# Faces of Pricing and profit planning at the doorstep of the EU: Government pricing policy in the innovative pharmaceutical sector in Turkey

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### **ABSTRACT**

The majority of research on the pharmaceutical sector has focused on an overall micro economic, medical oriented welfare issues, whereas the marketing management role of the innovative drug manufacturer has to a large extent been disregarded. Using the case of Turkey, through a series of in-depth interviews with highly innovative companies, other marketing management possibilities to develop pricing strategies and plan for profit are explored based on broader definitions of value and transparency. Our results suggest that pharmaceutical companies as well as governments might have a too narrow focus of value and underestimate the potential long term benefits of a broader approach to marketing management and long term relationships between the various stakeholders.

#### INTRODUCTION

Research has shown that highly innovative industries in the pharmaceutical sector are increasingly important parts of industrial policy strategy in many countries as health treats have become global (HIV, bird flue, CJD etc). Long term R&D and competitiveness of such companies depend heavily on clear, stable regulations allowing planning over a reasonable period of time. In this context, we analyze the impact in Turkey of increasing internal information uncertainty, changes in government domestic regulations and external forces such as the beginning of the EU integration process and the emergence of a true consumer society including self medication, brand importance and wider access to information on drug side effects and curative qualities. This is put within the context of an overall raise in development cost of truly new innovation in the pharmaceutical industry worldwide. The aim of the study is to gain an understanding of pricing and reimbursement/co-payment systems in Turkey and its effects on the marketing management of highly innovative drugs companies. Turkey as a new large European aspirant with a relatively young population is used to illustrate the threat and opportunities imposed by governments on such highly technological and innovative sector. While health care costs in most countries are under pressure to be contained many governments are often tempted to reduce prices across the board without analyzing the specific situations and environment (local and international) of highly innovative sectors.

In this paper, we use the peculiarity of the pharmaceutical industry in Turkey only as an example of price negotiation where 'value' demonstration and transparent decision making made on 'all' information not only 'demanded/regulated' should drive future managerial strategy. Despite the large corpus of research concerning the pricing in the drug industry (NCSL, 2006), there is a relative dearth of insight into why and how highly innovative firms engage and cope with government multifaceted policies, and how such framework of references influences long term decision to introduce, develop or delay access to any specific drug. In a bid to address these substantive issues, this paper provides brief summaries of: (a) the meaning of value and transparency in marketing management as a theoretical foundation; (b) the macroeconomic environment of Turkey and the recent legislation changes. Results through a limited number of interviews with key actors in multinational innovative pharmaceutical companies in Turkey highlight some possible strategy gaps. We analyze how innovative pharmaceutical companies actively engage with the government and prepare their marketing pricing strategy in such context. Here, we emphasize the analytical nexus of what people explain and not necessarily what they do. In conclusion, we discuss the long term management implications of price setting processes related to legislative choice in the Turkish health sector.

#### THE MEANING OF VALUE AND TRANSPARENCY

Issues related to pricing are particularly important for the long term sustainability of the highly innovative pharmaceutical sector particularly the future strategic position of the brand and supply value chain. From the industry's point of view, pricing, linked with strategy and profit planning offers a number of problems not always seen in other businesses. Even in more "conventional" industries a wide range of methods for estimating costs can be applied for developing the strategy and the long term profit. They range from simpler forms of cost plus pricing, to more advance methods trying to assess the customers' willingness to pay for certain characteristics or attributes of a certain product or service (e.g. Horngren, Bhimani, Datar and Foster, 2006). However, the pharmaceutical sector faces certain challenges when it comes to both cost and revenue planning. Currently, highly innovative companies are attempting to use sciences such as pharmaco-economics, disease management, and health economic to determine the value of their offering. However, this assumes that a transparent setting process is in place where a clear link can be demonstrated between information provided (i.e. 'real' value) and price level setting.

