Turkey is at the vanguard of a global trend of implementing universal health coverage. Building on that leadership position, Prime Minister Erdoğan has set a goal for Turkey to become a global leader in the delivery of health services over the next decade. A key element of developing the health care market in Turkey is expanding the country’s biopharmaceutical sector. For Turkey to meet its health care objectives, it needs to maintain a public policy environment that ensures adequate resources for health care and fosters innovation and investment in the biopharmaceutical sector. Too often, the government’s short-term cost containment polices have conflicted with its aspirations for ensuring Turkish citizens have access to needed innovative therapies and growing a biopharmaceutical sector.

Rod Hunter*

* Rod Hunter is Senior Vice President of the Pharmaceutical Research and Manufacturers of America (PhRMA).
In 2023, Turkey will celebrate the 100th anniversary of the founding of the Turkish Republic. In preparation for the centennial, Prime Minister Erdoğan has set a goal for Turkey to become a global leader in the delivery of health services over the coming decade. Since the early 2000s, Turkey has made dramatic progress in extending health care coverage to 95 percent of the Turkish population, placing Turkey at the vanguard of a global trend toward Universal Health Coverage (UHC). Building on this remarkable domestic achievement by developing an internationally competitive health services sector might seem a logical next step. A key element of such a plan would be the development of the country’s biopharmaceutical sector. Indeed, a vibrant, internationally integrated biopharmaceutical sector would deliver a wide range of benefits, from preventing disease and extending lifespan to creating high-paying jobs and helping raise living standards.

But in order for Turkey to meet its health care objectives, it needs to maintain a public policy environment that provides proper incentives for both the public and private sectors and supports private sector innovation, fostering investment in the biopharmaceutical sector, including by international companies. Too often, the government’s short-term cost containment policies have conflicted with its long-term aspirations to improve public health for its citizens and grow an innovative biopharmaceutical sector. If the government reforms these policies, Turkey could ensure that its citizens have access to innovative therapies when needed, while positioning itself to become a global leader in health care goods and services.

**Health Care in Turkey**

Turkey is one of the global economy’s success stories of the past decade. Per capita income has tripled, GDP has doubled, exports have quadrupled, inflation and budget deficits have been reined in, and economic growth has averaged five percent per year (faster than any other country, aside from China). In May 2013, the country finished paying off its 412 million dollar debt to the International Monetary Fund (IMF), leaving it with no outstanding debt to the IMF for the first time since 1994. The Organization for Economic Cooperation and Development (OECD) forecasts that from 2012-17, Turkey will achieve a higher annual rate of economic growth (5.2 percent) than any of the Organization’s other 33 member countries.

---

1 “Turkey to Become a Centre for Pharmaceutical Research,” Istanbul Gazette, 26 May 2013, http://istanbulgazette.com/turkey-to-become-a-centre-for-pharmaceutical-research/2013/05/26/
As Turkey’s economic indicators have improved, so have the country’s health indicators. From 2002-9,

- Life expectancy rose from 71.8 to 74.3 years
- Infant mortality declined by 52 percent
- Incidences of malaria fell from 11 cases per 100,000 people to 0.01 and incidences of measles fell from 14.7 per 100,000 people to 0.05
- Vaccination rates rose from 78 percent to 96 percent
- Hospital visits increased from 124 million to 295 million
- The number of primary care facilities increased 230 percent
- Primary care facility visits increased from 60 million to 198 million

Nevertheless, challenges remain. Noncommunicable diseases are responsible for more than 70 percent of all deaths in Turkey. While there has been a decline in smoking rates since 2000, obesity rates have been rising throughout the population. Turkey also faces demographic pressures. The share of its population over the age of 65 is projected to rise from 7.3 percent in 2013 to 10.7 percent in 2025 and 22.9 percent in 2050.

Still, Turkey’s strong progress is in significant part a byproduct of expanded health coverage, which the government prioritized in 2003. Today, more than 95 percent of the population is covered by some form of health insurance, up from 84 percent in 2004. Since 1995, public spending on health care has increased from 1.8 percent to 5.1 percent of GDP.

The Move Toward Universal Health Coverage

Turkey has been at the forefront among emerging markets in creating UHC for its citizens. The central objectives of UHC are to improve the health of individuals...
and the broader society, while also providing financial protection for individuals against costs incurred during the treatment of illnesses. In constructing UHC systems, policymakers must make difficult choices concerning the scope of coverage and means of delivery, with all choices entailing financially and politically challenging trade-offs. Key decisions include: Who is covered? What services and products are included in the coverage? To what extent are the services and products covered by the government?

