Developing a plan for primary health care facilities in Soweto, South Africa. Part I: Guiding principles and methods

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The new political era in South Africa offers unique opportunities for the development of more equitable health care policies. However, resource constraints are likely to remain in the foreseeable future, and efficiency therefore remains an important concern. This article describes the guiding principles and methods used to develop a coherent and objective plan for comprehensive primary health care facilities in Soweto. The article begins with an overview of the context within which the research was undertaken. Problems associated with planning in transition are highlighted, and a participatory research approach is recommended as a solution to these problems. The article goes on to describe how the research methods were developed and applied in line with the principles of participatory research. The methods were essentially rapid appraisal techniques which included group discussions, detailed checklists, observation, record reviews and the adaptation of international and local guidelines for service planning. It is suggested that these methods could be applied to other urban areas in South Africa and elsewhere, and that they are particularly appropriate in periods of transition when careful facilitation of dialogue between stakeholders is required in tandem with the generation of rapid results for policy-makers.

Introduction
The maldistribution of health care resources in South Africa between urban and rural areas, between previously government-defined racial groups, and between the public and private sectors, has been well documented (Centre for the Study of Health Policy 1989; Rispel and Behr 1991; Henry J Kaiser Family Foundation 1991). The new political era in the country offers unique opportunities for more equitable health care policies to be formulated and implemented. However, access by the health sector to new resources will be limited by the competing needs of other sectors, such as housing and education. A challenging task facing those concerned with the planning and provision of health services will thus be the achievement of equity through efficient means.

In 1992 the authors were requested to assist in the development of a plan for public primary health care facilities in Soweto (Centre for Health Policy, Chris Steel Architects and Rosmarin and Associates 1994). Soweto is a largely black urban township with an estimated population of between 1.2 and 1.6 million people, and is situated 20 km south-west of the centre of Johannesburg. The brief of the research team was to: determine where new facilities are required because current services are absent or inadequate; identify existing facilities which require upgrading or even closing down; and recommend the order in which improvements should be made over a period of 10 years.

While this brief was fairly straightforward, the context in which the planning had to occur was one of heightened political tension and uncertainty. From the outset the research team were aware that their role would have to include the facilitation of dialogue between the various stakeholders affected by the project, so that the final plan would be widely understood and accepted, unlike so many developed by external consultants. This article, the first of a two-part series, describes how the methods adopted by the research team were shaped, and sometimes constrained, by the broader political context.

The article begins by analyzing the political context in some detail. Problems associated with planning in transition are highlighted, as are the limitations
imposed by the existence of fragmented, and often duplicated, services. The article goes on to describe the principles adopted by the project team to guide the planning process. The last part of the article describes the general research methods which were consequently applied by the project team. A second article (Part II) will discuss the objective criteria which were developed and applied to the situation in Soweto in order to finalize the facility plan. Thus, Part II concentrates on technical, rather than political, aspects of planning (Doherty et al. 1996).

The context of health care provision in Soweto

The legacy of fragmented health services

One of the general characteristics of government health services in South Africa is the large number of authorities involved in the financing and provision of care. Systematic and integrated planning is impeded by the diverging functions, overlapping spheres of responsibility and rivalries of these authorities. It is worthwhile dwelling for a while on the fragmented nature of health care provision in Soweto in order to appreciate why the research team embarked on a lengthy, sensitive and often repetitive process of consultation with each of the existing structures.

At the time of the research, public primary health care services in Soweto were provided by five different authorities. Three local authorities were responsible mainly for preventive care (such as child immunization and growth monitoring) but also for limited curative care (namely, the treatment of patients with tuberculosis and sexually transmitted diseases). Two provincial directorates were responsible for family planning, antenatal care, maternity services and most forms of curative care. In addition, the Johannesburg local authority was involved in providing care to the residential areas bordering on Soweto. Referrals from the primary care clinics were received by an academic hospital, Baragwanath, on the outskirts of Soweto. Another authority, the Department of National Health and Population Development, did not provide services directly but was the major funder of the local authorities. The Central Witwatersrand Regional Services Council funded capital expenditure in the region, especially for the construction of new clinics, and it was this body which requested and funded the research project.