Moreover, the legal environment with patents laws and data exclusivity are to a large extent determining the realistic period over which an innovative company can have full marketing control over its products. However, few drugs only use totally new molecules most are often a combination of old and new technology leading to some interpretation within the legislation, hence, greatly influencing possible returns and marketing planning. The performance value of a drug both from a medical and price negotiation point of view can also be too complex from a government perspective that may lack precise technical tools (e.g. ICT) to evaluate its health budget holistically and fully appreciate the long term medical aspects of an innovation. In this context, the pricing value's demonstration is rather different and for obvious reasons more regulated in the pharmaceutical industry than most other "traditional industries". The various interests and different goals of the stakeholders are noteworthy, making the situation rather complex and the risks of dysfunction significant. Here, we suggest that price levels are disjointed from information value provided to governments by the different parties.

The current regulation of new pharmaceuticals drugs is inefficient because it demands arbitrary amounts of information while the type of information demanded does not seem to be clearly considered when decision-makers price the innovation. Indeed, parties do not have access to the complete information on the long term effect of any drug. The current knowledge model based on two to five year medical testing and twenty year approval has somehow reached its limit with consumer tolerance to unforeseen long term side effects. In addition, the same standards of evidence (often limited to ticking a certain number of requirements) are often applied across different technologies (i.e. innovative and generic drugs are considered on the same level). Here we need to consider the different aspect of value. At the basic level it consists of 'an amount, as of goods, services, or money, considered being a fair and suitable equivalent for something else; a fair price or return' (thefreedictionary). However, other aspects have to be considered such as (a) usefulness, utility and merit, (b) standards, quality, desirability, (c) effort, energy, time or even emotion. From a marketing perspective value is often seen as an investment leading to brand building and loyalty (Kotler et al 2005). Value should be perceived from a buyer's perception of the product characteristics rather than on cost. Here the idea of 'added value' becomes relevant as an element of the worth that has increased the perceived value. Value is also not just related to the tangible dimension of the service or good. From an accounting perspective value is characterized as a combination of value of time, cost vs customer willingness to pay for a given bundle of characteristics. Value is also often dynamic (price levels will reviewed if circumstances change) as presented in value chain strategy (e.g. Honrngren et al, 2006). A public sector definition of value is often designed to 'help people whose income is inadequate' for their basic needs. The notion of 'public good', the desire to provide equity linked to the ideas of a paternalistic state (medical coverage for all), state interference (link for reimbursement and co-payment) and dependency culture (access right) are also often advocated (Chapman and Cowdell, 1998). Lastly, from a management perspective value is a complex issue often being considered to be the compilation of utility derived from economic, technical, service and social benefits a customer receive from a company in exchange for the price it pays (or co-pays) within a set context and environment (public vs private insurance). Here a distinction is also made between understanding, creating and delivering value (Anderson and Narus, 1999).

The key criteria that allow the 'true' evaluation of value by the different parties are linked to the idea of transparency. This in turn encompasses coordination, time frame, cataloguing and digestive analysis of data, regular communication to the various stakeholders and medium to long term strategy formulation. In time, control mechanisms and enforcement measures are also often added. In addition, predictability and consistency within a given framework should be put in place to ensure maximum efficiency of the system. Overall accountability for each step remains crucial. Information exchange and two ways communication insure the basic working of the process. From a pricing perspective area such as financial disclosure, budgetary review, auditing and open meeting are also considered as must. Following that though all meta-level decision making information should also be published including minutes of meetings.

Transparency and exchange of information are in many industries critical issues for value creation. For the focal company, information about its environment will give meaning to and guide the company as to how the environment affects its actions (Pfeffer and Salancik, 1978). By sharing information and through transparency the two parties can solve problems and develop the relationship (e.g. Hirschman, 1970), and the coordination becomes explicit and tailored to the particular relationship (Clemons, Reddi and Row, 1993). Information exchange includes both the type of information and the mutuality of information sharing between the two parties (Helper, 1991). Experience from other industries shows that several ways of sharing information are possible, such as common information systems, sending employees to each other's plants and joint projects. The advent of information technology has opened up two ways "information highway" increasing the visibility and transparency between the parties involved (Christopher, 1998), thus increasing possibilities for mutual development of the relationship through better understanding of the other party, including ability to predict and understand each others preferences. Figure 1 summaries a classical way of government pricing model.

