PUBLIC PRIVATE PARTNERSHIP IN HEALTH. WHAT IS ITS EFFECT ON THE PERFORMANCE OF THE HEALTH SECTOR?

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Abstract

There is an increasing awareness that public funding of private health institutions, albeit limited, should be justified by clear returns for the system. The Government of Uganda has provided subsidies to PNFP Hospitals since 1997/98. Hence the question: what is the effect of public private partnership on the performance of the sector? The following questions were posed: what kind of evidence exists that access has increased, that quality is improving and that provision of public health services has increased?

Data from all 27 UCMB Hospitals were obtained and analysed retrospectively for the years 1995/96 to 2000/01.

The findings show that the provision of Government subsidies has allowed these Hospitals to preserve their function against a deepening crisis, to improve access to patients (both in terms of increased utilisation and decreased fees), to improve the quality of services and increase the volume of public health activities. It is possible to state that a large proportion of the Hospitals in the PNFP sub-sector is positively responding to the support received, is honouring the commitments it had taken and is giving a positive contribution to the performance of the Country's health sector.

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Introduction

In 1987 the Uganda Health Policy Review Commission recommended the integration of public and private health sector in a larger, pluralistic, national health sector[1]. In the Government White Paper of 1993[2], the recommendation made by the Health Policy Review Commission is stated as an objective. In two subsequent occasions, three years later, the Catholic and Protestant Medical Bureaux submitted a memorandum to the Ministry of Health[3], reminding the Ministry about the urgency to address the recommendation of the Commission and of the White Paper. Among others, the Bureau's memoranda stated the commitment of the sector they represented (the PNFP sector – private not-for-profit sector) to pursue the national policy objective. They altogether stated that the sub-sector was edging towards a crisis that would deprive it of the possibility to contribute to the achievement of the objectives of their Mission and the Country health objectives, thus nullifying the investment made along decades in an important component of the Country health system. The process of the development of a policy for public-private mix has recently been documented elsewhere[4]. The immediate result was the Government decision to re-instate subsidies for the PNFP sub-sector. The first allocation from Government Budget occurred during FY 1997/98 and aimed at addressing the situation of crisis in few hospitals. The following year subsidies increased and were extended to all the PNFP Hospitals. In the course of a "Budget Conference"[5] the Ministry clarified that the subsidies provided were aiming at addressing the critical situation of the hospitals, but also at encouraging hospitals to improve access to care, the remuneration of their staff and the provision of public health services. In the following years the subsidies substantially increased from the original 1 B Ug Sh to 10.8 B Ug Sh of the current financial year and extended, in FY 1999/2000 also to Lower Level units.
A more extensive exposition of the purpose, rationale and objectives of the partnership between Public and Private in Health is provided in a specific draft Policy[6] that is now undergoing a wider consultative process at decentralised level. The policy draft encompasses the entire private sector and provides specific policies for the different types of private health providers (PNFP, Private Practitioners, Traditional and Complementary Medicine Practitioners). At the moment only the specific policy for the PNFP institutions has been completed. This document states clearly that improved access and better quality of health care are objectives of the partnership[7].

Statement of the problem

There is increasing awareness and concern that the performance of the Health Sector in Uganda is not up to the desirable and desired[8]. There is increasing awareness that public funding of private health institutions, albeit limited, should be justified by clear returns for the system. Hence the question in the title: what is the effect of public private partnership on the performance of the sector? This paper cannot give an exhaustive answer to a question thus formulated. The private sector is wider than the PNFP sector; the word "effect" needs better qualification. It can, instead, provide initial answer to the question whether or not, four years after subsidies were first introduced, the PNFP

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health sub-sector is responding according to the stated objectives of the partnership and the aim of the subsidies provided. If the answer were positive, the assumption would hold true that the PNFP sector is giving its contribution to the improvement of the whole sector's performance. It can also provide initial answer whether or not there is evidence that the situation of crisis observed by the PNFP sector is being addressed.

Methodology

1. Approach

There is ample anecdotal evidence that the sector is positively responding to the policy objectives. Nonetheless the study team opted for a comprehensive approach based on the analysis of a set of parameters over time for a large sample of units.
Extensive retrospective information on activity, finance and staffing levels could be obtained only from UCMB database. This could limit the representativeness of the study. However these Hospitals account for 64% of the PNFP Hospitals in the Country and could well tell the general trend of the effect of subsidies for the entire PNFP health sector.
The information obtained from all 27 UCMB Hospitals was analysed. It is not possible to provide, at this moment, a similar analysis for Lower Level Units (support to Lower Level units started two years after hospitals, the flow of subsidies has been erratic, the capacity of LLU to provide exhaustive and reliable information is still limited).