Too often, the government’s short-term cost containment policies have conflicted with its long-term aspirations to improve public health for its citizens and grow an innovative biopharmaceutical sector.

There are multiple means of achieving UHC. While some developed countries have created single-payer systems, others have implemented mixed systems that include a larger role for private insurance in financing and managing health coverage. On 23 March 2010, the United States, which has government programs that ensure coverage for the indigent and the elderly, enacted legislation aimed at a more comprehensive mixed system. For emerging economies with limited tax bases and financing capacity, resource constraints may represent a challenge for a single national health system. Even developed countries with well-established national health systems such as the United Kingdom are seeing an expansion in the role of private health coverage.

Studies by the World Bank and others posit that there is no magic formula for emerging economies to realize UHC, but that several factors facilitate success: commitment of financial resources to health care, consideration of a role for private financing and co-payments as part of the financing system, focus on primary care, and flexibility allowing for midcourse corrections.

Since 2003, Turkey has been implementing its Health Transformation Program (HTP) with the goal of realizing universal health coverage. Pre-existing health insurance schemes have been consolidated and expanded into the General Health Insurance (GHI) program, which is now administered by the Social Security

13 A single-payer health care financing system is one in which a single entity, often a national government, is the sole administrator, collecting and allocating funds for all health care costs in the system.
Institution (SSI). The GHI provides reimbursement for designated preventative, diagnostic and curative services (inpatient and outpatient). With recent modifications, these health care services are offered for no fee to citizens earning less than 279 TL (156.71 U.S. dollars) per month, while people earning more make graduated social security premium payments, increasing in stages according to annual income.

With 95 percent of the country’s population now receiving some form of health coverage, the government has had to make a significant financial commitment, as only two percent of the population has private coverage. State transfers to cover the SSI’s deficit reportedly amount to three percent of GDP. Yet, the total level of health care spending remains far below Turkey’s OECD peers. Indeed, Turkey spends less per capita (906 U.S. dollars) than any other country in the OECD, where the average is 3,339 U.S. dollars. For Turkey, this amounts to 6.1 percent of GDP, compared to an OECD average of 9.3 percent.\(^{17}\)

While Turkey’s progress in extending health coverage has delivered positive health outcomes, the system is saddled with poor incentives that could lead to excessive budgetary impacts and unpopular rationing. Plus, the system does little to take advantage of the potential of private insurance markets. Budgetary constraints have already led the government to look for indirect means of constraining access to health services, including cancer medications. According to a 2010 report published by I3 Innovus, a biopharmaceutical development consultancy, cost-containment measures implemented in response to increased biopharmaceutical expenditures resulted in Turkish patients waiting up to four years to receive access to cancer medications following the approval of these medications by the U.S. Food and Drug Administration (FDA) or the European Medicines Agency (EMA).\(^{18}\) Government cost-cutting measures have disproportionately focused on the biopharmaceutical market, jeopardizing patient access to effective treatments. These short-term cost-containment mechanisms, including government price cuts, may have led some companies to delay the launch of new products in Turkey.

As Turkey works to develop an effective UHC, it must do so in a financially sustainable manner that ensures Turkish patients have access to needed medicines and maintains incentives for innovation. Recognizing that well-targeted health care spending is an investment in public health and individual well-being, Turkey should increase the share

\(^{17}\) “Health Data 2013: How Does Turkey Compare?,” \(OECD\), http://www.oecd.org/els/health-systems/Briefing-Note-TURKEY-2013.pdf


(The cost containment measures that have resulted in Turkish patients waiting up to four years for medicines include long delays in granting both good manufacturing practices certifications and marketing authorizations. These have both resulted in a limited number of new chemical entities entering the Turkish market, particularly since 2010 when the GMP delays began.)
“With 95 percent of the country’s population now receiving some form of health coverage, the government has had to make a significant financial commitment, as only two percent of the population has private coverage.”

The Biopharmaceutical Market

As health indicators have improved in Turkey, the country’s biopharmaceutical industry has also expanded. According to the Pharmaceutical Manufacturers Association of Turkey (IEIS), the value of the Turkish biopharmaceutical market increased from 5.13 billion euros in 2006 to 6.81 billion euros in 2010, before declining to 5.58 billion euros in 2012.19 There are 49 manufacturers in the industry and the industry employs approximately 25,000 people.20 Over the past decade, Turkey has seen both its biopharmaceutical imports and exports steadily increasing, though imports declined slightly in 2012. And the share of imports to exports has mostly remained steady, with imports starting to grab a slightly bigger share in recent years.21 Still, Turkey’s failure to create a supportive investment and innovation climate has stifled progress in developing a biopharmaceutical sector. Even with recent growth, the size of the country’s market is small—valued at 11.2 billion U.S. dollars in 2011—compared to other comparable countries. For instance, South Korea’s biopharmaceutical market is slightly larger than Turkey’s, despite a smaller population (49 million in South Korea; 72 million in Turkey).