Table 1 summarizes the public sector authorities involved in primary health care delivery in Soweto in 1992. Monthly attendances during 1991 averaged 38 000 at local authority clinics and 80 000 at provincial clinics, with attendances at individual clinics ranging from as few as 1500 to as many as 10 700 per month. Approximately 12 000 babies were delivered and 97 000 district home nursing visits were performed.

Uncertainty created by the period of transition

At the time of the research, the health authorities in Soweto were experiencing considerable political instability. In 1990, the Minister in charge of health care had announced that preventive and curative primary care services falling under provincial and 'own affairs' departments would be consolidated under local authorities (Centre for Health Policy 1992). While the decision had been welcomed for its potential to limit fragmentation, facilitate intersectoral co-operation and strengthen community involvement in health services, in practice the transfer of curative services to the local authorities had seen little progress by 1992. Procedures for the achievement of service consolidation, especially mechanisms for the transfer of authority and funds, had not been clearly defined by the national health department, and the managerial capacity of local authorities to assume their new responsibilities had been called into question.

The devolution of services required joint planning between the various health authorities, but planning efforts were marred by a lack of experience as well as the considerable suspicion with which the various authorities regarded one another. Practical issues such as the reconciliation of the different terms of employment of the various health authorities had not been resolved. Health workers expressed concerns about future salaries, chances of promotion and the security of pensions consistently - sometimes to the exclusion of priority health service problems - during the course of the project. The anxiety concerning material interests was fuelled by the largely negative experiences of health personnel during the previous three decades of health service restructuring by the apartheid government.

Further uncertainty was introduced into the health services by the progress, or lack of progress, of the political negotiation process. National negotiations were far from resolution, but even more important was the uncertain outcome of local discussions on the creation of a transitional democratic metropolitan government. The Central Witwatersrand
Table 1. Public health authorities involved in primary care provision in Soweto, 1992

<table>
<thead>
<tr>
<th>Public authority</th>
<th>Services offered</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Department of National Health and Population Development</strong> (regional office)</td>
<td>Services are delegated to City Health departments Subsidizes City Health departments Administers some capital expenditure for satellite clinics</td>
</tr>
<tr>
<td>Central Witwatersrand Regional Services Council</td>
<td>Funds capital expenditure</td>
</tr>
<tr>
<td><strong>Transvaal Provincial Administration: Hospital Services</strong></td>
<td></td>
</tr>
<tr>
<td>- Soweto Community Health Centres</td>
<td>Family planning Adequate and chronic illness diagnosis and treatment Trauma Health education Social work Maternity services Phototherapy X-ray services Rehabilitation services Psychology Outpatients' department Casualty Labour ward</td>
</tr>
<tr>
<td>- 11 clinics (excluding 1 burned down)</td>
<td></td>
</tr>
<tr>
<td>- Baragwanath Hospital</td>
<td></td>
</tr>
<tr>
<td><strong>Transvaal Provincial Administration: Community Services</strong></td>
<td></td>
</tr>
<tr>
<td>- School health team</td>
<td>School health services Psychiatric services Oral health services Family planning Health education</td>
</tr>
<tr>
<td>- Services at some Community Health Centres</td>
<td></td>
</tr>
<tr>
<td>- 1 'container' clinic in Doornkop</td>
<td>Primary health care outside the official area of Soweto</td>
</tr>
<tr>
<td><strong>Diepmeadow City Health Department</strong></td>
<td>Child health (immunization and growth monitoring) School immunization Family planning Health education Tuberculosis treatment Sexually transmitted diseases Rheumatic heart disease Social workers Home visits Services for the elderly Environmental health services</td>
</tr>
<tr>
<td>- 1 clinic in Diepkloof</td>
<td></td>
</tr>
<tr>
<td>- 1 clinic in Meadowlands</td>
<td></td>
</tr>
<tr>
<td><strong>Dobsonville City Health Department</strong> (service managed by Roodepoort City Health)</td>
<td></td>
</tr>
<tr>
<td>- 1 clinic in Dobsonville</td>
<td></td>
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<tr>
<td>- 1 satellite clinic</td>
<td></td>
</tr>
<tr>
<td><strong>Soweto City Health Department</strong></td>
<td></td>
</tr>
<tr>
<td>- 9 clinics (excluding 1 burned down) in Soweto</td>
<td></td>
</tr>
<tr>
<td>- 5 satellite clinics</td>
<td></td>
</tr>
<tr>
<td><strong>District Surgeon Services</strong></td>
<td>Ex-officio duties include medical examination of any cases referred by the state, examination of clients for disability grants, and examination for mental illness. Medico-legal activities include examination of rape victims and cases of child abuse, assault, and drunken driving</td>
</tr>
</tbody>
</table>