2. Source of data, period and sample

The information is obtained on regular basis from the Health Management Information System and each Hospital is requested to provide a summary report on a standard format each year. This information refers to activities, finance (income and expenditure by source/line item), staffing. Data are stored and analysed in a standard Version of Excel 97.
The database of UCMB provides information for all the 27 affiliated Hospitals (100% of UCMB Hospitals and 64% of PNFP Hospitals) for the period 1995/96 to 2000/01.

3. Parameters

Activity outputs

The following parameters were utilised: Inpatients, Outpatients, Deliveries, ANC, Immunisations. Given the fact that the data collected were drawn from the routine information system it was not possible to expand the outputs of activities to more than the 5 parameters listed. This therefore creates an assumption that the Hospitals produce only these 5 outputs. This is not true; however, given the fact that this is an analysis of trends, conclusions are still relevant. A composite indicator of activity (Standard Unit of Output for Hospitals– SUO(h)) was calculated by attributing to each output a relative weight. The weight attributed to each parameter was worked out on the basis of costs drawn from the literature[c],[d],[e].

[c] Barnum H. and Kutzin J. 1991. in the grey literature examined 1 Ip day would equal to 4 Op. Given that in the PNFP Hospitals studied the ALOS is 6.9 days, 1Ip would be equal to 24 to 28 Op.
[d] Flessa S. 1997. The first report of the study conducted by Flessa in the Lutheran Hospitals in Tanzania, found that 1 Ip day equals to 2 Op. Therefore according to Flessa 1 Ip would equal 12-14 Op.
[e] Giusti D. 1993. – unpublished - The author conducted a cost analysis in Matany Hospital: in terms of cost 1 Ip would equal to 15 Op. Eventually this latter weight was adopted because it was closer to the finding of Flessa. The weight proposed by Barnum was drawn from cost analysis in Hospitals from higher income Countries. In addition a relative weight was attributed also to Deliveries = 5 Op, Immunisations = 0.2 Op and ANC/MCH/FP activities = 0.5 Op. The formula for the calculation of SUO(h) would result: 1 SUO(h) = [15*Ip + 1*Op + 5*Del + 0.2*Imm + 0.5*ANC/MCH/FP]. If this

Finance

The data utilised were the following:

- Total income
- Income from fees
- Income from Delegated Funds/PHC Conditional Grants
- Total expenditure
- Expenditure for personnel cost.

All financial information was analysed both unadjusted and corrected for the positive rate of time preference and inflation, thus giving all moneys in 1995/96 constant value. The discount rate of 5% (currently recommended by analysts) and the inflation rate of 5% (average observed in Uganda) were used in the calculation of the discount factor[9]. Most results refer to the unadjusted values, as do the conclusions of the study. It is anyway interesting to take into account corrected values for considerations of broader scope.

Staffing

The total number of qualified staff and of non-qualified staff for each institution at mid-year was utilized.

Working questions

A set of working questions have been identified at the outset:

1. -What kind of evidence exists that access has increased?

To answer this question these parameters were used as best proxy:

- Total SUO(h)
- Average fees per SUO(h)
- Total income from fees.

2. -What kind of evidence exists that quality is improving?

This question is answered by the number of qualified staff in the sector as the best proxy. In addition the average remuneration of the staff employed (qualified and non-qualified) was also observed.

3. -What kind of evidence exists that provision of public health services has increased?

To answer this question the number of immunisations provided by the sector was utilised.

Results

1. Access

Utilisation

The total output of Hospitals shows a marked decline from 1995/96 and reaches its minimum in 1997/98. From that year SUO(h) started increasing again following a steady trend. Total output decreased 15% in two years (from 95/96 to 97/98) from 3.8 M SUO(h) to 3.3 M SUO(h) and increased 12% in the following three years from 3.3 M SUO(h) to 3.7 M SUO(h) (Graphic 1).

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formula were to be applied to LLU the relative weights would need to be different. As time goes by more results from cost analysis are becoming available. This will allow attribution of more precise relative weights to each output.