Turkey’s biopharmaceutical exports, while rising, still leave the country ranked as the 36th largest in the world.22 A 2011 Boston Consulting Group report focusing

22 AIFD (2012).
on Turkey’s biopharmaceutical market highlighted troubling trends: “Turkey is losing the chance to become a pharma production base,”23 wrote the report’s authors, noting, among other things that multinational corporations are delaying production investments in Turkey, and the finished product capacity utilization rate in 2010 was just 62 percent. If Turkey is going to meet its goal of becoming a global leader in health services over the next decade, it needs to rethink how it approaches health spending and regulation.

“While Turkey’s progress in extending health coverage has delivered positive health outcomes, the system is saddled with poor incentives that could lead to excessive budgetary impacts and unpopular rationing.”

**Public Policy Challenges**

Health care systems throughout the world operate in ecosystems heavily influenced by public policy. Decisions by government officials relating to intellectual property, regulation, taxation, and reimbursement rates have determinative effects on the evolution of markets for health services, including especially for innovative biopharmaceuticals with their capital intensity and long development timelines. Even governments that aspire to promote investment and innovation in health services sometimes pursue policies that undermine their explicit agenda. And sometimes policymakers underestimate the cumulative effects of intellectual property, regulatory, reimbursement, and other decisions. While Germany was once the international center of the pharmaceutical industry, much of the industry has since shifted to the U.S., attracted by a more hospitable scientific, regulatory, commercial, and investment ecosystem. By the same token, a 2008 European Commission report lamented the shift of the center of gravity of pharmaceutical research and development since the 1990s from Europe to the United States, again a consequence of the policy and economic environment.24

These experiences should be instructive for Turkey, where international biopharmaceutical firms face a discriminatory and unworkable government product registration system, punitive reimbursement and pricing programs, and deficiencies in the country’s intellectual property framework. As the U.S. State Department has

24 “Communication on Safe, Innovative and Accessible Medicines: A Renewed Vision for the Pharmaceutical Sector,” *European Commission Communication, COM(2008) 666*, 12 October 2008, p. 3. In the 1990s pharmaceutical research and development expenditures in Europe were higher than in the U.S. (7.766 billion euros compared with 5.342 billion euros). However, the picture had changed by 2006 (22.500 billion euros in the EU while 27.053 billion euros in the U.S.).
dryly observed, “Turkey’s pharmaceutical sector is a good example of a sector in which [Government of Turkey] policies complicate Turkey’s ability to fully realize its development potential.”

Emblematic of the measures that threaten investment and stifle domestic biopharmaceutical development is the pricing system used to determine biopharmaceutical reimbursements. The so-called “reference price” for reimbursements is based on the lowest factory price of pharmaceuticals found in five countries (France, Spain, Italy, Portugal, and Greece). The reference price is then reduced by 11 percent. In recent years, the Turkish government has made a number of significant revisions to this pricing system. In December 2009, the government imposed an additional 12 percent discount over the existing 11 percent discount. In December 2010 and November 2011, further discounts of 9.5 and 8.5 percent, respectively, increased the total social security discount for innovative products to 41 percent. If the reference price decreases at some point in the future, the discount is taken from the reduced reference price.

The reference pricing system has been a burden for biopharmaceutical companies operating in Turkey, according to Uğur Özkutlu, Chairman of Healthcare Market Access Working Group at the International Investors Association of Turkey (YASED), an organization representing international companies. “The past three years have been lost from our side,” he said last year. “The discounts have gradually increased from 23 percent to 32.5 percent to 41 percent today. In that context, the biopharmaceutical companies in Turkey have faced the worst setback ever. While total market growth was 2.7 percent, international companies’ growth here was negative 2.5 percent last year.”

A representative of Janssen Pharmaceutica, a Belgium-based subsidiary of Johnson & Johnson, echoed that sentiment: “The new pricing mechanism has enforced not only the lowest prices in Turkey, but also a high number of mandatory discounts. This has put the country at a level that is 50-60 percent lower than mean European

prices. We do not find this sustainable.”28 Even the Turkish government’s investment promotion agency, Invest in Turkey, has publicly cited as “threats” price controls and reimbursement policies related to biopharmaceuticals.29

Another troubling policy, directed solely at the biopharmaceutical industry, is the setting of prices based on a 90 day moving average in the exchange rate between the euro and the Turkish lira. But the baseline for the lira has been set at an artificially low rate, causing biopharmaceutical prices to be depressed an additional 20-22 percent.

