Reducing health care costs — potential and limitations of local authority health services

C. B. IJSSELMUIDEN, C. DE BEER

Summary

Local authorities (LAs) currently provide preventive and promotive services. It is argued that, by extending the role of the LA to the provision of comprehensive services, including ambulatory and hospital curative care, both the quality and the cost-effectiveness of health care would be improved.

Making health care the responsibility of the LA would minimise fragmentation, allow for the provision of a number of services that currently are neglected because they fall through the gap that exists between preventive and curative services, and result in the more effective use of personnel currently restricted to providing preventive care only.

LAs offer an appropriate structure for effective community control over the health services, and are more likely to be sensitive to local needs and demands. In addition, their administrative proximity to other LA departments responsible for housing, town planning and parks and recreation allows for an effective multisectoral approach to health.

The positive aspects of LA care can only be achieved in the context of racially integrated services provided by an LA elected by universal adult franchise. Smaller LAs may need to be grouped together in larger units for the purpose of achieving satisfactory economies of scale in the provision of health care.

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This article is a study of the current and potential roles that local authority (LA) health departments can play in providing a better health service for the country, at a lower cost than either the current or a private care model. The obstacles to fulfilling this role will be highlighted, and recommendations made. We focus in particular on the possibilities for reducing fragmentation and providing more appropriate care through expanding the role of the LA health services.

The main thrusts of the recommendations are the devolution of the control of health services to structures directly representing the health service users, and the integration of preventive and curative services. In this way direct political accountability can probably replace the financial incentives of privatised medical care as the driving force for an effective and efficient health service.

This study is a conceptual one and not a detailed cost-effectiveness study, although it is hoped that this paper will initiate more detailed cost analyses in the future.

For purposes of this paper the terms LA and LA health department will be used to indicate economically and professionally viable local or regional government structures with direct accountability to local ratepayers. The realistic structure for this concept may be found in the regional services councils, provided that direct accountability to users is not lost.

Johannesburg City Health Department and Centre for the Study of Health Policy, Department of Community Health, University of the Witwatersrand, Johannesburg
C. B. IJSSELMUIDEN, F.F.C.H. (C.M.) (S.A.)
C. DE BEER, B.A.

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'State Health' indicates the Department of National Health and Population Development and the various 'own affairs' health departments unless otherwise specified, and 'province' is used to indicate the directorates of hospital and community health services of the four provincial administrations.

The potentials and limitations of LAs in reducing health care costs, while at the same time improving the quality of care, are described by studying the currently existing deficiencies in health care delivery in South Africa. If it is not stated explicitly, it will be implicit that change from the current system to one where services will be provided by LAs will result in cost reduction and quality improvement.

Reducing fragmentation

The health services in South Africa are fragmented in many ways. The most important from the point of view of cost-effectiveness are: (*i*) fragmentation by health legislation; (*ii*) fragmentation by race; and (*iii*) fragmentation by public and private ownership of services. Each contributes independently to increasing the costs of health care, and each will be examined separately.

Fragmentation of public health services by legislation

In terms of the Health Act (No. 63 of 1977) LAs have been designated to provide preventive, promotive, and community rehabilitative services in their areas of jurisdiction. Incidental curative or other services may be delegated to LAs by State Health or by Province, on the basis of partial or total reimbursement for the provision of such services.

Province has been designated to provide hospital and outpatient services and, recently, also laboratory services and community health services in areas where no LAs are operative, the so-called 'Section 30 areas'.

State Health provides services for patients with chronic mental illness, school health, tuberculosis, family planning and sexually transmitted diseases. In addition, State Health is responsible for national health planning and the monitoring of standards.

There is, therefore, an almost total split, with curative services on the one hand and promotive, preventive and rehabilitative services on the other. This has three main cost-increasing consequences.

Curtailing 'non-core' expenditure

In the face of ever-present pressures to reduce spending, the services on either side of the 'curative/preventive divide' are likely to effect budget reductions first in areas that are perceived to be the responsibility of 'the other'. This results in increasing gaps in services, specifically in those services that combine elements of both preventive and curative care, leading to increased expenditure of both sides to maintain health standards.

A case in point is the hospital liaison programme of the Johannesburg City Health Department. In this programme

community health nurses visit mothers and their newborns in hospital to introduce the available services, and to arrange for a follow-up visit shortly after discharge at the home of the mother.