Fees

Fees paid by patients for one SUO(h) increased from 1,274 Ug Sh in 95/96 to a maximum of 2,405 Ug Sh in 97/98 (+88% in three years) and started declining steadily to reach 1,996 Ug Sh in 2000/01 (-17% in two years). When these values are discounted the fees paid by patients for one SUO(h) are now lower than in 1995/96 (1,225 against 1274 Ug Sh). (Graphic 2)

Income from fees

Total income from fees went from 4.9 B Ug Sh in 95/96 to 8.2 B Ug Sh in 98/99 (+67%in three years) and thereafter started declining to reach 7.4 B Ug Sh in 2000/01(-11% in two years). Discounted amounts show a net decline of income from user fees from 4.9 B Ug Sh to 3.5 B Ug Sh. (Graphic 3)

2. Quality

Number of qualified staff

The number of qualified staff went from 1,820 in 95/96 to 2,086 in 2000/01. A clear drop in the number of qualified staff is visible in year 1999/00, in correspondence of the recruitment by Government. The situation has apparently been corrected and improved in the following year. (Graphic 5)

Average salary of staff

It was not possible to obtain the average value of the salary for qualified staff. Information on the cost of staff is also missing for the first two years of the period. The datum presented refers to the average cost salary of all staff (qualified and non-qualified). It increased from about 114,668 Ug Sh in 1997/98 to about 182,388 Ug Sh (59% in three years, about 20% per year). (Graphic 5). A positive trend is observed also if time-adjusted values are used.

3. Provision of Public Health Services

The proxy used to indicate the involvement of hospitals in PHC activities is the number of immunizations provided. This dropped between 1995/96 (-36%) and the following year and since then is in slow but steady increase (+22%). (Graphic 6)

Discussion

The interpretation of the results gives clear answers to the questions posed at the beginning of the study.

1. Access:

The crisis observed by the sub-sector in 1996 is proven by the information obtained. In those years utilisation was dropping fast and reached its minimum in 97/98. It is remarkable that in the following three years utilisation has almost reached the 1995/96 levels. Financial access, as demonstrated by the average fees paid for SUO(h) has improved: non discounted values show that fees have increased 56% in 5 years, dropping steadily after the 1998/99 peak (- 17% since 98/99). Constant 1995/96 values show that average fees now are lower than in 1995/96. The response of the sector to the subsidies receive has been immediate immediate. (Graphic 2) As a matter of fact it is quite clear that Delegated Funds have dislodged User fees as source of income. The trend showed by the cumulative income from fees and delegated funds has a slightly diverging gradient from that of total income, this latter being steeper[f]. (Graphic 4). It is therefore clear that

[f] The fact that the cumulative income from delegated funds and user fees is growing less than the total income witnesses the capacity of the sector to mobilise other resources for the financing of the service provided at subsidised rates. Total income and total expenditure are almost equal (financial reports

the original purpose for which subsidies were provided (addressing the crisis) has obtained its result. In addition, in the following years, subsidies were provided to increase access (both in terms of improved utilization and improved financial access): in both cases results are evident. Access is improving and is attributable to the amounts of delegated funds. It may be said further that delegated funds are dislodging user fees as local source of income.

2. Quality

If the absolute number of qualifies staff is accepted as "best proxy" for quality the answer, also in this case, is clear. Quality is improving. It is also interesting to note that indeed in 1999/2000 the trend was reversed (arguably as an effect of the massive recruitment of qualified staff by civil service) and the following year new staff were recruited to fill the losses and restore the original trend. Also in terms of staff remuneration the improvement is quite clear. A second reason why subsidies were provided was the improvement of the quality of services. Also in this case there is sufficient evidence that the sub-sector is responding positively.

3. Provision of public health services.

The answer to this question is less straightforward. In the first instance the database does not capture the entire variety of public services provided. It is only last year that the HMIS started including some more indicators of PHC activities (e.g. no. of outreaches). Therefore there is no baseline datum from where to start. The only datum for which information extends for the entire period of observation is the total number of immunizations. While it is clear that hospitals tended to withdraw from PHC services during the crisis, it is altogether clear that these services are progressively increasing once again. Also in this case it is possible to say that the sub-sector is fulfilling the expectations and responding to one of the intentions for which subsidies are provided.

