

**A PLAN TO CONSOLIDATE, INTEGRATE AND EXPAND
DHS HEALTH DELIVERY SYSTEM CAPABILITIES
TO EMPHASIZE AMBULATORY CARE**

PART I: AMBULATORY CARE

Henry W. Zaretsky, Ph.D.

April 24, 1998

EXECUTIVE SUMMARY

● **Purpose**

This is the first of a two-part plan for the reconfiguration of the DHS health-care system. Part I addresses ambulatory care. Part II, which is forthcoming, will deal with matching inpatient needs with planned capacity in the LAC+USC replacement hospital.

The purpose of this plan is two-fold:

(1) **To set the Department of Health Services further along in its new direction to benefit from the most cost-effective methods** available to provide comprehensive health care, primarily through expanding community-based outpatient capacity; and

(2) **To identify the most cost-effective options for providing capacity augmentation**, to the extent necessary, to the LAC+USC replacement hospital.

● **Reason**

Advances in bio-medical technology and further reorientation of health-care delivery in response to managed care pressures have resulted in a marked shift in resources away from inpatient settings to outpatient settings; a shift that is generally viewed as enabling a more productive use of resources and a more appropriate level of care. The November 12, 1997 decision by the Board to reconfigure the hub of the Department's inpatient system, LAC+USC Medical Center, adds to the importance of developing a plan for a reorientation of the DHS system, **that will simultaneously result in expanded access for the indigent population while reducing inpatient capacity**. The major debate in recent years has been over the size of the

replacement hospital. Given, however, the changing nature of health-care delivery, the episodic nature of care provided to the growing uninsured population and the considerable surplus of community hospital beds in Los Angeles County, the greatest gap in meeting the health-care needs of the population for which DHS has primary responsibility is in the ambulatory care area. The Board decision calls for replacing LAC+USC at a capacity level of 600 beds; and to complement the hospital with increased community-based outpatient facilities to the extent funding is available.

Due to funding realities, DHS is not now fully meeting the ambulatory-care needs of the indigent population in Los Angeles County; nor is it likely that DHS ever will be able to meet these needs. The question is: **How can DHS best use its resources to meet as much of this need as possible?**

- **Major Assumptions, Findings and Recommendations — Ambulatory Care**

ASSUMPTIONS

- ▶ *These projections are based on a comparison of projected demand and physical capacity for the year 2005.*
- ▶ *Projected demand was largely driven by the LA Model, in terms of population and use rate projections. The major utilization assumption employed here that differs from the LA Model is the number of visits per person per year on the part of the uninsured population. The visit assumption of 3.6 is the mid-point between national estimates of the uninsured use rate and a commercial HMO use rate.*
- ▶ *Assuming continuation of the current uninsured use rate would ignore DHS efforts to meet the 1115 Waiver goals and to better manage its patient population to benefit from changes in health-care delivery, shifting emphasis away from inpatient care to more cost-effective outpatient care.*
- ▶ *Assuming the commercial HMO utilization rate would imply DHS will manage all its indigent patients in a managed-care mode. This is an unrealistic assumption, given the unstable nature of this population.*
- ▶ *Demand and capacity projections are based on an assumption of continuation of DHS's current market share according to payer type (i.e., mainly uninsured and Medi-Cal, in that order).*
- ▶ *The projected 2005 physical-capacity gap is the difference between projected demand by region and planned physical capacity. The latter estimate is based*

on the best efforts of DHS staff in terms of measuring capacity in each type of DHS facility, 1115 Waiver goals, and the planned reduction in LAC+USC outpatient capacity.