# THE MACROECONOMIC ENVIRONMENT OF TURKEY AND THE RECENT LEGILSATION CHANGES

When discussing the pharmaceutical industry in any countries, it is important to bear in mind a few strategic facts; (a) it is now a mature industry with most innovations of the 60s, 70s, and 80s falling in the generic category; (b) many 'me too' drugs exist, (c) there is a deepening competition in many therapeutic groups, (d) the industry is dominated by few very large mainly 'western' corporations, and (e) drug innovation is a costly, risky long term investment. In Turkey, the pharmaceutical industry represents around 20,840 employees (EFPIA, 2001) and has grown at an annual average of 14%, between 1995-2000, far exceeding the 8% growth in Europe. In value, pharmaceutical products expenditure reached 2,873 million Euros at producer prices (2001). Yet, Turkish drug consumption levels can still be considered as low compared to most developed countries with a per capita of 432 USD in 2000 compared to an OECD average of 2,307 USD (OECD, 2005). Turkey, with around 70 million inhabitants, an annual GDP growth rate of 5.1%, raising incomes, an emerging middle class, better health care awareness, urbanization, EU candidacy and geographical proximity to large Asian/Middle Eastern markets should make it a dynamic, attractive and progressive market. Pharmaceutical spending accounts for 24.8% of total health budget a figure above OECD average of 17.7%. Doctor population ratio is low at 1.4 per 1000 and the average reflects large regional and urban/rural variations. Since 2004, a major series of reforms have taken place: (a) The four state-run health insurance schemes, namely Emekli Sandığı (retired and civil servant), SSK (worker on a wage), and Bağ-Kur (self employed) and yesil card (poor) which covers 75 % of the population, were merged. (b) Reference pricing using 5 countries (France, Spain, Portugal, Italy and Greece) was implemented in 2004 (reference pricing establishes the maximum limits up to which the health ministry will pay for certain drugs) and (c) the expansion of the equivalent drug representation classification from 77 to 333 groups was established. In 2005/06 a series of scandals and bribery cases has shaken the confidence within the industry.

On the other side of the coin, reimbursement and co-payment policies have at large remained unchanged for the moment. In addition, the system for reimbursement is also moving towards 'cluster family reference pricing' based on therapeutic equivalent all reimbursed at the same level (i.e. generic and patented). While pharmaceutical companies formally maintain the possibility of freely pricing their products in effect manufacturers are essentially unable to realize a price above the reference price. Highly innovative and drug patented companies have been reluctant overall to endorse fully this pricing system. Under this system, patented and non-patented active ingredient of a given substance class are treated on an equal level; novelties and added medical values are overall ignored in price negotiation. This is considered as a de-incentive to innovate and

invest. Patent protection is also eroded as being classified exactly as a non-patent drug. Patent purpose is to secure a unique position which under this system is eliminated by jumbo groups. The method is also blamed for artificially inflating the price of generic drugs (up to 80%) as manufacturer with active ingredients are by default required to reduce their price, a pressure not put upon generic manufacturers. The idea of therapeutical progress is not taken into account here. In addition, due to the set country of reference clause this situation is not only restricted to the country of origin but extends far beyond. Moreover, in Turkey data exclusivity is only protected by a six years period that starts at the introduction of the drug in any EU countries. Overall this has a long term negative effect on the location of both R&D centers, production facilities and investment. Furthermore, in Turkey regarding reimbursement there is currently no common positive list of drugs, no Over The Counter legislation and no onerous/exception list as in many countries. Each of the previous health care systems still have their own criteria although they overall have many common features. Co-finance varies considerably and has a major flaw. Currently, the different health care systems, even if officially merged, continue to reimburse the cost of a drug at an amount of up to 30% more than the cheapest drug in the same reimbursement group. The difference between the generic price plus 30% and the patented drug needs to be covered by co-payment mechanisms (individual or private insurance). However, the cheapest price plus 30% rule, sometimes means that patients with no co-payment possibilities are given 'lower performance' drugs that often lead to additional cost for the overall health budget (one extra day in hospital etc), these costs being often well above the price difference between originator branded and generics products. Additionally, following that rule, pharmacist often change prescriptions to generic drugs (receiving volume discount incentive) making the final price in some therapeutic groups actually higher than branded drugs. In addition, many OTC drugs currently not reimburse in other EU countries are still in the 'positive/reimbursed' list in Turkey. Moreover, reference price system is not complying with neither the G10 recommendation VI as individual producers and insurance companies lack the opportunity to negotiate individual reimbursement price nor the requirement of the EC transparency directive 89/105 stating that prices must be 'based on objectives and verifiable criteria' and justified accordingly.