The hospital visit greatly reduces problems relating to tracing of persons after discharge, provides for an immediate assessment of potential problems with the newborn (breast-feeding and nutrition, child care, immunisation) and offers the opportunity to assess socio-economic problems such as alcoholism, unemployment and poor housing. This programme is the basis of the virtual 100% vaccination coverage and the disappearance of the major infectious childhood diseases in Johannesburg,[1] and has probably effected major savings in health care costs by reducing hospitalisation of newborns for nutritional, diarrhoeal and respiratory diseases. In 1986, in the framework of a rationalisation programme, it was recommended that this service be stopped since hospital contacts were not legally required. To maintain vaccination coverage and service utilisation by those who need it, extra staff time must now be spent on tracing mothers. The consequent reduction of home visits has reduced the preventive potential of these contacts. The expenditure on increased hospitalisation will probably never be measured.

Another example of an expensive reduction in 'non-core expenditure' is the virtual total absence of post-discharge home-nursing in South Africa. This activity could either be seen as an extension of curative work, and therefore be the responsibility of Province, or as community rehabilitation, and thus be the responsibility of an LA health department. Neither authority is currently providing this service, causing unnecessarily prolonged hospitalisation and hence increased health care expenditure.

Reducing preventive expenditure

The 'curative/preventive divide' created by the Health Act has perverted the axiom that 'prevention is cheaper than cure'. This axiom is not necessarily always valid. However, because the preventive and curative budgets are separated this axiom should currently read 'prevention is more expensive than non-prevention'. Increases in preventive expenditure in the LA's budget cannot be balanced against potential savings in curative expenditure in provincial or State budgets. It is therefore difficult to motivate for increased expenditure on preventive services without ever being able to show concomitant savings to the LAs.

This is a contributing factor in the non-implementation, or incomplete implementation, of the following potentially cost-beneficial interventions by LA health departments (Table I).[2-16]

The potential savings from effective implementation of these programmes may be enormous. In the USA, it is estimated that lack of effective influenza immunisation alone causes approximately 33 000 excess deaths and 172 000 excess hospitalisations at an approximate cost of $600 million during moderate epidemic years.[9] South African specific data are lacking, but the known high prevalence of most of the conditions on this list make it inevitable that the implementation of appropriate preventive measures will result in substantial savings in terms of hospitalisation costs, morbidity and mortality.

Suboptimal use of manpower and facilities

The 'curative/preventive divide' leads to suboptimal use of manpower and facilities. Health manpower training has both preventive and curative components, but because of the 'divide' those working in the curative sector cannot engage to a significant extent in preventive activities and vice versa, even though some have the necessary skills to do so. A typical situation is the 'immunisation clinic' in which LA health staff can immunise children, but can do nothing to remedy a cold, a rash or skin infection other than referring the child to another medical practitioner.

TABLE I. COST-SAVING PREVENTIVE INTERVENTIONS

Screening
Hypertension
Hypercholesterolaemia
Diabetes mellitus
Cervical cancer
Breast cancer
Colon cancer
Glaucoma
Intestinal parasites
Immunisation
Influenza
Pneumococcal disease
Hepatitis B
Mumps
Rubella
Meningococcal meningitis

Facilities used by city health departments could often easily accommodate primary care curative services, but, at present, public curative services do not use these facilities. The net result of the suboptimal use of manpower and facilities is an increased cost to health care providers due to both duplication and under-utilisation of staff and facilities, and an increased cost to health care consumers in terms of extra time and expenses involved in travelling to separate facilities.

In addition, the extensive infrastructure available to LA health departments is often situated in the less affluent sections of their areas of jurisdiction. This means that these are often more accessible, specifically to poor consumers, than provincial, State or private health care facilities. A further reduction of health care costs specifically in terms of direct costs to poor consumers could therefore be achieved by LAs providing comprehensive health services.

Fragmentation of health services by 'race'

The health services in any LA area in which more than one population group, as defined in the Population Registration Act (Act No. 30 of 1950), resides are not only divided on curative/preventive lines but are also divided on the basis of 'colour'. For Johannesburg, for example, this means that the responsibility for public health care provision is divided among four State Health departments, the Transvaal Provincial Administration, the City Health Department, and, to some extent, the two semi-independent 'management committees' for the Asian and 'coloured' areas — eight authorities altogether.

Although the detail may differ for other LAs, there is no place in the country where the provision of all health care is the responsibility of only one authority, with the exception of the so-called homelands.

Besides the confusion it creates among health care consumers, this situation is leading to extensive duplication of and gaps between services. The duplication is most clearly demonstrated by the virtually empty Johannesburg, South Rand and J. G. Strijdom Hospitals, while health authorities of 'other colour' must build new hospitals, such as the planned new Soweto Hospital and Lenasia Hospital.