*These services are not delivered at every clinic. Except for maternity cases, these services tend only to be provided from the four largest clinics, sometimes referred to as 'mother' clinics.  
#Provide follow-up treatment for cases diagnosed by primary care providers.
Metropolitan Chamber had been established in 1990 as a forum for the discussion of political, constitutional and other matters affecting the future of the Central Witwatersrand area (which includes Soweto). The Chamber created a Health Task Team and charged it with the development of local policies for the delivery of appropriate, non-racial primary health care services to the Chamber's constituent communities. During the course of the project, negotiations reached a deadlock and, following the withdrawal of some members, the talks were temporarily suspended. Such developments had a negative impact on morale in the health services especially as, except for the most senior managers, health workers had a confused understanding of the Chamber, its activities and the proposed changes to the local health services.

The health sector also witnessed intense strike action during the course of the project. This strike action took place against a background of general political unrest, including national stay-aways. Poor labour relations heightened the tension and distrust between health service managers on the one hand and ordinary health workers on the other.

Violence
Criminal violence in the area was a factor causing tensions and anxiety of another sort amongst health care personnel. Staff were concerned about their safety as several clinics had been attacked, vandalized or burgled in the recent past. For example, one clinic experienced 6 burglaries in an 8 week period during 1992. Another clinic was totally destroyed by a fire-bomb attack. Staff performing outreach services in the communities consistently felt under threat of hi-jacking and, as women, many feared the possibility of rape. Several health workers mentioned anxiety concerning the safety of their families at home. The constant spectre of violence appeared to affect the health workers' concentration and commitment, and many seemed preoccupied with issues of short-term survival rather than with the longer-term planning of viable health services.

Community participation in the period of transition
During 1991 and 1992, various calls were made by anti-apartheid groupings to end unilateral restructuring (that is, the restructuring of social services by the then minority government without the participation of other major role players). The development of a plan for primary health care facilities, while initiating a process of more objective planning in the area, could potentially have been seen as an attempt to restructure unilaterally. It was therefore crucial that the Soweto Civic Association (SCA), which is widely regarded as representing the community in Soweto, should be involved in the project to ensure that any new health service plan would have both legitimacy and the widest support. However, Civic members had serious concerns about being involved in planning jointly with the local authorities whom they believed had colluded in previous Apartheid planning. The situation was complicated by a lack of familiarity with health services on the part of health care authorities and health workers on the one hand and members of the Civic Association on the other hand.

Dealing with political constraints: a participatory research approach
At the beginning of the project the research team was thus confronted with health workers and community members who were preoccupied with broader political issues and suspicious of the research team's intentions. The mandate and authority of the team were ambiguous given that it had been contracted by only one of the several stakeholders in health care in Soweto.

The value of attempting to develop a rational and objective plan under these circumstances could be questioned. Yet the research team felt that the invitation to facilitate change as neutral outsiders was extremely opportune. Given the absence of policies for integration, and of any meaningful dialogue between the various actors, the formulation of coherent policies for integration and service development was crucial.

