

# P H A R<sub>x</sub> M A

## ISRAEL DRUG BULLETIN

### THE DRUG ECONOMY DURING PERIOD OF UPDATING THE BASKET:

#### ANALYSIS AND POLICY IMPLICATIONS

The Sick Funds rightly claim that they have very little control of their overall budget. On the income/revenue side, the government decides on the cost of the standard package of benefits (the *Sal*), based on the previous year's budget plus an automatic and inadequate adjustment for increases only in the prices of main inputs. On the expenditure side, the two major elements -- salaries and hospitals -- are subject to national agreements or government decree. In the other main area of the Sick Fund economy, drugs, the Sick Funds have more manoeuvre in influencing expenditure (over NIS 4 billion p.a.) and revenue (nearly NIS 2 billion from copayments). They have at their disposal a range of management tools on the demand side (e.g. influencing physician prescribing, copayments) and on the supply side (e.g. generic substitution, therapeutic substitution, parallel imports).

But to what extent have the Sick Funds in fact been able to exploit this extra "freedom" in managing the drug economy in the last few years? Taking into consideration that during this period they received extra (non-earmarked) funds for adding new drugs to the *Sal*, and with the aid of the latest Ministry of Health (MoH) 2001 financial audit of the Sick Funds, this article tries to answer this question. This analysis of the Sick Fund drug economy relates to drugs used in the community and does not cover those used in hospitals.

#### IMPACT OF CHANGES IN REVENUES AND EXPENDITURES

From 1998 to 2001 the Sick Funds received additional budgets from the Treasury (Table 1) for the inclusion annually of some tens of new drugs which they were obliged to provide to their members. In order to calculate the annual net impact on the drug economy of major changes in revenues and expenditures, we use the formula: additional budget from Treasury for new drugs plus extra copayments from patients less extra expenditures (purchases) on drugs. Table 1 quantifies these changes and the net impact for each of the years 2001 to 1998 and also the total for 2001-1998.

Particularly noteworthy was the modest increase in expenditure (NIS 147m) in 2001, after three consecutive years of growing expenditures. This is especially remarkable as one expected to see the impact on expenditure of new drugs added in previous years, as well as in 2001. For three out of the four years during 2001-1998 there was a net "positive" impact on the Sick Funds' drug economy. In 2001, the net impact was substantial (+ NIS 267 m); as a result the aggregate impact over the last few years was also positive and quite substantial (+NIS 216m

for 2001-1998). One could argue, that the drug economy during this period "subsidised" other parts of the Sick Fund economy.

Together Clalit and Maccabi account for over 80% of total Sick Fund membership (age-adjusted), and nearly 90% of drug utilisation. Repeating the above analysis for these Funds (Table 1), we see that Clalit also had a surplus for the same three out of four years, giving it a very substantial surplus during 2001-1998 (+NIS 353m). Maccabi managed a significant improvement only in 2001 (+NIS 81m), having belatedly made strenuous efforts to reduce its growing deficit. Maccabi has considerably tightened its policy with regard to accessibility as well its negotiating stance *vis a vis* suppliers.

**Conclusion:** This analysis suggests that the Sick Funds as a group managed their drug economy successfully, during a period when new drugs were added. This is particularly true for Clalit, which benefited substantially over this period. This raises a number of questions:

- Are the Sick Funds really spending the additional Treasury budgets on new therapies as intended? (In 1995-1997, when no extra budgets were allocated and virtually no new drugs were added, the **expenditure** on drugs by Sick Funds increased at a similar rate as that from 1998 (*PHARMA Bulletin 47B*). Without reliable information on actual expenditures on new drugs added to the *Sal*, policymakers are not be able to make informed evidence-based decisions on this crucial issue.
- To what extent are additional expenditures on new drugs being matched by an increased degree of product competition (e.g. lower drug prices) plus increased copayments from patients?

