCED PRIMARY CARE		INTENSIVE OUTPATIENT CARE PROGRAM (IOCP)		EXTENSIVIST				
Region	Potential savings	% of addressable healthcare spend	Potential savings	% of addressable healthcare spend	Potential savings	% of addressable healthcare spend	Total potential savings	% of addressable healthcare spend	% GDP
U.S.	\$26BN	1.50%	\$122BN	7.00%	\$105BN	6.00%	\$253BN	14.40%	1.60%
U.K.	\$2BN	1.50%	\$9BN	7.00%	\$7BN	5.60%	\$17BN	14.10%	0.60%
Other OECD countries*	\$27BN	1.90%	\$78BN	5.50%	\$65BN	4.60%	\$170BN	12.00%	0.70%

*Other OECD countries include Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, and Turkey.

Note: Addressable medical spend is defined as the spend on the provision of medical care.

Source: Oliver Wyman analysis. Source for 2011 GDP: OECD.org.

end of life, depending on the specific conditions and level of medical spend associated with each patient. Each of these segments directly corresponds to one of Oliver Wyman's primary care models. The proportions of individuals within each segment in these sample databases were assumed to represent the proportions within the full U.S. commercial and Medicare populations.

In order to segment the Medicaid and uninsured populations, for which no medical claims data were available, Oliver Wyman made assumptions on the characteristics of these populations relative to the commercial and Medicare populations. The uninsured population was assumed to be largely similar to the commercial population, as was the indigent Medicaid population. The elderly and disabled Medicaid population was assumed to be most similar to the highest cost Medicare patients. These assumptions were based on total national medical spend for each of these populations.

Savings estimates for each care model were developed based on secondary research and direct Oliver Wyman experience with implementation of these care models. By applying the specific types of procedures and negative outcomes avoided through these care models to the cost of the avoided procedures and outcomes obtained from medical claims analysis, Oliver Wyman was able to estimate the overall savings that would be achieved by the full care models at maturity.

The savings estimates for each care model were then applied to the population segmentation described above to obtain overall savings estimates.

United Kingdom: Segmentation was similar to the U.S. methodology, with two major differences: (1) Clinical data rather than medical claims data were used, and (2) segmentation was not broken down by payer segments as it was in the U.S., because these segments do not exist in the U.K. The defined segments and their relationship to Oliver Wyman's care models were the same.

The savings estimates were developed with the same methodology as they were in the U.S. Knowledge of the U.K. health system and U.K. health system data were used to adjust the savings based on its unique characteristics.

Remaining OECD Country Methodology: We did not have access to detailed claims or clinical data from the remainder of OECD countries. To estimate a segmentation of each OECD country, Oliver Wyman thus compared its health status across a range of indicators, including obesity, heart disease, asthma, and COPD rates, as well as its relative age breakdowns, to those of the U.S., and created an adjusted segmentation based on this comparison. For example, a country with a generally healthier and younger population than the U.S. would have a segmentation placing more individuals in the healthier segments covered by lower acuity care models. This methodology was calibrated by testing it with the U.K. population and ensuring that the results were comparable to those achieved through the segmentation of the full clinical data available for the U.K.

Baseline savings estimates for each care model were assumed to be the same as those that could be achieved in the U.S. Further research for each OECD country identified in-progress initiatives in a small subset of countries that already address some of the issues addressed by Oliver Wyman care models. In these cases, the amount of savings that could be achieved by the Oliver Wyman care models were adjusted downward based on the specific issue addressed and the proportion of unnecessary spend associated with that issue.

ABOUT OLIVER WYMAN

Oliver Wyman is a global leader in management consulting. With offices in 50+ cities across 25 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm's 3,000 professionals help clients optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities. Oliver Wyman is a wholly owned subsidiary of Marsh & McLennan Companies [NYSE : MMC], a global team of professional services companies offering clients advice and solutions in the areas of risk, strategy, and human capital. With 53,000 employees worldwide and annual revenue exceeding \$10 billion, Marsh & McLennan Companies is also the parent company of Marsh, a global leader in insurance broking and risk management; Guy Carpenter, a global leader in risk and reinsurance intermediary services; and Mercer, a global leader in human resource consulting and related services.

Oliver Wyman's Health & Life Sciences practice serves clients in the pharmaceutical, biotechnology, medical devices, provider, and payer sectors with strategic, operational, and organizational advice. Deep healthcare knowledge and capabilities allow the practice to deliver fact-based solutions.

Follow Oliver Wyman on Twitter @OliverWyman.

For more information, contact Patrick Clinton at patrick.clinton@oliverwyman.com.

www.oliverwyman.com