The research team painstakingly involved all stakeholders in the research process; an approach developed to diffuse conflict which could have arisen around the project. This participatory research approach had been developed by the researchers in the course of other projects since the unbanning of the African National Congress in early 1990, and is documented in detail elsewhere (Doherty and Rispel 1993). It builds on the concepts of community participation and stakeholder analysis explored in the international literature (Werner 1980; Rifkin 1986; Patel and de Beer 1990; Pan American Health Organization 1990; Hadorn 1991; Askew 1991).

The principles implied by the participatory research approach are:
• Research will only be undertaken if the research team has free access to all staff and information, and if the findings of the project will be made public.
• The research process will be inclusive, and all stakeholders (and people of all levels of seniority within each organization) will be drawn equally into a cooperative research effort.
• The research team will endeavour to remain impartial, sharing all information with each stakeholder but protecting individuals by keeping the source of sensitive information confidential.
• The research project will be overseen by a technical committee on which all stakeholders, including the community, are represented.
• The research team will report its findings not only to the client who has commissioned the work, but also to a bona fide body representing all stakeholders (in the case of this project, the Central Witwatersrand Metropolitan Chamber).
• The research team will put effort into building the capacity of the various stakeholders so that their contribution to the research process will be meaningful.
• Although the research team will document political and personnel issues raised by the stakeholders during the course of the research, the research team will limit its recommendations to the original brief (in the case of this project, the development of a facility plan).

The major implication of adhering to the above principles was that the research process was very time-consuming, taking approximately 12 months to complete. About half of the field work was dedicated to achieving effective participation. This impacted on the cost of the research project itself, and also had cost implications for the different stakeholders in terms of the time spent participating in discussions. A costing study of another large project estimated that the economic costs of participation could have been as much as 14% of the total project cost, including stakeholder costs (Doherty et al. 1991). It is likely that the costs of participation were even higher in the Soweto project. Another problem was that the researchers had to accept delays in the research programme (such as those caused by personnel crises) in order to respond with sensitivity to the needs of the stakeholders. Nevertheless, with hindsight the participatory research approach proved to be essential for dealing with the many uncertainties, both political and personal, which plagued the community of Soweto.

The overall methodology used in developing the facility plan

This paper has discussed how the approach to the research task was fundamentally shaped by the context in which the research took place. The following section details the research methods which were employed within the overall strategy of participatory research in order to fulfil the brief of the research team. The description of the methods includes a considerable amount of detail in order to emphasize the time implications of participatory research.

The choice of methods was influenced by the number of existing clinics in Soweto (24), the time available to complete the study (approximately 12 months), the amount of researcher time available (approximately 1.5 full-time equivalents for the duration of the project), and the need to feed information into local policy discussions around the restructuring of health services. The methods can be divided into 6 distinct categories: negotiations with health care authorities; a clinic-based component; a series of group discussions with various interest groups and role players to complement the clinic-based component; meetings with health care consumers; workshops to develop recommendations; and the application of objective criteria.

Negotiations with health care authorities

The initial process involved in-depth discussions with the various health authorities providing services in Soweto. Separate meetings were held because of sensitivities concerning the future roles of these authorities. The objectives of this initial process were: to ensure that the various authorities understood the project and its implications; to enlist their commitment to, and participation in, the project; and to obtain authorization to visit the clinics. A detailed explanation was given of the proposed methods and comments were invited on the overall research approach.

The clinic-based component of the research

All of the 24 existing clinics in Soweto were visited and evaluated. The clinics were not sampled because of the many differences between clinics. It was also important to involve all stakeholders at clinic level to ensure that the outcome of the evaluation would receive wide support. Two researchers spent approximately two days at each clinic (although this time was divided between several visits) and an architect spent half a day. The clinic-based component of the research included the activities described below.
Introductory meetings
Each clinic visit began with an introductory meeting with the clinic management. These meetings usually coincided with the regular administrative meetings in an attempt to cause minimal disruption to the clinic routine. The objectives of this meeting were: to familiarize clinic staff with the background and objectives of the research project; to gain the confidence of staff; to explain the proposed methods; and to receive input on the appropriateness of the research approach.