An overview of the major health related issues in Turkey is provided by a recent article by (Tatar and Kanavos, 2005) including: poor health indicator data, regional disparities, weak management capacity, inefficient use of hospital etc. From a pricing perspective Table 1a and b show the results of a 2005 study by Kanavos et al describing the main issues supported by the 'new hope in health' foundation (SUVAK).

To finalize the picture, in Turkey, seven key characteristics of the system need to be remembered: (a) technical skills within the evaluation process are clearly missing both in specialist medical areas but also in the overall understanding of disease management or pharmaco-economics; (b) the current system do not favor innovation neither from a therapeutical perspective nor from a management pricing perspective; (c) current reimbursement focus on cost of drug expenditure mainly rather than focusing holistically on the overall allocation and saving within the heath budget; (d) close door policy during price setting discourage innovation and encourage the current status-quo perceived as beneficial for generics, wholesalers and pharmacists mainly; (e) the few data available are usually not public nor seem to have any clear influence in the pricing/reimbursement and co-payment decisions; (f) partnerships and discussions among the main partners, innovative, generic companies but also insurance and supply chains are weak or non-existent; (g) long term policies and outcomes are difficult to foresee and currently lead to extra cost rather than better allocation of resources.

## RESULTS: PRICING AND NEGOCIATION IN THE PHARMACEUTICAL INDUSTRY IN TURKEY

Firstly, the approach in Turkey of reference pricing tends to adopt only a very technical methodology to price setting based mainly on set number of objective (measurable) therapeutical properties of any given new drug and a set of comparison countries. On the reimbursement side this is mirrored by adopting a cluster family reference pricing based on therapeutic groups. From this perspective, in Turkey, the move from 77 to 333 groups is perceived as a welcomed evolution by our respondents (Respondents (10) were selected and identified as key players currently setting and negotiating price with the Turkish government from various innovative companies. The interviews were transcribed and transcripts were analysed using a combination of a 'Framework Analysis' (Ritchie and Spencer, 1994) and 'grounded theory' (Glaser and Strauss, 1967)). Arguments are even put forward for some sub-groups to be created within each therapeutic equivalent set. However, for example no 'onerous drug list' exists in Turkey or exception list for outstanding medical value drugs. We argue that nontangible factors are ignored putting the innovative companies at a disadvantage. Bioequivalence for all generic drugs while required since 2005 are still not complete. Turkey seems to tolerate a two speed situation, even on

established variables, detrimental to innovative companies. Here the lack of expert skills by ministry officials on issues such as for example survival enhancing value, tolerability, efficacy on hard to treat conditions but also areas such conveniences of use both for patient and MD also favor a status-quo hence generic drugs over innovative treatment. The demands and tests (including clinical trials, economic evaluations, estimated extend of use etc) required from this industry are often no considered fully when negotiating prices or only considered as a series of 'ticks' to be fulfilled prior to starting the price negotiation.

*Gap1:* there is a need by the pharmaceutical industry to find a solution in better communicating with non-specialist government officials, and/or create and encourage the government to provide within the education system curriculum related to disease management and pharmaco-economics that will ease the problems in the future. The participation of non-medical specialists in consultative and educational roles outside conventional referrals may also contribute to better outcomes. Legislation should also when existing be enforced fully to ensure higher level of competition.

Secondly, the micro-clinical perspective employed in the appraisal/evaluation of any new drug in Turkey appears to exclude any subjective country specific variables in the negotiation process per se. Our respondents seem to find it difficult to think away from the technical aspect of any drug treatment (drug acquisition cost, administration cost, concomitant cost, adverse effect cost and lab testing costs). While in other industries managers often come from a variety of fields, it seems that the pharmaceutical sector personals have mainly a medical oriented management background only. The result is that a scientific and regulated approach to negotiation is favored as opposed to a more managerial approach. This is in clear contrast with the expertise often available in health ministry where many appointments are made politically.

Gap 2: The pharmaceutical industry should encourage multi-disciplinary approach to budget management and pricing towards techniques used in the retail sector and B2B sector and benefit from the insights of different bodies of knowledge. Evaluation of drug commission should also be more independent from a marketing approach to price setting.