Further handicapping the growth of Turkey’s biopharmaceutical market has been a slowdown in the approval process for the marketing of new drugs in Turkey. While national law requires the Health Ministry to authorize the registration of medicinal products within 210 days, surveys by the Association of Research-Based Pharmaceutical Companies (AIFD) indicate that the regulatory approval period exceeded 1,100 days in 2011.

Approval delays have been exacerbated by a policy instituted in March 2010. Under this policy, the Health Ministry will only issue a certificate attesting to “Good Manufacturing Practices” (GMP) following an on-site inspection by Ministry staff, or by the competent authority of a country that recognizes the GMP certificates issued by the Health Ministry. (Previously, Turkey recognized certifications of pharmaceutical safety by agencies such as the FDA.) This requirement has further slowed approvals and curtailed patient access to new medicines. The AIFD has estimated that in recent years about 250 innovative products manufactured outside Turkey, including anti-infectives, antipsychotics, vaccines, cardiovascular, diabetes, and oncology drugs were awaiting registration by the Health Ministry.

Turkish health care is also hamstrung by low levels of investment in innovative drug research and development (R&D). Spending on R&D as a share of GDP was just 0.8 percent in 2009 – the third-lowest share among 30 OECD countries, and well below the OECD average of 2.3 percent.30 And the national budget allocation for government

---

expenditures on biopharmaceuticals has been declining since 2009. At 1.11 percent of GDP, Turkey’s expenditures fall below the OECD average of 1.5 percent of GDP.

**Needed Reforms**

Turkey possesses advantages—an advanced UHC system, infrastructure, strong domestic knowledge, and a favorable location—that position it with the potential to become an integral part of the global health services industry in which Turkish companies and researchers contribute to global public health and well-being. But if the country is going to meet its goal of becoming a leader in the delivery of health services by 2023, it needs to implement reforms encouraging investment and innovation. These reforms include:

- Developing and implementing a long-term policy to support biopharmaceutical innovation and investment
- Strengthening intellectual property protections
- Liberalizing rules on foreigners conducting research and development
- Replacing the “reference price” system and revoking the government price discounts, both of which depress investment and innovation
- Rationalizing the approval process for new biopharmaceuticals

Implementing such policies would help Turkey meet its goals of attracting biopharmaceutical investment and developing an innovative biopharmaceutical sector. A more favorable climate would also help Turkey attract more clinical trials, which represent a significant portion of R&D expenses connected to biopharmaceutical innovation. In 2011, just 70 clinical trials were conducted in Turkey. By contrast, there were 310 in South Korea.

**The Opportunity**

Turkey’s economic development over the past decade has made the country a model, as has the country’s pathbreaking progress towards UHC. Yet, challenges remain and midcourse corrections are needed. Turkey should promote greater reliance on private health insurance to support UHC, with government funding being targeted at the needs of the vulnerable. With the private sector providing increased resources, Turkey could avoid the temptations for the sorts of myopic regulatory and cost-containment measures that have denied Turkish patients needed innovative medicines and have undermined the investment and innovation environment in the country. With such reforms and more steady and consistent policies aimed at fostering an innovative health sector, Turkey could well achieve the aspiration of becoming a global leader in health services by 2023.
Can Turkey Rebound to Achieve its 2023 Targets?

- **Turkey’s 2023 Targets: A Private Sector Perspective**
  Rahmi M. Koç

- **Turkey’s Role in Protecting the Mediterranean Environment**
  Bernard Fautrier

- **Turkey’s Bid for the 2020 Olympic Games**
  Hasan Arat

- **Turkey and Regional Energy Security on the Road to 2023**
  Bud E. Fackrell

- **The Next Decade of the Third Sector in Turkey**
  Filiz Bikmen

- **Turkey, China, and the New Silk Road**
  Riza Kadilar & Andrew K. P. Leung

- **Growth and the Future of Southeast Europe**
  Valbona Zeneli

- **Does “Responsibility to Protect” Apply in Syria?**
  Akshan de Alwis

- **Turkey’s Health Care Reform: The 2023 Challenge**
  Rod Hunter

- **Can Turkey Aim for 100% Renewable Energy?**
  H. Serhan Sützer

- **Ten Global Brands by 2023: A Sweet Fantasy?**
  Ergin Hava

- **Turkey’s EU Membership Quest and Greece**
  George Koukoudakis

- **Event Analysis: The Atlantic Council Energy and Economic Summit**
  Event Analysis: The Atlantic Council Energy and Economic Summit

- **TPQ Roundtable: The Evolving Relations of Turkey and Israel**

To Subscribe Online:
www.turkishpolicy.com