Conclusion

For four years GoU has provided subsidies to the PNFP health sub-sector with clear objectives: 1) preserving the function if the sub-sector against a deepening crisis, 2) improving the accessibility of the sub-sector, 3) improving the quality and 4) encouraging the sector to re-commit to the provision of public health components of the Minimum Health Care Package (MHCP). From the analysis of the data available it is possible to state that a large proportion of the Hospitals in the PNFP sub-sector is positively responding to the support received and is honoring the commitments it had taken. If due consideration is given to the fact that the baseline indicators for the monitoring of the HSSP targets have been established in year 2000/01, it is also possible to state that the sub-sector is giving a positive contribution to the achievement of the HSSP targets and therefore improves the performance parameters of the health system.

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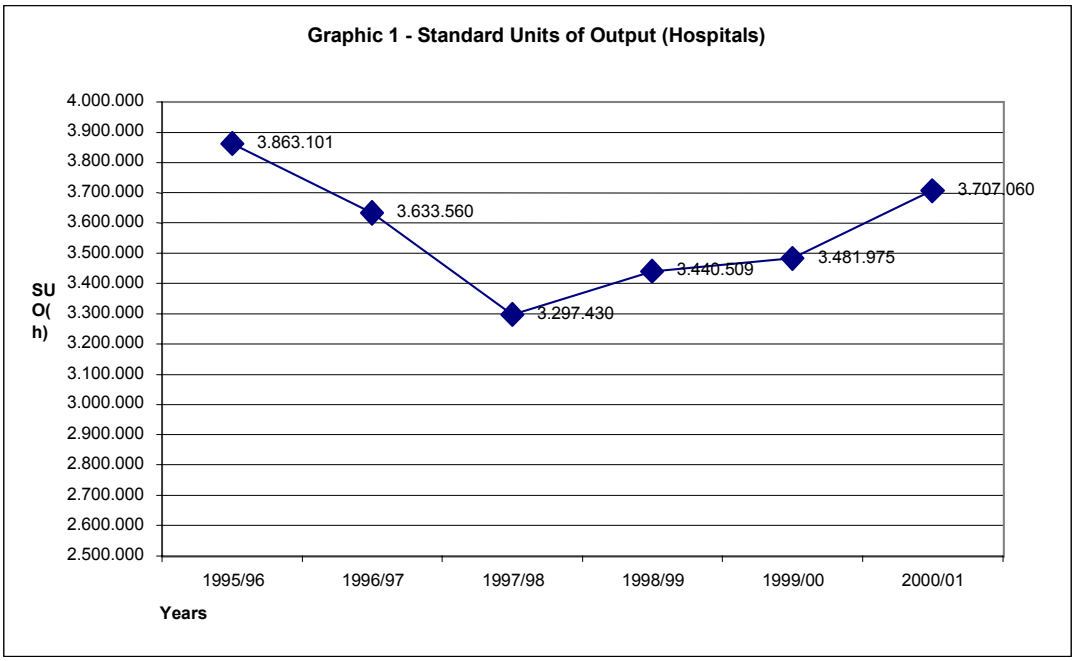
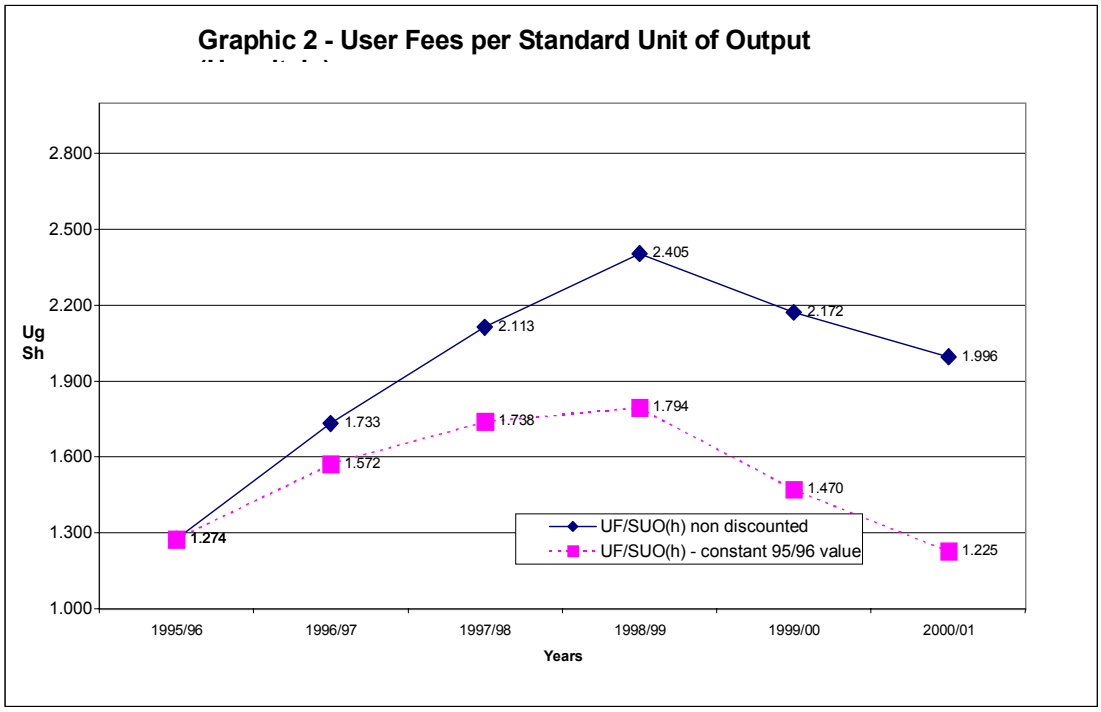
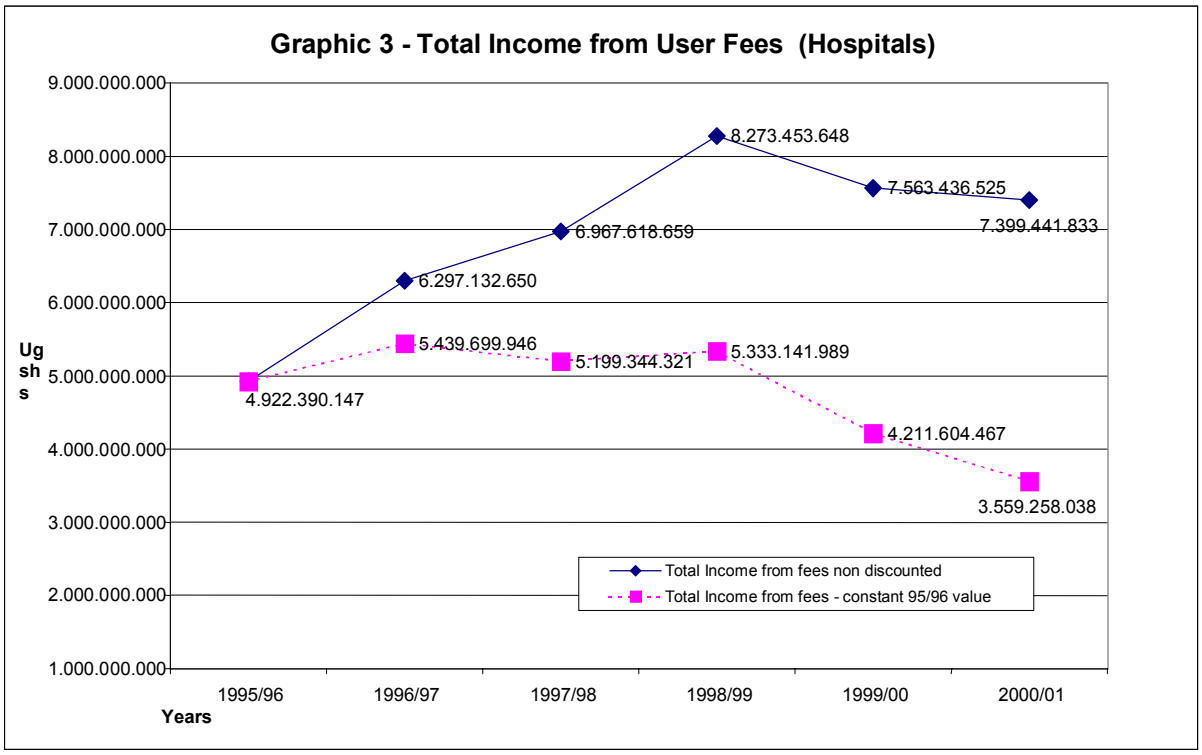
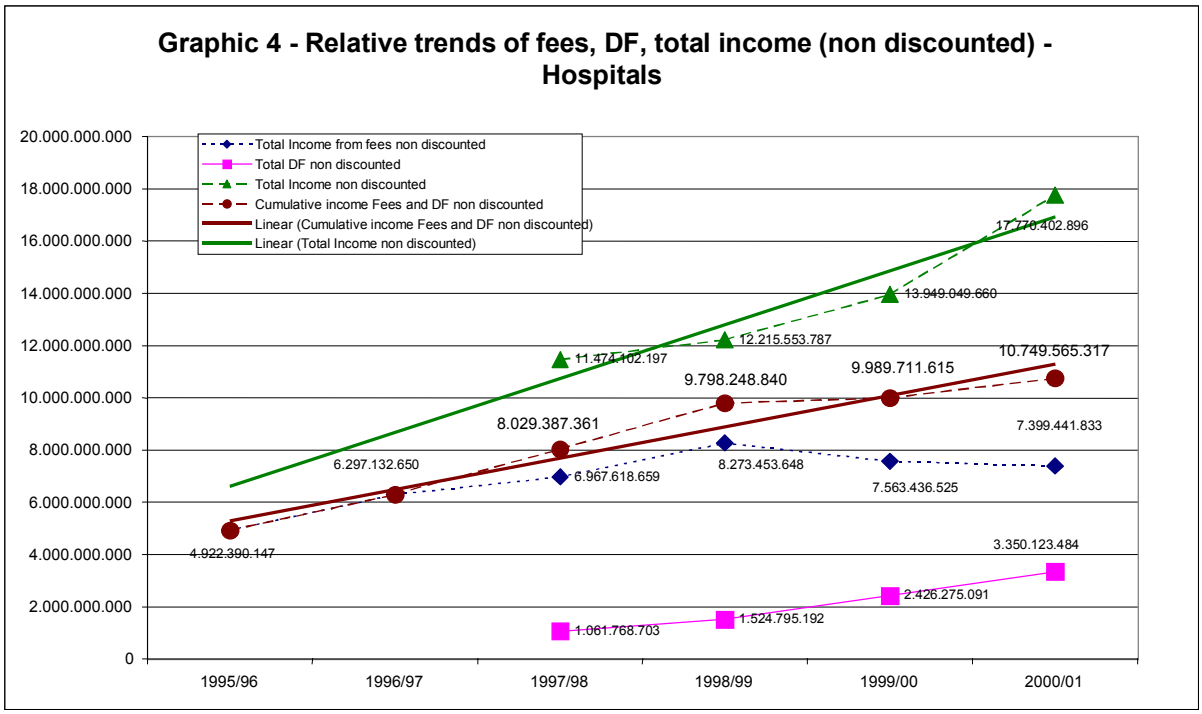
show minimal losses some years and minimal surpluses other years) as it is pertinent for a sector that does not aim at making profit but at securing operations with a balanced budget.

