# Health services delivery in Asir, Saudi Arabia: regional experience of integration

*Abdul Aziz M. Al-Khuzayem,[1] Ahmed A. Mahfouz,[2] Abdalla I. Shehata [3] and Reda A.G. Al-Erian [1]*

إيتاء الرعاية الصحية في منطقة عسير بالمملكة العربية السعودية : تجربة إقليمية في تكامل الخدمات

عبد العزيز محمد الخزيّم وأحمد عبد الرحمن محفوظ وعبد الله إبراهيم شحاته ورضا عبد الغني العريان

خلاصة : تعرض هذه المقالة تجربة الإدارة العامة للشؤون الصحية في منطقة عسير بالمملكة العربية السعودية ، فيما يتعلق بتكامل الخدمات الصحية . إن الأوضاع الجغرافية والاجتماعية الديموغرافية والإدارية في هذه المنطقة تقتضي تطبيق هذا الأسلوب . وتعرض المقالة خلفية تاريخية لتطور الخدمات الصحية بالمنطقة في الماضي القريب . كما تناقش إعادة تشكيل النظام الصحي ، وما أدخل من تغييرات في المهام الإدارية ، وتشرح مزايا تكامل الخدمات الصحية .

ABSTRACT This paper presents the local experience of the General Directorate of Health Affairs in Asir, Saudi Arabia, regarding integration of health services. The geographical, sociodemographic and administrative situations of the region necessitate this approach. A historical background of the development of health services in the region in the recent past is presented. Restructuring of the health system, changes in management functions and advantages of integration of health services are discussed.

**La prestation des services de santé à Asir (Arabie saoudite): expérience régionale d'intégration**

RESUME Cet article présente l'expérience locale de la Direction générale des Affaires sanitaires d'Asir (Arabie saoudite) en matière d'intégration des services de santé. Cette approche est rendue nécessaire par la situation géographique, socio-démographique et administrative de la région. Le contexte historique du développement des services de santé au niveau de la région dans le passé récent y est présenté. La restructuration du système de santé, les changements dans les fonctions administratives et les avantages de l'intégration des services de santé sont examinés.

*[1] Asir General Directorate of Health Affairs, Abha, Saudi Arabia.*
*[2] Department of Epidemiology; [3] Department of Health Administration and Medical Care, High Institute of Public Health, Alexandria University, Alexandria, Egypt.*
*Received: 13/11/94; accepted: 12/11/96*

## Extent and topography of Asir

Asir is a large administrative province of Saudi Arabia, with its capital at Abha. The province is essentially a highland one, but includes a large area of the desert tableland to the north and east as far as Bisha and Tathlith. The topography and vegetation of the region is very varied, from juniper forests in the highlands to palm thickets in the coastal plain. The mountain range has the highest rainfall in Saudi Arabia, enough in places to sustain dry farming. The eastern edge of the highland plateau is called the Sarat. It slopes down to the east, merging into the tableland of western Najd. By contrast, the western edge is sharply delimited by the precipitous escarpment known as Al-Asdar, which runs parallel to the Red Sea coast. Further to the west lie the coastal lowlands. These, particularly around Jizan, are rich farming areas fed by wadis from the mountains [1].

## Development of the health care delivery system in Asir

In the recent past, the health care system in Asir was centralized, both in its organization and its function. During this time, the central administration authority in Abha supervised and controlled every aspect of the health care services. The system was divided into three departments: hospital administration department, dispensaries department and preventive medicine department (Figure 1).

During the 1980s, Asir was divided into eleven health districts, in line with the newly developed primary health care concept. However, little authority was delegated to the districts. For each district, there was a director for the district hospital and another for the district primary health care centres. However, both these directors worked under the close supervision of the corresponding central departments in Abha (Figure 2).

The successful development of health systems based on primary health care depends on several factors [2–7] such as:

- government, political, social and financial commitment
- strong management capability for implementation
- well-oriented, trained and committed health personnel
- decentralization: district/local level