An information leaflet was produced which emphasized the principles adopted by the research team. These principles stressed: the importance of participation by both staff and community members in the research and in developing the recommendations; the need for involvement of both the current and future providers of health services to ensure that plans are implemented; and the maintenance of confidentiality, whilst ensuring that the results of the project would be freely available.

Staff interviews
Detailed group interviews were conducted with staff at each of the health care facilities. A copy of the interview schedule was left behind during the introductory meetings, and a suitable time was set to conduct the interview unhurriedly. Junior and senior staff members were interviewed separately to minimize conflicts and to ensure that people were not inhibited in expressing their opinions. The purpose of the staff interviews was to gather factual information as well as to elicit the opinions of staff concerning facility-linked problems. Questions were structured around the staffing complement of the clinic, the services offered by the clinic, problems experienced by staff, geographical access to the facility, perceptions concerning the integration of preventive and curative services, and recommendations for service improvement. The qualitative information generated through this process was analyzed and summarized into themes, and contributed to the final list of recommendations.

Physical analysis of the facility
The researchers were accompanied by a senior member of the clinic staff who conducted a guided tour of the clinic buildings and grounds. Detailed facility checklists were completed by both the researchers and the architect. The purpose of these checklists was to highlight problems of design, space, structure and infrastructure, as well as to identify the improvements that are required.

Record reviews
Clinic registers were reviewed in order to discover the geographic distribution of patients attending the clinic. The purpose of the review was to corroborate the subjective experience of the clinic staff. A systematic random sample of addresses appearing in child health, family planning, tuberculosis, curative care, antenatal care and delivery service records was taken. A sample was drawn from each of these services and consisted of at least 100 records and reviewed a period of at least four months.

Area tours
The researchers were familiarized with the circumstances of communities surrounding each clinic through guided tours of these areas.

A series of group discussions
A list was generated of all the professional and other interest groups that are involved in different components of primary care service delivery in Soweto and who were not accessed through the clinic visits. These groups included head office staff, administrative staff, environmental health officers, rehabilitation therapists, social workers, school health nurses, educators, pharmacists, dentists and private general practitioners. Each of the group discussions was preceded by an introductory meeting to explain the purpose of the study. This was followed by an in-depth interview focusing on services offered, problems experienced, perceptions of the integration of services, and recommendations for service improvement. The qualitative information generated through this process was analyzed and summarized into themes, and contributed to the final list of recommendations.

Meetings with health care consumers
Several strategies were employed to achieve community participation. Initially the researchers attempted to elicit the opinions of patients through the administration of a structured individual or group interview with patients seeking care in the clinic. This proved to be difficult in practice and consequently only one group discussion and 30 to 40 individual patient interviews were conducted at two clinics. A drawback of this method is also that it does not allow the opinions of community members who do not use the clinics to be canvassed.
Two meetings with groups of community members in different parts of Soweto were organized on weekends but were very poorly attended, due to many other activities in the community generated by the political transition. At one meeting, the community members who attended were mostly young males who did not have much experience of public sector facilities. In addition, many health workers attended this meeting as community members and volunteered most of the information. Often this information was positively biased towards the health workers and the quality of care they deliver.

Following these experiences, the researchers decided to use the Soweto Civic Association (SCA) as the sole means of accessing public opinion. Whilst the SCA is not representative of the entire community, it is the largest representative body and provided the best channel of communication with the community. Prior to the commencement of the project, the SCA had been consulted for their comments on the proposed study and to enlist their support and participation. As the research progressed the researchers were referred by the Civic Executive to its health representatives, who subsequently provided most of the Civic’s input to the project. The SCA also attended meetings of the technical committee, which included all the health service authorities and was set up by the research team to provide guidance for the project.