- ▶ *It is anticipated that the patient load in County-based ambulatory-care facilities will increase in complexity due to aggressive efforts to provide the level of care in these settings that will minimize the need for hospitalization. As such, the inpatient load is also expected to increase markedly in acuity, making the LAC+USC replacement hospital heavily oriented to intensive care and tertiary/quaternary-level services.*

FINDINGS

- ▶ *There will be a need for substantial increases in DHS outpatient capacity in most regions of the County by the year 2005, especially in the LAC+USC region. Of a projected physical capacity shortage of over three-quarters of a million visits system-wide, 556,000 are attributed to the LAC+USC region.*
- ▶ *In addition to projected increases in demand, the physical capacity shortage in the LAC+USC region is affected by planned decreases in outpatient capacity at LAC+USC, based on estimates that less specialty visits will be necessary due to fewer inpatients.*
- ▶ *For the LAC+USC region, demand projections are affected by plans to shift current non-urgent emergency visits to community-based outpatient settings, as medically appropriate.*
- ▶ *County-wide, a combination of three-to four new comprehensive health centers (or similar, appropriately configured ambulatory-care facilities), and expanded public/private provider partnerships with enhanced or expanded primary-care centers, are believed to be the most flexible means to add necessary capacity, since outpatient specialty services are expected to be in particularly short supply, and comprehensive health centers can accommodate both primary-care and specialty services. Physical capacity of a prototype comprehensive health center is estimated at 207,000 visits annually.*
- ▶ *On a regional basis, at least two comprehensive health centers (or an equivalent combination of other ambulatory-care facilities and public/private partnerships) will be needed in the LAC+USC service area; and one comprehensive health center (or equivalent combination of facilities) will be needed in the South Service Planning Area.*
- ▶ *In addition, a portion of existing DHS ambulatory capacity is in need of renovation to improve operating efficiency, achieve maximum physical capacity*

and better attract the segment of the DHS patient population with a choice of delivery systems (i.e., Medi-Cal managed care enrollees).

- ▶ *The costs associated with constructing and equipping a comprehensive health center are considerable. Construction, equipment and land acquisition costs are estimated at \$36 million for each comprehensive health center. Meeting projected needs in this manner will involve capital expenditures in excess of \$100 million.*

RECOMMENDATIONS

- ▶ *To the extent resources are available, DHS should add appropriate ambulatory-care capacity, and renovate existing capacity most in need of such renovation, as indicated in the above findings.*
- ▶ *Because of the high cost of constructing and equipping comprehensive health centers, emphasis should be placed on alternatives to new construction, such as acquiring existing space, joint-venturing with other providers and/or leasing space.*
- ▶ *Of these three alternatives, the most cost-effective appears to be joint venturing.*
- ▶ *To the extent construction is necessary (for expansion, renovation or both), attempts should be made to secure at least partial funding through an expanded SB 1732 program, provided that total project capital cost (i.e., hospital and health centers) does not exceed the original LAC+USC cost estimates underlying the plans filed with OSHPD in 1994 (i.e., when the proposed replacement hospital was sized at 946 beds). This will require legislation, which may be controversial.*

● **Process**

The plan presented here is based on the best available data. As new data and information become available, appropriate revisions and refinements should be incorporated. In developing this plan, all pertinent documents were reviewed relating to DHS and DHS-related planning efforts with respect to ambulatory and inpatient care. It thus builds on previous DHS efforts. DHS planning efforts are being substantially upgraded. The Director of Public Health will coordinate the development of all Department plans, and these plans will be included in the Lewin Group post-waiver strategic planning effort. The next revision of this plan will benefit from these increased planning capabilities.

I. PURPOSE

The purpose of this plan is move the Department of Health Services further along in its new direction to benefit from the most cost-effective methods available to provide comprehensive health care. Given advances in bio-medical technology and further reorientation of health-care delivery in response to managed care pressures, there has been, and will continue to be, a marked shift in resources away from inpatient settings to outpatient settings. This shift is generally viewed as enabling a more productive use of resources and a more appropriate level of care from the patient's perspective. The recent decision to reconfigure the hub of the Department's inpatient system, LAC+USC Medical Center, adds to the importance of developing a plan for a reorientation of the DHS system. Without such a plan, and with little change in DHS health-care delivery practices, a future of overcrowded hospitals and emergency rooms, inability to accept most transfer requests from private hospitals and growing frustration on the part of County-responsibility patients is all but inevitable. Implementation of a realistic plan to consolidate inpatient services and to expand outpatient capabilities can provide the means to avoid these undesirable developments, while improving the system's ability to respond to service needs on the part of the population for which the County is responsible. In recent years, the major debate has been over the size of the replacement hospital. Given, however, the changing nature of health delivery, the episodic nature of care provided to the uninsured population and the considerable surplus of community hospital beds in Los Angeles County, the greatest gap in meeting the health-care needs of the population for which DHS has primary responsibility is in the ambulatory-care area.