This analysis is complicated by the fact that Sick Fund data on overall drug expenditures and revenues covers also their provision of non-*Sal* drugs (i.e. over-the-counter (OTC) medicines for sale, as well as prescriptions for non-*Sal* drugs). Together these items account for considerably less than those derived from *Sal* drugs, so that it is unlikely that their inclusion here significantly alters the main findings. With the forthcoming publication of data for 2002 on the breakdown into *Sal*/non-*Sal* drug expenditures and revenues, future analysis should clarify this uncertainty. It should also be noted, though, that this analysis does not take into consideration the extra budget Sick Funds received from the Treasury for the automatic adjustment for inflation of health inputs, a part of which indexation (17%) covers drug price inflation.

## LONG TERM TRENDS IN DRUG ECONOMY

**Expenditure:** Annual growth in expenditure on drugs during the last decade continues to decline dramatically (Table 2). From a 28% annual growth before the introduction of National Health Insurance (NHI), growth in expenditure declined to only 3.8% in 2001 (-0.2% per capita, at constant prices). This is truly remarkable if one considers that hundreds of new drugs were introduced continuously since 1998, some of them very expensive.

Long-term growth in per capita expenditure at constant prices -- an indicator of growth in individual drug consumption -- is 4.8% p.a., which is about half the long-term growth trend seen during the 1970s, 1980s and early 1990s. Whereas in earlier decades the main driver behind growth in consumption was the change over to new therapies, there is some evidence in Israel and abroad suggesting that volume growth is now a major

factor. We are also in a period of relatively few breakthrough products with "blockbuster" potential. This is supported by the analysis showing that per capita consumption growth did not differ whether new drugs were added or not to the *SaI* (Table 2, 2001-1999 vs 1998-199). This modest growth in recent years (4.8%) is more typical of other countries, unlike earlier on when Israel's very high per capita growth rates put it at the top of international league tables. (Sax P, *Isr J Med Sci* 28:719, 1992).

For most periods during the last decade the growth in Clalit's drug expenditure was less than the Sick Fund aggregate (Table 2), but when allowance is made for changes in number of members this is reversed (e.g. in 2001-1999, 5.8% per capita in Clalit compared to 4.8% Sick Fund aggregate). This higher growth in per capita drug expenditure is probably a reflection of Clalit's greater share of the chronically ill in the overall population.

**Revenue from copayments:** Although the very high annual growth in pre-NHI revenues from copayments has significantly declined (Table 2), the Sick Funds are still enjoying very "healthy" annual increases in revenue in recent years (13.3% per capita during 2001-1999, at constant prices). Clalit enjoys an even higher growth rate in revenues (14.6%), again probably due to its greater share of the chronically ill, but also from growing revenue from OTC and non-*SaI* prescription medicines.

**Net costs (expenditures less revenues):** Growth in net costs have declined dramatically, in particular since 1999 (Table 2). In 2001, net costs actually shrunk, by -2.8% p.a., and by a remarkable -6.6% in per capita terms at constant prices. This contraction in per capita net costs in the Sick Fund drug economy is a reflection of their ability, particularly that of Clalit and more recently of Maccabi, to manage both the expenditure and revenue sides of the equation. **However, it is also a warning indicator of the degree to which the quality of pharmaceutical benefits may suffer at the altar of efficiency gains particularly for those least able to pay copayments for prescriptions (see also "Cost-sharing by Patients" below).**

## SHARE OF DRUGS IN SICK FUND ECONOMY

In 2001, the share of drugs in the Sick Fund economy declined, in contrast to the long-term trend (Table 3). This was particularly significant for net costs on drugs as a share of total Sick Fund expenditure, declining to only 10.4% in 2001 (cf 12.4%, 2000), a proportion not seen since the mid-1990s.

A similar trend was seen for Clalit and for the aggregate of the 3 other Funds (Table 3) (analysis, not shown here, indicates this was true for all Funds). The share of expenditure and of net costs on drugs is lowest in Clalit (16.3% and 8.4% respectively in 2001) and highest in Maccabi (not shown here) at 21.2% and 14.0%, respectively).

**Conclusion:** The decline in 2001 after a long term trend of increases in the share of drugs in public health expenditures may reflect changes in the other larger items of expenditure, salaries and hospitals. It is too early to conclude whether this decline is indicative of a significant change in trend.