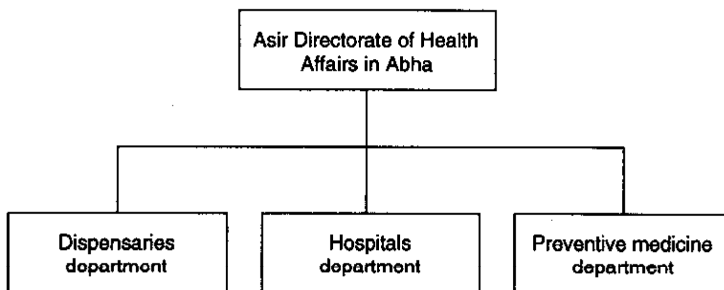


**Figure 1 Administrative structure in the centralized system**

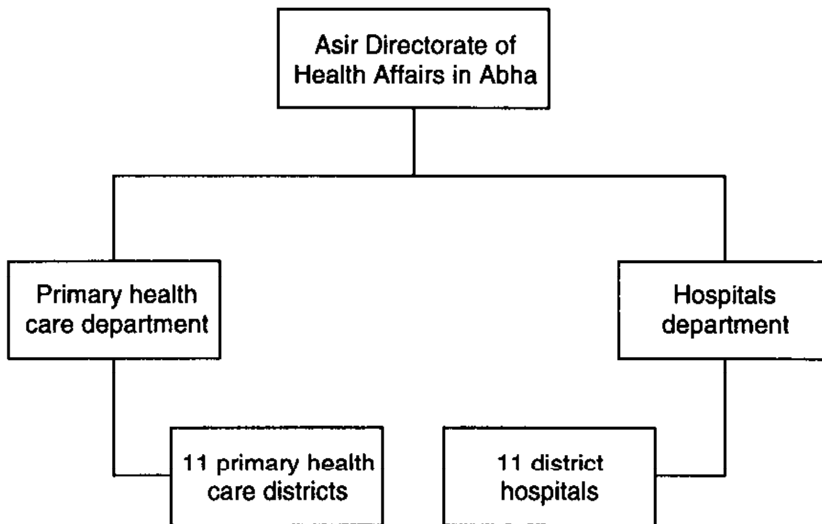


Figure 2 **Administrative structure in primary health care districts**

- community involvement in local decisions.

The primary health care districts in Asir were partially successful but generally speaking their performance fell short of expectations. The following obstacles were observed:

- existence of barriers and lack of coordination between the primary and secondary levels of care in the same district;
- little delegation of authority to the assigned directors;
- improper use of the available health resources;
- absence of the concept of comprehensive health services provision;
- excessive administrative load on the Asir General Directorate, hindering its function in planning and development;
- improper use of available resources for comprehensive training.

Awareness of these obstacles prompted the move to integrate the health care services in the region. Integration of the health services was primarily designed to ensure a unified region and to facilitate contact between the health administration and the community in a region where communications are difficult.

## Organization and functional integration of services

A restructuring of the system in early 1991 was the basis for integration. The authority of the peripheral health areas, their responsibilities and their relationship with the regional health administration at Asir General Directorate of Health Affairs were defined (Figure 3). Asir was divided into 14 integrated health areas. The division was based on demographic, social, economic and geographic criteria and also on