Thirdly, while the price in a reference pricing system remains an important issue respondents underline that it should not be seen in isolation. In Turkey, actual patent protection, data exclusivity, and reimbursement/co-payment concerns are becoming even more crucial. In effect, looking at data exclusivity which starts from the date of launch in any EU countries, the real result is to halve the time data are protected before generic companies can use them.

*Gap 3:* A seemingly truncated reference pricing system is used in Turkey where other reasons for a particular drug price in any reference countries are ignored. Innovative companies should try to provide further managerial information on the circumstance of price setting in the reference countries (e.g. link to volume reimbursement level, co-payment, and exceptions). Flexibility could be considered within the system to reflect the global environment of pricing (e.g. national security, bioterrorism, ethical consideration, human genome, cloning, transgenic technology).

Fourthly, in Turkey pricing is strongly perceived by our respondents as a political issue. Many, generic local companies appear to have an organic advantage over multinational organizations often perceived as foreign. Political links can often be established including for example the lobbying at parliament level for the 80% reimbursement maximum price level for generic, the lowest data exclusivity protection time together with Spain (6 years) in Europe, the fact that three wholesalers control 70% of the market and that no parallel distribution network will be welcomed and that the pharmacy lobbying remains strong and has up to now prevented an OTC list to be drawn.

*Gap 4:* Innovative companies should attempt to get involved at a political level and communicate their need to the political world more clearly. It is obvious that in Turkey the association of innovative companies need further organization and clout at political level. To that intent the Association of Research-Based Pharmaceutical Companies regrouping 33 innovative organizations has initiated several actions' programs (AIFD, 2006).

Fifthly, price is perceived by our respondents as 'pre-determined', 'rigid', not reflecting the true value of innovation. Serious life saving products are treated equally to generic drugs treating minor conditions. This is particularly the case for reimbursement policies. What is the value of a generic product reimbursed at 80% of

the value of a patented product? Innovative companies are perceived to be discriminated. The system reduces the incentive to bring innovation in the country; it also reduces incentive for overall development and for taking into consideration the emerging needs of local patients. This is often described as an allocation problem within the present system that is currently compounded over time.

Gap 5: Most of the pharmaceutical companies while investing in R&D in Turkey have not been able to transfer the full value of such investment towards better pricing. We also surmise that, overall, R&D activities conducted by the innovative companies may be too narrow and lack country specific social studies. This follow a reflection of the pessimist view by our respondents that the government will not act upon the new evidences presented. This may be a contributing factor that maintains the often low image of the patented product companies' activities in the public opinion. From wider perspective on R&D innovative companies may want to encourage schemes such as community health workers, or health aides that have important roles in bridging the language and cultural gaps between the different professional stakeholders.

Sixthly, our respondents acknowledge that there is a notable lack of overall organization and communication between the different partners involved in the drug aspect of the health budget. The hate relationship between highly innovative and generic companies has prevented the industry to unite in areas that could put in perspective more macro saving such as the value of cost management reduction in the drug area vs hospital or ambulatory costs etc.

*Gap 6:* The drug industry as a whole should influence more strongly government to have a holistic approach of disease management and cost reduction/containment over the total health budget. We suggest here that the creation of an independent committee including non-medical staff in the decision pricing process may lead to an increase rigor in following protocols due to the legal constraints placed on their decision making.

Lastly, following the previous argument from an internal company perspective, our respondents claim to have recognized a need to learn and to become more efficient using experiences from highly competitive firms such as Walmart, Loreal and Michelin.

*Gap 7:* Innovative companies should make a special effort to extend their area of expertise and benchmark their pricing strategy with other highly competitive and global sectors.