## **COST-SHARING BY PATIENTS**

The long-term trend of increasing level of cost-sharing by patients continued unabated in 2001, copayments reaching 41.6% of all Sick Funds, compared to about 30% or less before NHI was introduced (Table 4). The increase in cost-sharing in 2001 was particularly steep considering there were no major across-the-board increases in MoH-approved charges. Possible explanations are increasing share of revenues derived from sale of OTC drugs, and of prescription drugs through supplementary insurance. In 2001 increased OTC sales were driven by large price increases for popular OTC brands, following the temporary removal of price controls on OTC drugs.

In 2001, cost-sharing in Clalit approached almost 50%, and at the time of writing it may well be that Clalit's patients on average are paying more than half of the actual purchase cost of drugs. Leumit continues to lag behind in its ability to raise drug revenues from its members (26.1% cost-sharing in 2001, not shown here).

In 2001, for the first time data was made available allowing analysis of cost-sharing for SaI-only drugs (Table 5). This shows that cost-sharing on SaI medications was just over 30% for all Sick Funds, almost 35% for Clalit (these may be an underestimation -- see footnote to Table 5).

**Conclusions:** This level of cost-sharing by patients is in conflict with the MoH requirement that Sick Funds should levy about 15% as copayment. The difference results mainly from the fact that Sick Funds, in particular Clalit, purchase drugs at prices much less than the maximum price agreed by the MoH and on which patients' copayments are calculated. Furthermore, Clalit's patients unlike those of other Funds, do not benefit from weakening drug prices, especially when a much cheaper generic version is introduced, a fact that is obscured by Clalit's confusing and opaque method of calculating copayments (*'manot'*).

In an earlier bulletin (***PHARMA Bulletin 47B***) we noted that whereas the average Israeli, compared to his/her counterpart in other western countries, voluntarily spends a relatively low amount on OTC drugs, he/she is obliged to fork out a relatively high amount on prescription medicines, which are supposedly a reimbursable benefit after having paid health insurance tax.

## **IMPLICATIONS**

### **For the Overall Sick Fund Economy**

Financial transparency between different sectors of the Sick Fund economy is an essential requirement for policy analysis. As noted earlier, the Sick Funds have an unusual degree of freedom concerning their management of the drug economy. In the light of their success in this area, perhaps it is time to consider how Sick Funds could benefit from having greater freedom and manoeuvre in the management of other sectors of their economy, particularly on the expenditure side.

## **For Updating the *Sal***

In view of the financial gains made by the Sick Funds in managing their drug economy, even during a period when many new and expensive drugs were added to the *Sal*, it is perhaps time that the government and Sick Funds together reconsider their inflexible stance with regard to the addition of new drugs. **Patients needing the latest proven therapies should enjoy the fruits of the Sick Funds' success in managing the drug economy.**

In the first place, those drugs that the MoH forecasts as not requiring extra budgetary resources should be **automatically included** throughout the year. The Sick Funds could have a formal consultative role in this process. If subsequently the Sick Funds provide evidence that a particular drug nevertheless involved extra expense, then the MoH should consider this evidence.

For many of those drugs which the MoH forecasts to involve extra expenditures and for which the Sick Funds receive additional (non-earmarked) budget annually, there are claims by industry that Sick Fund purchases often do not match these allocations year after year. The data analysis above (Tables 1 and 2) provides support to this claim. In the light of this, it ought to be incumbent upon Sick Funds to take the initiative and to add carefully selected new drugs that are supported by quality evidence of clinical- and cost- effectiveness. At the same time, there should be a government commitment to **subsequently** reimburse them with extra expenditure so incurred, subject to stringent examination of data provided by them.

Furthermore, there are a few drugs, which although not particularly cost-effective (provide only limited benefit to critically ill patients at high cost), that, **nevertheless**, should be included for **equity** considerations. Patients should receive these medications, perhaps on a named patient basis, using resources from a special fund. This was the basis of proposals made by the MoH's Ombudswoman for the NHI and supported by the former Minister of Health Rabbi Nissim Dahan, but were eventually rejected by senior MoH officials and by Clalit. Some of the drugs, often erroneously described as "life-saving" drugs by the media and interest groups, would fall within this category.

Finally, acceptance by the main parties of a more flexible approach to the funding and addition of new drugs to the *Sal*, should pave the way to the Treasury finally agreeing to regular adjustment of the cost of the *Sal* for increase in population.