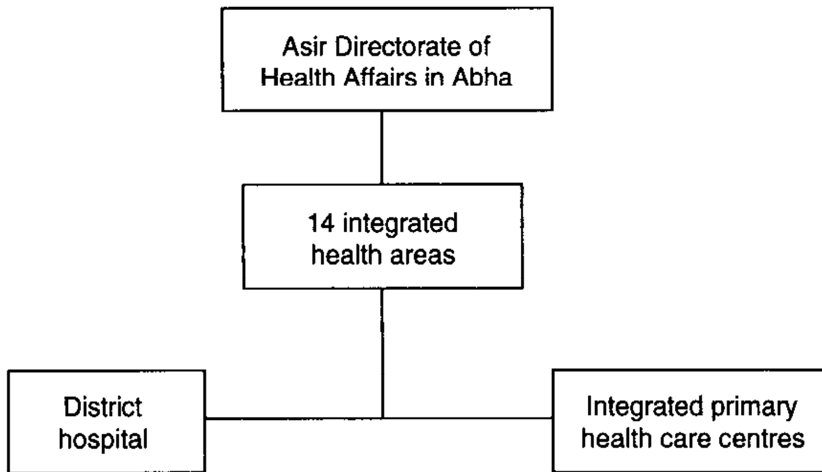


Figure 3 **Administrative structure in the current integrated health services**

Table 1 **Features of the integrated health areas in Asir, 1993**

| Integrated health area | Number of PHCCs | Number of hospital beds | Population served | Total visits to PHCCs | Total referrals to hospitals |
|---|---|---|---|---|---|
| Abha | 35 | 230[a] | 131 432 | 90 428 | 23 171 |
| Khamis Mushayt | 14 | 194 | 152 870 | 67 716 | 27 297 |
| Muhayel | 22 | 150 | 97 539 | 56 315 | 15 446 |
| Majarda | 17 | 126 | 59 413 | 34 411 | 10 710 |
| Sarat Ebeeda | 22 | 100 | 50 964 | 39 096 | 13 831 |
| Al-Namas | 13 | 126 | 37 358 | 21 719 | 9 010 |
| Sabt Al-Alaya | 12 | 100 | 33 256 | 19 745 | 8 557 |
| Bellasmar | 10 | 110 | 14 064 | 8 828 | 5 382 |
| Al-Maddah | 15 | 30 | 31 371 | 22 313 | 9 388 |
| Rejal Almaah | 18 | 60 | 39 262 | 24 249 | 10 110 |
| Zahran Al-Janoob | 9 | 100 | 25 168 | 18 634 | 16 413 |
| Ahad Rufeeda | 9 | 40 | 47 112 | 27 101 | 8 200 |
| Bashayer | 5 | 40 | 16 785 | 9 538 | 4 343 |
| Tathlith | 5 | 90 | 28 944 | 17 626 | 7 787 |

*[a] Including beds in the tertiary care hospital in Abha*
*PHCCs = Primary health care centres*

Table 2 **Personnel in the integrated health areas in Asir, 1993**

| Integrated health area | Physicians | Dentists | Nurses | Pharmacists | Laboratory technicians | X-ray technicians | Sanitary workers | Administrative staff |
|---|---|---|---|---|---|---|---|---|
| Abha | 65 | 17 | 144 | 21 | 14 | 6 | 23 | 34 |
| Khamis Mushayt | 44 | 9 | 101 | 14 | 8 | 3 | 12 | 17 |
| Muhayel | 38 | 8 | 76 | 16 | 6 | 1 | 8 | 9 |
| Majarda | 21 | 5 | 54 | 9 | 4 | 5 | 8 | 7 |
| Sarat Ebeeda | 34 | 8 | 68 | 11 | 7 | 5 | 9 | 7 |
| Al-Namas | 20 | 6 | 37 | 12 | 3 | 4 | 3 | 15 |
| Sabt Al-Alaya | 16 | 5 | 33 | 7 | 6 | 3 | 1 | 6 |
| Bellasmar | 12 | 2 | 31 | 4 | 1 | 1 | 5 | 6 |
| Al-Maddah | 23 | 6 | 48 | 5 | 6 | 3 | 2 | 17 |
| Rejal Almaah | 28 | 4 | 64 | 11 | 8 | 4 | 2 | 17 |
| Zahran Al-Janoob | 15 | 2 | 30 | 4 | 1 | 1 | 3 | 4 |
| Ahad Rufeeda | 19 | 5 | 39 | 8 | 5 | 6 | 4 | 9 |
| Bashayer | 7 | 2 | 15 | 2 | 2 | 3 | 1 | 1 |
| Tathlith | 11 | 3 | 24 | 5 | 3 | 1 | 1 | 1 |

the ease of communication and transport. Table 1 shows the number of primary health care centres, hospital beds and the population served in each of the integrated health areas for 1993; Table 2 shows the personnel for each area. The director of the district hospital is himself the director of the primary health care centres which refer to the district hospital.

Conferences, meetings and seminars were held on the concept of integration of health services in Asir for all health workers in the integrated health areas to explain the new approach. A problem that arose early was the opposition by some senior staff members to delegating their administrative authority to staff in the peripheries. Initially, staff at the integrated health areas were unclear about their responsibilities and relatedness within the system. Therefore, the technical department in Asir General Directorate of Health Affairs launched in-service training to help overcome some of these inadequacies.

To involve the community and to encourage its active participation in the health care system and health care practice, the role of local health committees at primary health care centres (both male and female local health committees) and health friend committees at the district hospital were augmented and stressed. Major activities of local health committees and health friend committees included: providing a link between the community, the health team and the government sectors; participating in health education; raising funds and support; participating in planning and evalua-

tion of health activities, and raising the awareness of the community of the optimal use of the health services provided.

Responsibility for implementing the integration policies was placed upon both parties (central and peripheries). However, much of the actual implementation was carried out by the "parent" departments, with technical and programme advisers from the Asir General Directorate of Health Affairs visiting the integrated health areas. Regular conferences were held between the directors and assistant directors for health in the integrated health areas and their counterparts in the General Directorate for continuous assessment of the experience.

## Integration policy and organizational changes

Responsibility for the main hospitals in the integrated health areas and for disease control and environmental health programmes was delegated to the integrated health area administrations, and funds were given by the regional administration specifically for these activities. It became possible to graft the organization of the health system on to the organizational structure of the regional and local administration. The officially designated functions of the integrated health areas are to:

- assign and guide advisory committees to assist in the planning and organization of health services in the integrated health areas;
- manage and administer primary health care centres;
- manage the district hospital;
- inspect and implement environmental health programmes;
- implement and supervise local programmes for control of endemic diseases such as leishmaniasis, malaria, leprosy, tuberculosis and schistosomiasis;
- supervise dental health programmes.