On November 12, 1997, the Board of Supervisors approved a resolution to replace LAC+USC at a capacity level of 600 beds. The replacement hospital is to be complemented by increased community-based outpatient facilities to the extent funding is available. While the replacement hospital will have less inpatient capacity than currently, its considerable trauma and emergency-service capabilities are expected to be maintained closer to current levels. In addition, in keeping with general health system trends showing that the average inpatient has a higher acuity than previously, since less-acute patients are treated in non-inpatient settings, the replacement hospital will emphasize high-end, specialized acute care; services provided through overflow contracting will be of a more routine nature, and more widely available in the community. According to most recent studies projecting capacity requirements for LAC+USC, demand for services will exceed capacity at 600 beds.¹ Thus, it is essential that arrangements be made to provide additional capacity in other locations, within the Department of Health Services (DHS) system, through private-sector providers, or both. Thus, in addition to projecting system-wide resource requirements for ambulatory care, Part II of this plan seeks to: (1) determine which LAC+USC services are likely to need augmentation; (2) estimate the extent of such

¹ See Harvey M. Rose Accountancy Corporation, *Evaluation of the Los Angeles Department of Health Services Facilities Replacement and Improvement Plan*, October 1995; Lewin-VHI, Inc., *Study Report Prepared for the Steering Committee for the Study of Los Angeles Health Resources*, May 1995; Tranquada, Robert E., M.D. and Henry W. Zaretsky, Ph.D., *County of Los Angeles Health Facilities Improvement and Replacement Plan Analysis*, October 1996; and The Lewin Group, *LA Model: Inpatient and Emergency Services Component Update*, May 19, 1997.

augmentation; and (3) identify the most cost-effective mechanisms to provide the needed overflow capacity. In preparing this report, all pertinent documents were reviewed: (1) relating to DHS ambulatory-care need, capacity, projections and goals²; and (2) relating to inpatient plans, volume and projected need.³

II. PLANNING PRINCIPLES

DHS has several principal responsibilities which have been defined by statute, by historical practice and by circumstances existing in the private sector and in the economy of Los Angeles County. In addition to its statutory requirement to provide needed health-care services to medically indigent residents, DHS provides a number of irreplaceable services, such as hospital care for jail inmates, burn services, HIV services, and 60 percent of the trauma services and critical proportions of the emergency medical services for all citizens of the County. Any redesign of the DHS delivery system must provide for these needs, while seeking the most efficient configuration possible. The following guiding principles are adapted from Tranquada and Zaretsky (1996)⁴

1. Consolidate and integrate tertiary and quaternary services in DHS hospitals, wherever possible, to maximize efficiencies. Such services are generally planned on a regional (even multi-county) level. The size of the total patient population no longer justifies unneeded duplication of highly expensive services; nor does the shift away from specialty, and toward primary-care, training programs. Depending on demand levels and the replacement cycles among the individual DHS hospitals, specialized services should be concentrated in as few locations as possible. (And, given its location and relative size, LAC+USC would represent the preferred site for the bulk of the quaternary and tertiary-level services, assuming services could be relocated among all DHS hospitals at minimal costs.) This will entail coordination of residency and fellowship training programs among the three Schools of Medicine with which DHS is affiliated, and can very likely result in reductions in faculty, resident and fellow staffing in some services. The schools should be encouraged to initiate detailed plans for coordination of their programs.