Obvious gaps in services are also present. The most clear example of 'colour-induced' gaps in services is the total lack of ante- and perinatal services for black people living in Johan-

nesburg. The explanation for this is that blacks are supposed to live in Soweto, and therefore to deliver in Soweto. Because the Transvaal provincial health authorities apparently plan their services on this *de jure* situation rather than on the *de facto* situation, antenatal services for blacks have not been provided at any of the provincial hospitals in Johannesburg.

The role of the LAs is clear. Having the facilities, skills and manpower available, LAs could, at no great increase in cost, provide antenatal services for anyone in their area of jurisdiction.

Fragmentation of health services by public and private sectors

The fragmentation described above is further enhanced by a multitude of private clinics and hospitals. This has two important cost-increasing effects.

Absence of a comprehensive health database

One of the main tasks of any LA is to provide promotive and preventive health services. It therefore needs accurate information on disease epidemiology from the curative sector. The multitude of private hospitals and clinics, the reluctance of private health care providers to publish morbidity and mortality data, and the lack of profit emanating from the process of data collection in private hospitals combine to make it virtually impossible to establish a comprehensive health database for any municipal area. This hampers preventive planning, and is likely to increase curative needs as well as the costs of preventive measures.

Lack of efforts in non/low-profit activities

Non-profit health interventions are, in general, anathema to profit-orientated, private health care providers, while low-profit interventions take a low priority. Examples of failure of the private practitioners or hospitals to provide services that should logically be provided by them and must now be provided by LA health departments at additional costs include immunisation, especially at birth, health education, and various screening programmes. Although private medical care providers could be reimbursed for some of these preventive activities, such as immunisation and screening programmes, others, such as health education and home visits for risk assessment, are likely to remain low-income activities and will therefore not be implemented.

Providing appropriate services

The Alma Ata Declaration of the World Health Organisation states, in summary form, that health services should be structured so as to maximise involvement of the users in the planning and provision of the services, and in such a way that the services are accessible, and appropriate, to local needs.[17]

The two generic concepts contained in this declaration are *accountability* of health services to the users, and *appropriateness* in relation to local needs.

Of all public health structures in South Africa, LA health services can come closest to this ideal. There is a direct link from resident to ward councillors, and from the ward councillor to the Medical Officer of Health. This is potentially an effective mechanism of community involvement in health care.

It is therefore not surprising that some of the larger city health departments provide evening and weekend clinics to accommodate working mothers and mobile clinics for the homeless, and that environmental health problems are investigated and acted upon in a matter of days.

In contrast to this direct accountability of LA health departments are the positions of State Health and the provincial authorities. In both cases, and especially in the latter, which comprises no elected members whatsoever, there is little opportunity for health care users to influence policy, certainly not in relation to local health issues.

In addition to the accountability of the services, which is a strong force in making services more appropriate, the appropriateness of health services is further encouraged by the staffing of LA health departments. Both field staff and managerial personnel are likely to have an in-depth knowledge of local geographical, demographic, economic and social conditions. This will encourage the finding of locally appropriate solutions as opposed to the rigid application of general standards by provincial authorities. Because an LA health department can respond sooner and more appropriately, its interventions are likely to be more cost-effective, timely and relevant.

It is difficult to prove that accountable and appropriate health services are more cost-effective. However, since accountability of the health service will lead to more appropriate services, and since the 'appropriateness' of the service indicates the use of resources to effect maximum benefit, there is a clear conceptual link. Furthermore, because of the relative closeness between ratepayer and health budget, health expenditure is more likely to be critically examined by the users.

There are, however, two major impediments to optimal accountability of LA health departments. Firstly, only those who can vote have direct access to ward councillors. Ratepayers who cannot vote, either because of skin colour or because of foreign nationality, have less influence, if any at all. Secondly, many LAs will be so small that even with the best of intentions they cannot fulfil their constituents' requests.

Promoting a multisectoral approach to health care

Looking at health in a wider perspective, there is no doubt that both in developed and underdeveloped communities factors outside the health service can contribute more to the improvement of health status than health care alone.

An excellent example of the importance of linking into these other services is provided by the Queens Boulevard Pedestrian Safety Project in New York.[18] Epidemiological investigation of a dangerous route demonstrated that an extraordinary proportion of pedestrian casualties were caused at a specific section of the route, and that the mean age of these casualties was much higher than elsewhere. By combined action between various local authority departments visibility of pedestrians was increased, education was provided, and traffic lights were changed, all of which resulted in a significant drop in casualties.

In an LA, there are direct links between the departments of health, traffic, town planning, parks and recreation, housing and other relevant departments. In addition to this, the LA health departments themselves have environmental health sections, which provide services relating to hygiene and the control of pests and of soil, water, noise and air pollution. The services that LA health departments can provide, or can link to, are therefore in line with the concept of a comprehensive, multisectoral approach to health.