All peripheral activities are coordinated by one director; the director of the hospital and the primary health care centres served by the district hospital.

## Changes in management functions

The day-to-day organization and management of the services (such as renewal of the contracts, monitoring, coordination of annual vacations, etc.) is carried out by the peripheral integrated health areas. Direct management is done through the integrated health areas.

The execution of the decisions and the management of the services of the area are the responsibility of the manager of the area. Each integrated health area is required to prepare a health plan for a defined period; this is based on the needs/demands of the population as conveyed through the local health committees and health friend committees. The plans make up the integrated health plan for the whole region. As a basis for preparing the health plans, Asir General Directorate of Health establishes minimum or basic norms for health staff, centres or services, determines the purposes or objectives of the services, and lays down criteria for assessing the effectiveness and productivity of health programmes.

The General Directorate of Health in Asir maintains responsibility for the overall health policies that are to be implemented by the integrated health areas. The administration allocates finances; the peripheral administration then establishes a budget for running the health services in the area. Funds are used to run the integrated health

area hospital, primary health care centres, disease control programmes and environmental health services, which are responsibilities delegated to the peripheries. Workforce requirements for the integrated health areas are their own responsibility.

A special training unit was set up within each integrated health area to train the entire health team (which was not the case before). Technical in-service courses are given by technical staff for integrated health areas. The integration process has allowed for upgrading the training process in primary health care. It is now possible to use the facilities of the district hospital in terms of spacious rooms, trainers, specialists, better housing conditions and audiovisual materials. Technical supervisors in the integrated health areas, although fully responsible for implementing such programmes on their own, can seek the help of the parent departments.

Maintenance of buildings, equipment and facilities is done by the peripheral administrations for decentralized facilities.

Recently, a law on the organization of territorial administration in Saudi Arabia was enacted. The law defines the territorial divisions of regions and specifies the authorities responsible for their administration. The territories of Asir mentioned in the law are almost the same as the integrated health areas defined by Asir General Directorate of Health Affairs a few years ago.

## Effects of integration on multisectoral activities

Integration has brought different sectors of the various governmental administrations into closer cooperation; intersectoral coordination has become much easier than before. Any local problem (e.g. related to water, municipalities, agriculture, education) can be solved rapidly and efficiently without having to communicate with the central health authorities in Abha.

At the community level, integration has meant that the specific needs of the community have a better chance of being met; they are undoubtedly voiced more frequently. In short, integration has acted as a catalyst to community involvement and collaboration with communities and community groups has increased.

## Advantages of integration

In conclusion, the following improvements in the health services have been noted:

- Decisions are properly and more easily taken in each integrated area.
- There is more effective management and greater control of activities.
- Users participate more in the control of services.
- Services are adapted to each group and its health needs.
- The administrative load of Asir General Directorate of Health Affairs has decreased.
- Administrators at the primary health care level are better utilized, thus allowing the technical health workers to do their original jobs.
- Technical personnel (physicians, nurses, technicians) are better utilized and more easily transferred from primary health care to the hospital and vice versa.
- Resources, drugs, equipment and furniture are better utilized and exchanges between the hospital and primary health care are now feasible.
- There is greater support of the referral system.

## References

1. Mauger T. *Undiscovered Asir.* London, Stacy International, 1993.
2. Mills A et al. *Health system decentralization. Concepts, issues and country experience.* Geneva, World Health Organization, 1990.
3. Rakich JS, Longest BB, Darr K. *Managing health services organizations.* 3rd ed. Baltimore, Health Professional Press, 1992.
4. Buzzell RD. Is vertical integration profitable? *Harvard business review,* 1983, 61:997–9.
5. Clement JP. Vertical integration and diversification of acute care hospitals: conceptual definitions. *Hospital and health services administration,* 1988, 33:100–3.
6. Conard DA, Dowling WL. Vertical integration in health services: theory and managerial implications. *Health care management review,* 1990, 15:9–11.
7. *District health systems: global and regional review based on experience in various countries.* Geneva, World Health Organization, 1995 (WHO document No. WHO/SHS/DHS/95.1).

Several countries of the Region have identified the establishment and improvement of the managerial process at all levels and the strengthening of management capabilities as main priorities in health system development.

*Source*: The Work of WHO in the Eastern Mediterranean Region. Annual Report of the Regional Director. 1 January–31 December 1996. *Page 18.*