² “Department of Health Services 1115 Waiver ‘Access’ Requirement,” 1996; Waiver Implementation Team, “Review of Outpatient Specialty Service Needs,” October 29, 1997; Ellerbe Becket, *Los Angeles County Public Health Programs & Services Facilities Implementation Plan*, October 1993; Waiver Implementation Team, “Project Management Plan,” 1997; Mark Finucane, “Vision Statement — Future of Public Health,” December 2, 1997; Mark Finucane, “Review and Proposed Actions on UCLA Report on Public Health Programs and Services,” January 6, 1998; The Lewin Group, “The LA Model: Ambulatory Care Component,” May 1997; and Task Force for Health Care Access in Los Angeles County, “*Closing the Gap*”: Report to Los Angeles County Board of Supervisors, November 24, 1992.

³ The documents referred to in *footnote 1*, above, supplemented by current volume data for all DHS hospitals.

⁴ *Op.cit.*, pp. 42-43.

2. Regionalize specialty ambulatory services wherever possible.
3. Distribute primary care capabilities as broadly as possible, while responding carefully to the geographical distribution of indigent populations.
4. Integrate ambulatory and inpatient services as completely as possible, including support functions (e.g., as medical records, information systems), and wherever possible, medical staffing, on a regional basis, in order to form a system that can be responsive to the principles of managed care.
5. Size the capacity of ambulatory and inpatient resources to meet estimated need for the following:
 - The medically-indigent population;
 - The emergency and trauma load;
 - Regionalized services provided by LAC+USC not sufficiently available in other facilities (e.g., jail, AIDS, burn); and
 - A proportion of the Medi-Cal population sufficient to maintain disproportionate-share revenues which can support the indigent care burden.
6. Limit capital expenditures to the minimum necessary to fulfill this mission.
7. Be prepared to contract for inpatient services in the private sector for those services and in those geographic areas where revised inpatient capacity is inadequate.
8. Continue to develop new sources of revenue for the system, including the ability to retain disproportionate-share revenue while reducing inpatient utilization, so that such revenue can support overflow contracting.
9. Actions taken need to be consistent with the 1115 Waiver.

The plan presented here is based on the best available data. As new data and information become available, appropriate revisions and refinements should be incorporated. DHS planning efforts are being substantially upgraded. The Director of Public Health will coordinate the development of all Department plans, and these plans will be included in the Lewin Group post-waiver strategic planning effort.

III. DHS AMBULATORY CARE NEEDS ASSESSMENT⁵

As part of the 1115 Waiver, DHS committed to restructuring its system to deemphasize inpatient services and increase access to ambulatory care. This report provides the results of a preliminary needs assessment to determine where service needs, capacity, and service gaps exist.

A. Methodology

This needs assessment projects visit need and capacity within the DHS system and partnership sites by Service Planning Area (SPA) for the year 2005, to determine where service gaps will exist.

Service Need

Projected service need was estimated by applying payer-specific use rates to the projected payer-specific population in the year 2005, taking into consideration population and insurance coverage changes. A market share estimate was then applied to project the number of DHS visits.

The LA Model Ambulatory Care Component was used to determine the baseline number of visits in Los Angeles County for 2005. This model projects ambulatory care utilization by geographic region by payer for the years 1995, 2000, and 2005. Projected 2005 utilization, used in this analysis, assumes changes in the population by age, gender, ethnicity, and insurance coverage status, as well as changes in use rates that reflect overall changes in the way health care is delivered.

The LA Model uninsured use rates are based on Rand Corporation's national estimates for this population.⁶ When LA Model age/sex specific use rates are applied to the Los Angeles County age/sex specific uninsured population, the average use rate is approximately 2.6 visits/person/year. That use rate was compared to other sources of utilization data for the uninsured and insured populations.

For this analysis, it was assumed that uninsured per-capita utilization will increase by 2005. Numerous published articles have documented that the uninsured have lower utilization of health services, because they lack access to these services.⁷ A recent study documented that

⁵ This section, prepared by the Waiver Implementation Team, describes on-going work.

⁶ Marquis, M.S. and S.H. Long, "The Uninsured Access Gap: Narrowing the Estimates," *Inquiry*, Vol. 31, No. 4 (Winter 1994-95), 405-414.

