

# Public Health Impact of Washington Adventist Hospital's Relocation

*A study completed by the Lewin Group*

In 2005, Washington Adventist Hospital initiated a Vision for Expanded Access designed to improve access to care for all in the communities we serve and provide improved facilities and services. ([www.expandedhealthaccess.com](http://www.expandedhealthaccess.com))

Specific initiatives of this Vision are underway, including a community-based Center on Health Disparities that is working to remove barriers to accessing health care; expanded community partnerships to improve access to care; development of expanded primary health-care services; and other initiatives.

A key element of the Expanded Vision includes the relocation of Washington Adventist Hospital to a larger campus within the current service area with better road access and that is more suitable for the development of a 21<sup>st</sup> century hospital, coupled with the re-use of the present campus in Takoma Park for health care and community services.

**As part of its commitment to meeting the community's needs and improving access to care, in 2006 Washington Adventist Hospital commissioned the Lewin Group, an experienced health care consulting firm, to study the public health impact of the hospital's relocation.** This study provides information that will help us plan the new Washington Adventist Hospital campus, the reuse of the existing campus and other initiatives designed to improve health-care access.

The Lewin report was completed in September 2007 and is being released to the public. If you have questions or comments, please feel free to contact me or Robert Jepson at (301) 315-3042. **The Lewin Group has provided this brief summary of the report:**

## **Report Summary**

*"The Lewin Report provides a comprehensive assessment of the relocation's public health impact from the perspectives of quality, cost, and access. Issues of quality and cost are enhanced by the move, as it enables a number of needed improvements related to facility redevelopment, private rooms, and outpatient services expansion. Overall, geographic access will be improved by the move, as the new location will be closer to a higher proportion of WAH's current service area population. Geographic access to underserved populations will be mixed, as the new location is closer to certain areas and further from others. Given the Hospital's continuing commitment to community outreach and its efforts to involve the community in its further planning, no material increase or decrease in geographic access to underserved populations is anticipated. Finally, the report stresses the importance from a public health perspective of ongoing planning with the community for the re-use of the Takoma Park campus, with emphasis on such critical services as rehabilitation, urgent care, primary care, and pre-natal care." (The Lewin Group)*

# The Public Health Impact of the Washington Adventist Hospital Relocation

*Prepared for:*  
**Adventist HealthCare**

*September 17, 2007*

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## **ABOUT THE LEWIN GROUP**

The Lewin Group is a premier national health and human services consulting firm with more than 35 years of experience delivering objective analyses and strategic counsel to health plans, hospitals, public agencies, non-profit organizations, industry associations and stakeholder groups across the United States. The firm, located in DC Metropolitan region, is recognized for its objectivity, analytical capability, strategic vision, and commitment to client satisfaction.

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## EXECUTIVE SUMMARY

In 2000, Washington Adventist Hospital (“WAH” or “the Hospital”) began considering alternative plans to modernize its facilities and address various constraints associated with its current Takoma Park campus. Because of the Hospital’s location, patients, neighbors, employees, and others find accessing the hospital challenging. Parking is very problematic on the campus, for patients and staff – and many employees now are bused to work from an off-campus location. Private rooms that provide patients with privacy and the hospital with more flexibility in serving patients are not available at WAH, but are the standard at other facilities. The Emergency Department operates in cramped quarters. For these and other reasons, outpatient services are underdeveloped at the hospital, and WAH is finding it increasingly challenging to meet growing community needs and assure its long-term viability. WAH, together with leadership from the Adventist HealthCare, began a process of developing and assessing options that would address these concerns.

The Lewin Group was retained by Adventist HealthCare to assist with the public health impact assessment. This report documents findings of that assessment.

Adventist HealthCare leadership has considered the following principal alternatives for the future development of Washington Adventist Hospital:

1. Rebuild WAH on the current site by beginning with a Phase 1 project that would add a new patient tower, convert semi-private beds to private rooms, expand the emergency department, and relocate various programs throughout the campus.
2. Move WAH to another location and reuse the current campus for health care services and other community-focused activities.
3. Close the hospital, as it becomes weakened over time due to the described constraints associated with the current campus. Financial projections prepared by WAH management indicate that the hospital’s financial performance will deteriorate in the current location.

Based on leadership’s continued assessment of options for the future of WAH and its Vision for Expanded Access, Adventist Healthcare’s current plan is for WAH to move to another location and to reuse the current campus for health care services and other activities consistent with the results of several studies and surveys currently being conducted by Adventist HealthCare and the City of Takoma Park. These plans also will incorporate input from community stakeholders.

The principal findings of the study are as follows:

1. WAH’s “primary service area” includes Takoma Park, Langley Park, much of Silver Spring, College Park, and north Hyattsville. About 52 percent of WAH’s discharges in 2006 were accounted for by residents of zip codes for these primary service area communities.
2. WAH has been the closest hospital for less than one-third of the residents of the primary service area; other hospitals thus have been more proximate.