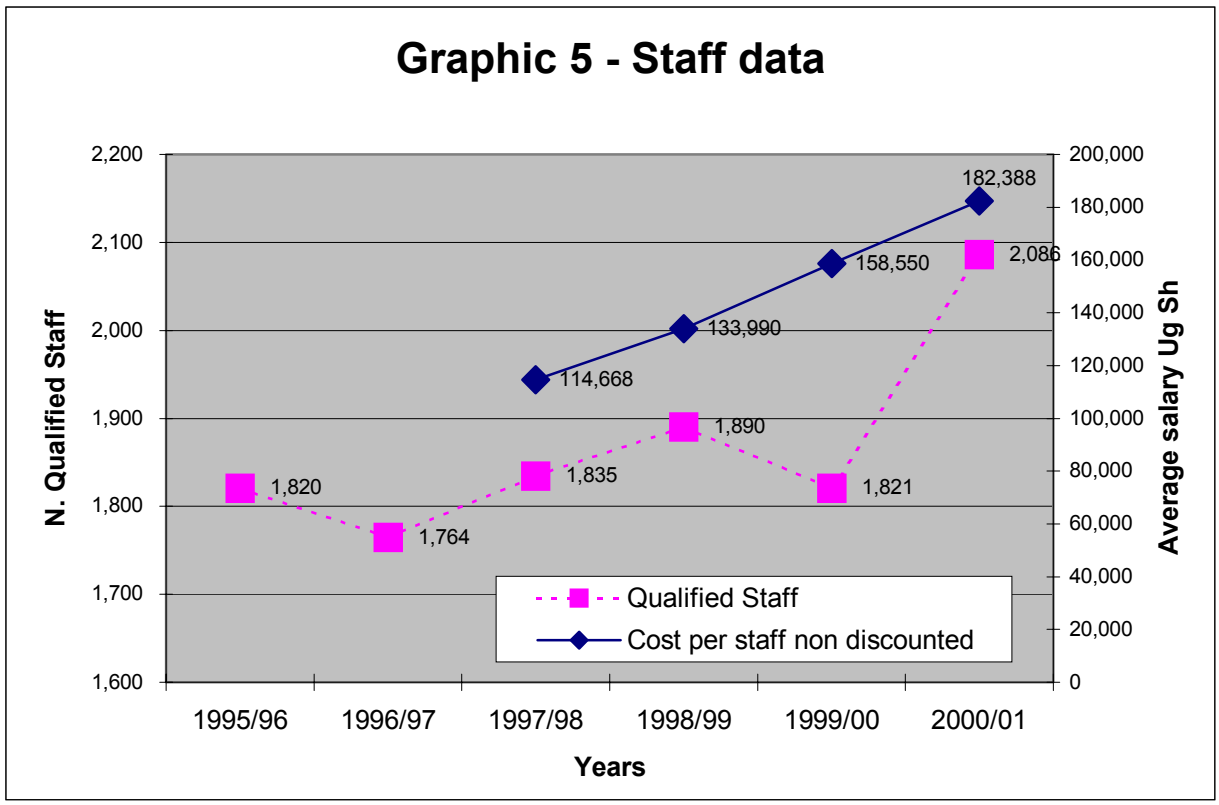
GRAPHICS

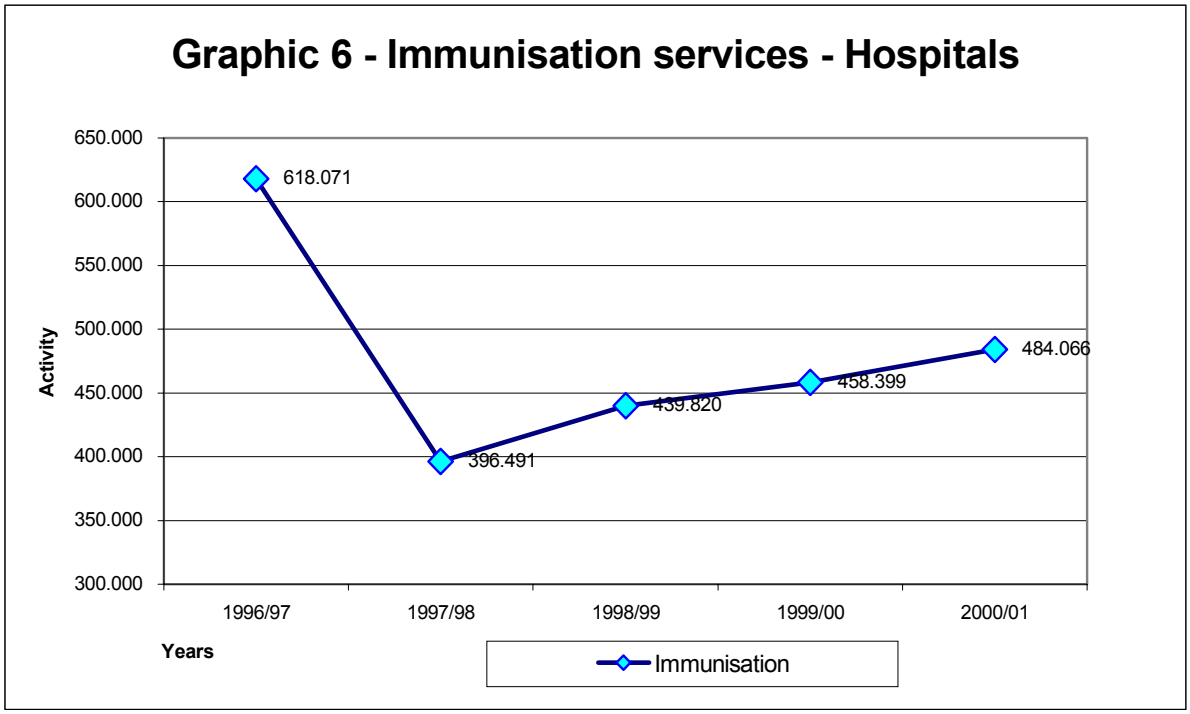

Graphic 1 - Standard Units of Output (Hospitals)
4.000.000
3.900.000
3.800.000
3.700.000
3.600.000
3.500.000
3.400.000
3.300.000
3.200.000
3.100.000
3.000.000
2.900.000
2.800.000
2.700.000
2.600.000
2.500.000
SUO(h)
3.863.101
3.633.560
3.297.430
3.440.509
3.481.975
3.707.060
1995/96
1996/97
1997/98
1998/99
1999/00
2000/01
Years