⁷ See Bograd, Harvey, Debra Pearson Ritzwoller, Ned Calonge, Karen Shields and Maureen Hanrahan, "Extending Health Maintenance Organization Insurance to the Uninsured," *Journal of the American Medical Association*, Vol. 277, No.13, April 2, 1997; and the references cited therein.

once the uninsured are insured, they use services at the same rate as the insured population.⁸ The goal of the restructured DHS system is to increase access to outpatient care and to provide this care in a manner consistent with managed-care principles. This increased access should enable the uninsured to use outpatient services at a rate similar to insured managed-care populations (and potentially reduce inpatient utilization).

The use rates of insured populations were reviewed to develop a new use rate for the uninsured. The LA Model Medi-Cal HMO and commercial HMO use rates, when applied to the age/sex specific uninsured population, were above 5 visits/person/year. A recent study of utilization by uninsured people that were enrolled in a Denver Kaiser health plan indicated that the previously uninsured population had a use rate of 4.6 visits/person/year once enrolled in the Kaiser plan.⁹

Realizing that the Los Angeles County uninsured population will not be enrolled in a health plan, their utilization will probably not be as high as these estimates. Therefore, a midpoint estimate of 3.6 visits/uninsured person/year was used (the midpoint between the LA Model estimate of 2.6 and the Denver Kaiser experience of 4.6), assuming that DHS will be successful at integrating some of the uninsured into its restructured system of care while others will continue to underutilize ambulatory care services by accessing the system in an episodic manner. The 3.6 visit estimate is consistent with the experience of Kaiser's Northern California commercially insured population, with a use rate of 3.4 visits/member/year. In addition, the LA County Health Survey (conducted in 1997), which was a telephone survey administered to 8,000 households in Los Angeles County, indicated that the median use rate for the uninsured population is 4 visits/person/year. This estimate is based on asking respondents how many visits they had in the past three months.

The DHS market share projection was based on comparing 1996/97 DHS workload by payer by SPA to 1996/97 Los Angeles County total visits, as estimated by the LA Model. In addition, market share estimates from the report entitled, "Closing the Gap," prepared by the Task Force for Health Care Access in Los Angeles County, were used for the uninsured population, to correct for an artificially low market share estimate based on workload alone, resulting from DHS outpatient curtailments in recent years.

Projected need estimates include need for ambulatory care services at DHS hospitals, Comprehensive Health Centers, Health Centers, General Relief providers, and Public/Private Partnership (PPP) providers.

Capacity

⁸ *Op.cit.*

⁹ *Op.cit.*

Projected capacity is an estimate of the number of visits that could be accommodated in existing DHS facilities and by existing PPP providers. Capacity was estimated differently for the different types of facilities. For all facilities other than Comprehensive Health Centers and Health Centers, capacity is measured in terms of volume goals. For these facilities, it is measured in terms of maximum physical capacity.

Capacity in DHS hospitals, with the exception of LAC+USC, was assumed to remain at FY 1996/97 service levels, since ambulatory care expansion consistent with 1115 Waiver goals will be community-based rather than hospital-based. LAC+USC's capacity was assumed to be 350,000 visits, as indicated in the service configuration plan for the replacement facility.

General Relief provider capacity was not changed from 1996/97 workload, and PPP provider capacity was increased to reflect the 1115 Waiver goal of providing 600,000 PPP visits Countywide in the year 2000.

Comprehensive Health Center and Health Center maximum physical capacity was calculated based on the number of exam rooms, provider-to-exam-room ratio, and visit-to-provider ratio. This analysis assumes one provider per two exam rooms, and 5,760 visits per provider per year. The 5,760 visit productivity standard is based on the LA Model estimate for a General Practice physician. This assumes current operating hours. Extending hours of operation would increase capacity. The additional volume forthcoming from extending operating hours depends on marketing efforts and the nature of the patient population served by each clinic.