The multisectoral approach is further encouraged by the intimate familiarity of LA health departments with local health needs and local health and welfare organisations. This increases the comprehensiveness of the services available, and reduces costs by preventing duplication and enabling voluntary organisations to offer services that would otherwise not be available.

There can be little doubt that increased integration of services provided by governmental, profit and non-profit organisations and of research can lead to a major, but not easily quantifiable, decrease in health care costs. The cost-containment potential of the easier link to sectors outside the health sector parallels the potential cost savings of integrating

preventive and curative services. In fact, it is a logical extension of the preventive domain.

The other health service structures are unable to integrate services to the same extent. State Health's links with other sectors impacting on health are much more indirect, probably because of the lack of direct accountability of State departments to local health consumers. This applies even more so in the case of the provinces.

The private sector's contribution to health is, for obvious reasons, not comprehensive. No profit-orientated health organisation in South Africa has yet claimed to provide a comprehensive health programme with the health of its constituents as an expressed goal. Neither are cases known of the managements of private (for profit) health organisations engaging in campaigns to reduce smoking, for example.

Attracting manpower

The shortage of nursing staff in provincial hospitals is very topical. Among the most important reasons given is remuneration. However, in spite of providing a similar remuneration package to the Transvaal Provincial Administration, city health departments generally have no difficulty in attracting nursing and environmental staff.

There is, however, a problem in filling medical and managerial posts because of the scarcity of suitably qualified community health specialists and the limits imposed on salaries paid to council employees by the Remuneration of Town Clerks Act (Act No. 115 of 1984). This Act fixes all salaries of council employees in relation to the salary of the town clerk, which in turn is determined by the size of the municipality. Although this arrangement provides for reasonable incomes for employees of larger municipalities, most small LAs will not be able to attract medical staff. As one consequence, only 13 of the more than 800 LA health departments in South Africa have a full-time medical officer of health (Johannesburg, Soweto, Pretoria, Germiston, Benoni, Bloemfontein, Welkom, Cape Town, Kimberley, Port Elizabeth, East London, Durban, and Pietermaritzburg).

To comply with the Health Act, the other LAs employ a part-time medical practitioner for medical functions, but their health departments are *de facto* headed by a health inspector or registered nurse. Consequently almost all preventive and promotive services in South Africa, outside the 'homelands', are managed by health inspectors or nurses rather than by community health specialists.

It is difficult to isolate the reasons for the relative ease of attracting nursing staff, and to some extent medical staff, into LA health departments. However, it is thought that a combination of the following factors contribute: (*i*) LAs are small and provide opportunity for individual professional growth and job satisfaction; (*ii*) the staff take part in the process of planning, executing and evaluating their work rather than performing in only one of these areas; (*iii*) the staff has the opportunity to be involved in a wide scope of health care rather than the narrow technical field alone; and (*iv*) there is no fear of being transferred, unlike provincial and State structures where this may be used in a punitive manner or for disciplinary reasons.

Although these arguments are not intended to detract from demands for better pay currently made by many in the health sector, it seems that the cost-saving effects of LA health care in terms of staff costs may be achieved by replacing remuneration as a major factor in creating job satisfaction with factors that are more directly related to effective and efficient health care provision.

Recommendations

To achieve the potential cost savings outlined in this paper, and at the same time to improve the quality of health care, the following proposals are made:

1. LA health departments should be given the reponsibility for *all* local health care, i.e. (*i*) primary health care — preventive/promotive, curative, rehabilitative; (*ii*) community hospitals, health centres, clinics and mobile units; and (*iii*) health and social welfare services for the indigent, aged, disabled, homeless, street children, etc.

2. That the role of State and Province changes to: (*i*) adequately subsidising LA health departments; (*ii*) increasing their role in the setting of target health outcomes and monitoring these, with minimal interference in the processes by which these are achieved, so that innovative, locally appropriate schemes can be started; and (*iii*) educating and informing the peripheral health departments to ensure 'continuing preventive medical education' for the country as a whole.

3. That the Remuneration of Town Clerks Act be amended to allow medical staff and specialists in community health to be employed in all LA health departments.

4. That LA health departments be grouped together, in situations where LAs are too small to provide high-quality services. The medical officer of health could then be elected/chosen by the participating city councils. The regional services councils may present the most economically and professionally viable grouping. However, lack of accountability to the municipal electorate as well as their constitution on the basis of racially divided municipalities still have to be addressed.

5. That, in view of the overriding importance of accountability in making LA health departments appropriate and responsive to local needs, all residents in LA areas must be able to exercise control over LAs and LA health departments by means of universal adult franchise.

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