Graphic 2 - User Fees per Standard Unit of Output
2.800
2.500
2.200
1.900
1.600
1.300
1.000
Ug Sh
2.405
2.172
2.113
1.996
1.733
1.738
1.794
1.572
1.470
1.274
1.225
UF/SUO(h) non discounted
UF/SUO(h) - constant 95/96 value
1995/96
1996/97
1997/98
1998/99
1999/00
2000/01
Years


Graphic 3 - Total Income from User Fees (Hospitals)
9.000.000.000
8.000.000.000
7.000.000.000
6.000.000.000
5.000.000.000
4.000.000.000
3.000.000.000
2.000.000.000
1.000.000.000
Ugshs
8.273.453.648
7.563.436.525
7.399.441.833
6.967.618.659
6.297.132.650
5.439.699.946
5.199.344.321
5.333.141.989
4.922.390.147
4.211.604.467
3.559.258.038
Total Income from fees non discounted
Total Income from fees - constant 95/96 value
1995/96
1996/97
1997/98
1998/99
1999/00
2000/01
Years


Graphic 4 - Relative trends of fees, DF, total income (non discounted) - Hospitals
20.000.000.000
18.000.000.000
16.000.000.000
14.000.000.000
12.000.000.000
10.000.000.000
8.000.000.000
6.000.000.000
4.000.000.000
2.000.000.000
0
Total Income from fees non discounted
Total DF non discounted
Total Income non discounted
Cumulative income Fees and DF non discounted
Linear (Cumulative income Fees and DF non discounted)
Linear (Total Income non discounted)
17.770.402.896
13.949.049.660
12.215.553.787
11.474.102.197
10.749.565.317
9.989.711.615
9.798.248.840
8.029.387.361
7.399.441.833
6.297.132.650
8.273.453.648
6.967.618.659
7.563.436.525
4.922.390.147
3.350.123.484
2.426.275.091
1.524.795.192
1.061.768.703
1995/96
1996/97
1997/98
1998/99
1999/00
2000/01


Graphic 5 - Staff data
2,200
2,100
2,000
1,900
1,800
1,700
1,600
N. Qualified Staff
200,000
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Average salary Ug Sh
182,388
158,550
133,990
114,668
2,086
1,890
1,835
1,820
1,764
1,821
Qualified Staff
Cost per staff non discounted
1995/96
1996/97
1997/98
1998/99
1999/00
2000/01
Years


Graphic 6 - Immunisation services - Hospitals
650.000
600.000
550.000
500.000
450.000
400.000
350.000
300.000
Activity
618.071
396.491
439.820
458.399
484.066
1996/97
1997/98
1998/99
1999/00
2000/01
Years
Immunisation

BIBLIOGRAPHY

[1] Health Policy Review Commission. 1987. Report.
[2] Ministry of Health. 1993. White Paper on Health Policy Review and Update. Entebbe.
[3] UCMB and UPMB, 1996. Resolutions and recommendations of Medical Superintendents and Senior Administrators of UCMB and UPMB Hospitals, Kampala
[4] Birungi H, Mugisha F, Nsbagasani X, Okuonzi S, Jeppson A. 2001. The policy on public-private mix in the Uganda health sector: catching up with reality. Health Policy and Planning. 16: 80-87.
[5] Ministry of Health. 1998. Report On Budget Conference For Private Not For Profit (PNFP) Hospitals. Kampala
[6] Ministry of Health. 2001. Draft Policy on the Public Private Partnership for Health. Kampala
[7] idem. 2.4 part 2
[8] Uganda Health Bulletin. Vol.7 n.4
[9] Drummond F. et al. 1998. Methods for the Economic Evaluation of Health Programmes, Oxford Uiversity Press. 74