During the second half of 1992, the SCA established a Health Forum with representatives from each component township of Soweto. This provided a more formal and structured mechanism with which to achieve community participation. Several workshops were held with the Health Forum. The initial workshops were mainly to explain the nature and structure of health services and outline some of the problems. As the Forum became better acquainted with the research team, the researchers were often requested to provide ‘technical inputs’ prior to the Civic’s meetings with health care authorities as part of their on-going negotiations. This tested the researchers’ ability to remain impartial and objective during the course of the project. As the Forum’s members became more skilled and confident of their knowledge concerning health service issues, their contribution to the planning process increased.

**Workshops to develop recommendations**

Feedback to staff was seen as an important component of the study. Information gathered through the clinic-based component of the research was compiled into draft reports (without recommendations) which were circulated to the clinic managers of each health care authority. This was followed by a workshop with senior staff members from each clinic as well as area nursing service managers. Separate workshops were conducted with staff from the different authorities. The objectives of the workshops were: to receive feedback on individual clinic reports; to give staff an opportunity to contribute to the process of developing recommendations; and to develop consensus on a prioritized list of recommendations.

Importantly, the research team also played an integral role in facilitating a three-day planning workshop at which representatives from the various health care authorities and the SCA were present. This was the first time that the various stakeholders had set about planning Soweto health services jointly. The workshop concluded by establishing a Health Matters Group to coordinate future planning efforts. The proceedings of the meeting constituted a formal decision to embark on the process of restructuring health services in the area (Proceedings of the Greater Soweto Health Services ‘Bosberaad’ 1993).

**Setting objective criteria**

The information gathered through the clinic-based research, workshops and other interviews, while invaluable, was in most cases subjective. It was important for the project team to supplement this subjective information with more objective planning tools. Criteria for the location and size of clinic facilities were developed on the basis of local and international experience. These criteria commented on the maximum distance that a person should live from a primary health care facility and the optimal size of a clinic’s catchment population, and made the distinction between different packages of primary health care, ranging from basic to more specialized or expensive services. The development of these criteria and their application to achieve equity and efficiency in a prioritized facility plan are described in Part II of this series which concentrates on the technical, rather than political, aspects of the project.

**Conclusion**

This article has described the principles and methods used in developing a plan for primary level health facilities in Soweto. The methods were essentially rapid appraisal techniques which included group discussions, detailed checklists, observation, record
reviews, and the adaptation of international and local norms for planning health services.

The success of the research project, as evidenced by the involvement of all stakeholders in the whole research process, culminating in the development of recommendations, illustrates the importance of the participatory research approach in laying the foundation for both community and health worker involvement. The research process was long, difficult and time-consuming, but ensured that the recommendations have the widest support.

The methods described in this article could be applied to other urban areas in South Africa as well as elsewhere. The overall approach adopted by the project is particularly appropriate in periods of transition when careful facilitation of dialogue between stakeholders is required in tandem with the rapid generation of results for policy-makers.

Endnotes

1 At the time of writing this article (early 1995), the responsible authorities remain much the same. These will soon be reorganized into a comprehensive district health system following the conclusion of national and local level negotiations.

2 In 1983 a new constitution created three nominally equal parliaments, one each for representatives elected by white, ‘coloured’ and Asian voters respectively. Africans were excluded from this arrangement. It was intended that the new houses of parliament would legislate and govern those matters (termed ‘own affairs’) specific to each racial group. As far as health was concerned, it was decreed that most aspects of health care were to be considered ‘own affairs’.

3 The Central Witwatersrand Metropolitan Chamber evolved from proposals made by the Soweto Civic Association as part of negotiations to end a three-year boycott of rent and service payments by township residents.

References


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Mr Nick Webb graduated from the University of Natal in Durban (South Africa) with a BSc and an MSc in Town and Regional Planning. His work relates in the main to urban development and regional planning. He presently works for the local authority in Durban, but at the time of the research was employed by a private firm, Rosmarin and Associates, in Johannesburg.

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