The Reengineering Systemwide Ambulatory Care Design Team is currently developing standards for DHS staffing and productivity. When those standards have been developed, they will be used to refine this capacity estimate.

This capacity estimate assumes that all exam rooms are available for patient care and that staffing is available to fully utilize all space. Currently this is not the case, for several reasons: (1) As a result of budget curtailments, staffing at Comprehensive Health Centers and Health Centers has been severely reduced. Even with 1115 Waiver funding available to expand services at these sites, it has been difficult to hire the staff to restore services to their previous levels. To staff up to the maximum physical capacity level would require a significant financial commitment; (2) Some exam rooms may be dedicated to a particular service, making the exam room/provider standard difficult to achieve (e.g., one exam room is being used for pediatrics, while, at the same time, the next exam room is being used for adult medicine); and (3) Exam room capacity may be overstated, since some exam rooms have been converted to necessary support uses. The Reengineering Design Team will provide an updated number of exam rooms.

In addition, some of the Health Centers are old and in poor physical condition. The average age of CHCs and HCs is 35 years, with two facilities more than 65 years old. Physical plant problems in the majority of clinics include seismic, fire safety, asbestos, and code compliance problems. While no facilities are at risk of imminent closure, there are upgrade costs associated with each facility. These upgrade costs have been estimated, but should be updated

before final decisions are made on increasing capacity. For DHS to attract patients to its facilities, and to expand its role as a managed care provider, it will need to upgrade those facilities in fair to poor condition.

B. Results

The table on the following page summarizes the projected service need, physical capacity and resulting service gap in the year 2005.

The results indicate an overall capacity shortage in all SPAs except two, with only the West SPA having any significant excess of physical capacity. Additionally, within individual SPAs there can be geographic and/or service maldistribution issues. The SPAs with the largest capacity shortages are San Gabriel, East, South, and Metro. The analysis presumes the completion of the San Fernando and Mid-Valley replacement projects. The SPAs comprising the LAC+USC service area (East, Metro, and San Gabriel) show a projected capacity shortage of 556,000 visits in the year 2005. This represents 73 percent of the system-wide shortage of 761,000 visits.

C. Next Steps in Planning

This analysis needs to be further refined before capital-expenditure or contracting decisions are finalized regarding ambulatory care expansion. Three areas for further research include: (1) types of services needed; (2) a refinement of where geographically services should be expanded; and (3) an assessment of the physical condition of current facilities from both structural and marketing (i.e., patient amenities) perspectives. Some elements of this analysis could also be refined or validated.

**PROJECTED NEED AND CAPACITY FOR
DHS AMBULATORY CARE SERVICES
ACCORDING TO SERVICE PLANNING AREA
2005**

SPA	NEED	PHYSICAL CAPACITY*	PHYSICAL CAPACITY GAP	% UNMET PHYSICAL CAPACITY NEED
EAST	576,895	387,693	189,202	33%
METRO	726,037	598,685	127,352	18%
SAN GABRIEL	557,560	318,353	239,207	43%
<i>LAC+USC Subtotal</i>	<i>1,860,492</i>	<i>1,304,731</i>	<i>555,761</i>	<i>30%</i>
ANTELOPE VALL	132,415	135,637	(3,222)	-2%
SO. BAY	534,836	521,875	12,960	2%
SAN FERNANDO	496,205	431,487	64,718	13%
SOUTH	865,184	679,900	185,285	21%
WEST	71,955	126,851	(54,896)	-76%
Grand Total	3,961,087	3,200,481	760,606	19%

* In most cases, budgeted service level is less than physical capacity.

Types of Services Needed

A gross estimate of visits needed does not indicate what types of services should be expanded. For example, many DHS specialty clinics have long waits for non-urgent appointments, indicating that more specialty services should be added to reduce backlogs. We also know, however, that many patients seen in specialty clinics could more appropriately be seen in a primary care setting. If comprehensive primary care was more accessible to patients and both patients and physicians were educated that care should be accessed via the primary care physician, then specialty demand would decrease. On the other hand, given efforts to shift patients from inpatient to outpatient settings, the patient complexity in both settings should increase, suggesting greater demand for outpatient specialty services.