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**Table 1: Impact of Changes in Drug Revenues and Expenditures in Sick Funds  
(million NIS)**

	<i>2001</i>	<i>2000</i>	<i>1999</i>	<i>1998</i>	<i>Total 2001-1998</i>
<b>Additional budget</b> (Treasury/new drugs) (A)	195	255	150	150	750
<b>Additional revenue</b> (patient copayments) (B)	219	209	264	128	820
<b>Additional expenditure</b> (C)	147	597	378	232	1354
<b>Net impact (all Funds)</b> (A+B-C), of which	+267	-133	+36	+46	+216
<b>Net impact (Clalit)</b>	+181	-89	+185	+76	+353
<b>Net impact (Maccabi)</b>	+81	-46	-54	-10	-29

**Table 2: Trends in Sick Fund Economy: 2001 (% change) and Selected Periods  
(% change, annual average)**

	<i>Total</i>				<i>Per Capita in Real Terms</i> <i>(age-adjusted, at constant prices)</i>			
	<i>2001</i>	<i>2001-1999</i>	<i>1998-1995</i>	<i>1994-1992</i>	<i>2001</i>	<i>2001-1999</i>	<i>1998-1995</i>	<i>1994-1992</i>
<b>Change in expenditure</b>								
Sick Fund aggregate	3.8	10.2	15.8	28.0	-0.2	4.8	4.8	11.0
Clalit	4.2	9.7	13.4	24.4	1.8	5.8	5.2	9.8
<b>Change in revenue</b>								
Sick Fund aggregate	15.0	19.4	15.8	34.5	10.6	13.3	4.7	16.7
Clalit	16.2	19.1	14.5	36.1	13.1	14.6	6.1	20.2
<b>Change in net costs</b>								
Sick Fund aggregate	-2.8	5.4	15.9	25.5	-6.6	0.0	5.0	8.9
Clalit	-5.1	3.8	12.8	19.3	-7.0	0.2	4.6	5.2

**Table 3: Share of Drugs in Sick Fund Economy (%)**

	2001*	2000	1999	1998	1997	1995	1994	1992
<b>Expenditure as % of total expenditure</b>								
Sick Fund aggregate	17.8*	18.2	17.2	17.6	16.8	14.7	14.3	15.5
Clalit	16.3	16.5		15.0	15.4	13.4	12.6	14.0
3 other Funds	19.9	20.5		19.6	19.4	17.3	17.9	19.1
<b>Net costs as % of total expenditure</b>								
Sick Fund aggregate	10.4*	12.4	11.6	11.8	11.6	9.9	10.0	11.3
Clalit	8.4	9.3		9.3	9.9	8.4	8.2	9.3
3 other Funds	13.6	14.5		14.6	14.8	12.7	13.8	14.5

\* In 2001 for the first time the Sick Funds reported breakdown data on the expenditures for providing services within the *SaI* only. The share of expenditure on *SaI* drugs only as percent of total expenditure was .5%, whereas the share of net costs on *SaI* drugs was 10.8%.

**Table 4: Patient Cost-Sharing: Ratio of Drug Revenues to Drug Expenditures (%)**

	2001	2000	1998	1997	1995	1994	1992
<b>All Sick Funds</b>	41.6	37.3	32.6	30.7	32.8	30.1	27.2
<b>Clalit</b>	48.7	43.6	37.9	35.6	36.9	34.8	29.0
<b>Other Funds</b>	32.6	29.4	25.4	23.8	26.9	23.1	24.1

**Table 5: Patient Cost-sharing: Ratio of *SaI* Drug Revenues to *SaI* Drug Expenditures in 2001 (%)\***

<i>All Sick Funds</i>	<i>Clalit</i>	<i>Maccabi</i>	<i>Meuhedet</i>	<i>Leumit</i>
30.3.	34.6	23.7	29.5	22.7

\* The denominator "*SaI* drug expenditure" includes all overheads, even though an undefined part of them may be attributed to providing non-*SaI* medicines. This potentially underestimates the true ratio of *SaI* drug revenues to *SaI* drug expenditures.