#### CONCLUSION AND DISCUSSION

While the administrative health structure is often pointed out as the major weakness, changes are often only slow at best an incremental. We contend that innovative companies should consider concentrating their marketing pricing effort on wider targets that build long term brand awareness and country specific links. While our respondents often argue for a more regulated approach, we argue that there is a need for regulation mainly in the technical therapeutic aspect of drug pricing to clearly define the 'value' position of innovative drugs vs generic production. On a pure pricing aspect, a softer approach may be more flexible in the long term. Rather than using micro criteria more abstract evaluation structure should be used while negotiating such as for example Efficacy or effectiveness/ Side Effects; What is the placement of product in pathway / therapeutic strategy?; Seriousness of illness; Is the treatment preventative / curative / symptomatic treatment?; Public Health Impact.. This may include taking into account specific situations including national emergency, medical breakthrough such as stem cell or human genome as well as the evolution of understanding and needs in the health sector. What kind and form of treatment will consumer want in ten years from now? Value and transparency need to be driven from a public good perspective with a clear social impact evaluation taking into account long term sustainability and wishes of both pharmaceutical companies and the public at large. A managerial debate build on value communication and transparency in all marketing pricing/reimbursement and co-payment activities should be promoted. Development of a discourse on the value of disease management at society level rather than cost containment should be advocated. In addition, the government should look at the overall strategic role of often 'foreign' innovative companies in Turkey leading to a long term policy statement that reflect these positions. A mutual win-win strategy should be developed. That said, while pricing is an important issue in highly innovative companies, discussion over costing the 'real' impact of health policy over the medium term is a much harder task, beyond most politician mandate, often eluded in profit of micro drug pricing decisions and short term gains. Moreover, following the line in the UK of the National Institute for Health and Clinical Excellence (NICE), further engagement and forward planning is required in areas such as

implementation, horizon scanning, technology appraisal guidance and costing tools (local and national). As the cost of drugs but also the 'delivery mechanisms' are increasingly more expensive, highly innovative companies will have to find a way to balance better treatments including less costly remedial with the reality of the public health budget possibilities and private co-payment legitimacy.

# Table 1a: Main pricing issues concerns in Turkey from a consumer perspective

# 1. Informal payments comprised of 25% of out-of-pocket (OOP) payments.

- 2. Payments for drugs accounted for the majority of the formal payments. Informal payments for medicines include payments made mainly OOP (other than statutory co-pays) by insured individuals and particularly medicines acquired from community pharmacies for in-patients.
- 3. The majority of the informal payments were in the form of cash payments. Gift and in-kind payments also existed to a lesser degree.
- 4. Physician office visits and payments for surgery (i.e. the so-called knifepayments) arose as the most important types of informal payments. Both the influence of part-timers on the health sector and extra payments for surgeons have been discussed by all the parties related with the health sector for a long time. It is widely acknowledged that in Turkey if a patient wants to get a prompt and better service s/he has to visit the private office of the doctor first. In addition, some surgeons ask for extra money for performing surgery ("knife payments"). The evidence from this study suggests that these two practices are the main reasons for informal payments.
- 5. The under insurance phenomenon ("double billing") is raised as an important issue for health policy makers in this survey. Under insurance occurs when a 38 patient pays for the services although he is already covered by a scheme. This issue is verified by the fact that the insured population also paid informal payments especially in physicians' offices and physician services in the public hospitals. Thus, health insurance coverage does not mean that OOP payments both formal and informal are avoided.
- 6. Even Green Card holders, who theoretically constitute the poorest section of the population, had to pay for informal payments. The majority of these payments occurred ironically in the public facilities where the MoH facilities had the largest share. The knife payments also had a large share for the Green Card holders.
- 7. For the hospitalized patients the majority of the informal payments were for in kind contributions which comprised drug purchases, food, medical supplies, and expenditures for the accompanying person. These payments occurred predominantly in MoH facilities. Furthermore, Green Card holders were the major payers of informal payments in MoH facilities where they are supposed to get care free of charge.
- 8. In the public sector the poor paid more informal payments per capita than the wealthier segments of the population. The elderly also paid more informal payments per capita then the young. The unemployed also paid more informal payments per capita in the public sector then the rest. The findings were further exacerbated with the analysis of the reasons for not seeking, delaying or interrupting treatment. A significant number of people did not seek treatment for lack of money even among the insured population. For interrupting treatment, the lack of money was the main reason for 93.3% of Green Card Holders and 73.3% of the insured population

Source Kanavos et al 2005 p38

# **Table 2b: Most Urgent pricing issues in Turkey**

#### **Pricing**

- While the lowest of the five prices from a basket containing 5 EU countries appears to be a logical way of devising a pricing strategy in Turkey, the same cannot be said about the pricing methodology for generic products. The current maximum ceiling of 80% of the originator price may lead to high prices for generic products.
- The non-existence of pure generic (non-branded) products does not necessarily allow for the implementation of a robust generics policy, although, understandably, generics may still need a further vote of confidence by prescribers and patients alike.