This analysis cannot determine the current level of inappropriate specialty or emergency room utilization to determine the appropriate balance of services in the future. A next step of the analysis will be to apply the LA Model's primary to specialty care ratio to projected DHS visits as an indicator of projected primary and specialty care need. Other sources for a primary-to-specialty-care ratio will also be assessed. Projected primary and specialty need will then be compared to primary and specialty capacity to determine where gaps exist. This analysis is particularly important because much of the projected capacity is in Health Centers, PPP sites or categorical Public Health Clinics; which could not be used to meet specialty-care need. The extent to which DHS has an appropriate service mix distribution must be examined.

Geographic Needs

Determining service gaps by SPA only gives a broad indication of where services should be expanded, since SPAs are so large. An analysis by health district (or some other geographical unit smaller than SPAs) would provide a better indication of where geographic service gaps exist, and would identify any geographic maldistribution of resources. That analysis will be completed as another step of this needs assessment.

Physical Condition of Existing Capacity

A significant portion of current ambulatory-care capacity is in need of renovation based on age, and to be competitive with private-sector capacity in terms of attracting Medi-Cal managed-care enrollees. This assessment should be integrated with the Reengineering Study referred to above. The results of a complete assessment should be incorporated into the ambulatory care plan.

D. Principal Findings

There will be a need for increases in outpatient capacity in most regions of the County, especially in the LAC+USC region. Of a projected 761,000 visit capacity shortage county-wide, 556,000 are attributed to the LAC+USC region. The projected gap in this region is the result of: (1) increases in overall demand; (2) planned reductions in outpatient capacity at LAC+USC, reflecting less specialty visits based on fewer inpatients (i.e., a reduction in physical capacity); and (3) a planned shift in non-urgent emergency visits to community-based outpatient settings, as medically appropriate (i.e., an increased demand for non-emergency ambulatory care).

DHS is not now fully meeting the ambulatory-care needs of the indigent population residing in Los Angeles County, and cannot be expected to do so in the future. What can be expected, though, is that it deploy its resources in a manner to enable meeting as much of the unmet need as possible.

There is a projected county-wide gap of over three-quarters of a million visits annually. A combination of three-to-four new comprehensive health centers (or similar, appropriately configured ambulatory-care facilities), and expanded public/private provider partnerships with enhanced or expanded primary-care centers, are believed to be the most flexible means to add necessary capacity, since it is likely that outpatient specialty services will be in short supply, and comprehensive health centers can accommodate both primary-care and specialty services. From the capacity gaps identified in the above table, it appears that: (1) at least two comprehensive health centers (or equivalent combinations of other ambulatory-care facilities and PPPs) will be needed in the LAC+USC service area — most likely in the San Gabriel and East SPAs; and (2) one comprehensive health center will be needed in the South SPA. The prototype comprehensive health center is estimated to have a physical capacity of approximately 207,000 visits annually.

Costs involved in constructing and equipping a comprehensive health center are considerable. Construction, equipment and land acquisition costs are estimated at \$36 million for each comprehensive health center. And this does not address needs to renovate existing capacity. Thus, meeting the identified needs through construction alone would involve capital costs in excess of \$100 million.

E. Recommendations

To the extent resources are available, DHS should add appropriate ambulatory-care capacity, and renovate existing capacity most in need of such renovation, as indicated in the above findings. Because of the high cost of constructing and equipping comprehensive health centers, emphasis should be placed on alternatives to new construction, such as acquiring existing space, joint-venturing with other providers and/or leasing space. Of these three alternatives, joint-venturing may be the most cost effective.

To the extent construction is necessary (for expansion, renovation or both) efforts should be made to secure capital funding through an expanded SB 1732 program, provided that total project capital cost (i.e., hospital and health centers) does not exceed the original LAC+USC cost estimates underlying the plans filed with OSHPD in 1994 (i.e., when the proposed replacement hospital was sized at 946 beds). This will require legislation, and thus is far from a sure funding source.