#### Reimbursement

• Although up until recently there was no unified reimbursement system, the government is gradually implementing such a principle, working from bottom upwards. This will eliminate differences across insurance schemes and will increase equity in access by less privileged social groups, i.e. Green Card holders.

- It is unclear at this point whether the unified reimbursement system (as applied by Bağ-Kur) based on haphazard and selective price referencing yields any benefits or is robust to take account of market dynamics. Indeed, a general evaluation of this system has suggested that it may at times be cheaper for Bağ-Kur to even reimburse originator branded products than to reimburse generic versions of these products.
- It is unknown what principles guide the admission of (new) products into the reimbursement list and how robustly these are followed. There is also little information on the experts involved in reimbursement decisions and their respective contribution. Indeed, the roles and responsibilities of drug reimbursement decision makers not clearly defined.
- It appears that several medications, which should in principle be available as overthe-counter, are actually reimbursed by insurance funds. This may lead to waste of scarce resources by health insurance and could be done on a selective basis initially, before being altogether abolished (with few exceptions) in the long-run.
- It also appears that other elements of Turkish reimbursement policy are not robust; for instance, in addition to the positive list and the criteria for inclusion, our interviews suggest that there is little being done on rational drug use, on monitoring physician prescribing, audit, or drug utilisation review.

# Proxy demand-side

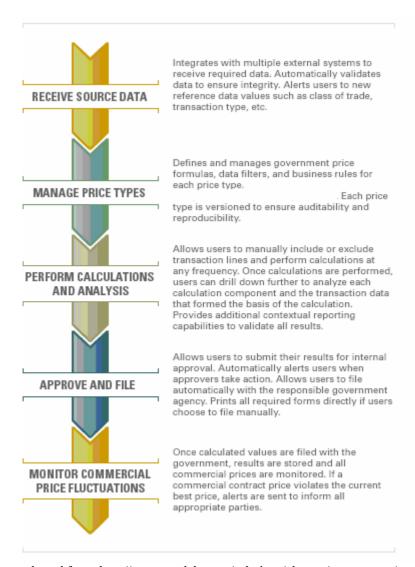
- With regards to policies influencing physician behaviour, we have identified several problems, which affect quality and appropriateness of care and may also lead to waste of scarce resources. The problems outlined below reflect the situation in physician prescribing and authorising behaviour.
- Physicians always prescribe by brand name; although pharmacists can substitute for a (theoretically cheaper) generic, the entire system may not necessarily create any savings worthwhile mentioning.
- There is a multi-tier system with some physicians also practicing privately
- Enforcement of available clinical guidelines by clinicians remains non-existent.
- Physicians and other health care professionals working in hospitals and primary care centres are considered to be civil servants and their productivity is thought to be low.
- •At the other end of the spectrum, an increase in "productivity" is thought to occur through physicians' supplementary payments. Physician authorizing behavior in hospitals is explicitly linked with the size of the hospital revolving fund, from which physicians draw a significant proportion of their salary; there is, therefore, an explicit occurrence of supplier-induced demand, which may lead to a waste of scarce resources because of the financial incentives to physicians from this practice.
- There are great challenges in terms of management team training in hospitals to run the reforms; there are currently very few, if any, hospital managers and most hospitals are run by lead physicians.

#### Pharmacies

- The "muvazaa" practice and the lack of skills among dispensers undervalue the contribution of the pharmacy profession and its role as providing, among others, proper counseling to patients.
- A further "devaluation" of the pharmacy profession is underwritten by the near complete absence of any regulation regarding pharmacy location, geographical distribution and the total number of pharmacies in the country. While this policy was probably important up until this point in order to enable more pharmacies to offer services to patients, policy makers would probably need to address the problem from now on.
- Pharmacists are paid on a regressive margin basis from health insurance funds, but they also receive (unknown but thought to be generous) discounts and free goods from manufacturers.

Source: Kanavos (2005) Page 42

Figure 1: Government Pricing at a Glance



Source: adapted from http://www.modeln.com/solutions/pharma/government/

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