3. WAH's patient origin statistics demonstrate its dual role as both a regional referral center and a community hospital that meets local needs. An unusually high percentage of WAH's patients travel from distant locations to the hospital. This largely is explained by the Hospital's substantial interventional cardiology and psychiatry programs that draw patients from across Maryland.
4. WAH has a market share of discharges that exceeds 50 percent for only one zip code: the hospital's home zip code of 20912. This means that for only one zip code, WAH serves the majority of inpatient health care needs.
5. There are pockets of vulnerable people in the areas historically served by the Hospital. With the growth of the African American and Latino populations, Montgomery and Prince George's Counties have become increasingly diverse in recent years. WAH's service area is home to a large proportion of the Asian Americans who live in Montgomery County. Non-English speaking residents in the area have more difficulty accessing care, and data suggest that health disparities are present.
6. There are several notable health problems in the areas historically served by WAH, including a higher than average rate of hospitalization for children with asthma, comparatively high rates of cardiovascular disease (particularly for African Americans), increasing rates of obesity-related disease, infant mortality rates that remain above Montgomery County's goal, and cultural barriers to care. WAH's Vision for Expanded Access includes several elements that are well aligned with addressing the identified public health concerns, including the Center on Health Disparities. The Hospital's community outreach programs, such as its support for mobile clinics and Health and Wellness Programs, have targeted identified needs.
7. Several of WAH's services play important roles in meeting community needs. The emergency room provides intake for mental health and for intoxicated patients. It also provides "after-hours" care for patients who otherwise would rely on one of the area's safety-net clinics. WAH operates one of the only psychiatric services able to meet patient medical (in addition to mental health) needs and the service admits a high share of the area's hospitalized patients. WAH's Obstetrics/Gynecology services have become increasingly important to the area's uninsured and immigrant populations who need prenatal and labor and delivery services. WAH also has served as a convenient resource that provides access to care for residents of area nursing facilities.
8. WAH historically has been a leader in providing uncompensated care in the region. In 2006, the Hospital provided nearly \$22 million in uncompensated care, or about 9 percent of revenue. WAH has committed to providing uncompensated care at least at its current level.
9. Adventist HealthCare has identified a number of problems and issues with the current Takoma Park site that affect WAH's ability to meet community needs. The Hospital is situated in a cramped residential neighborhood on 13.6 acres of land alongside schools and homes where concerns about traffic and congestion have been widely publicized. Several of these problems also have implications for public health. These include:

- Insufficient and poorly configured space for emergency room services;
  - Insufficient space to provide ambulatory care services and to meet on-campus demand for physician offices, and provide adequate access to primary care and chronic disease management programs;
  - More difficult access to the hospital for County Emergency Medical Services (EMS) than to alternative sites;
  - A lack of private and adequately sized rooms for patients;
  - A challenging physical plant layout that affects the ability of the Hospital to be operationally efficient; and
  - Insufficient parking spaces for hospital patrons and staff.
10. The costs to operate WAH in an aging physical plant have increased rapidly. Utilities and plant operations costs have increased by almost 50 percent in three years, to more than \$6.3 million annually.
11. Under the Vision for Expanded Access, the Hospital has proposed to move six miles from one area where a high volume of inpatients have resided, to another. The new WAH site is farther away from some zip codes with a comparatively high proportion of people in poverty (e.g., 20011 and 20912) but is closer to other zip codes with similar socioeconomic characteristics (e.g., 20903 and 20783). Overall, it appears that access to the nearest hospital for this group of vulnerable patients would not change materially if WAH relocates services to its proposed new location.
12. The new hospital site would provide closer access to hospital services for low-income elderly persons living in Montgomery County, and Montgomery County EMS has found that the new site would provide significantly better access for ambulance transport compared to the current WAH location in Takoma Park.
13. Hospital facilities at the proposed new site would not be operational until at least 2012 (five years). During the next five years, health care needs and the capacity available at other facilities in the area are likely to change.

This Report considers the possible public health impacts of the alternative approaches that could be implemented by Adventist HealthCare. One framework for identifying a “public health impact” is to consider implications for access, quality, and cost.

In terms of **access** to care, after performing several detailed travel time analyses, the following conclusions have been reached.

- First, **virtually all residents of the WAH service areas have a hospital located within 6 miles.** While traffic congestion can affect actual travel times to services, the residents of the WAH service areas as a whole have enjoyed good geographic access to hospital care. Residents of only three zip codes in the Silver Spring area travel on average, more than 6 miles for hospital care.

- WAH currently is the closest hospital for residents of five of the zip codes in the defined service areas (and roughly 103,000 persons). In the new location, WAH would be the closest hospital for 171,000 residents of the Primary Service Area.
- Prince George's Hospital Center is the closest hospital for residents of six zip codes in the WAH service areas, with about 149,000 persons in 2006.

Travel distances to the closest hospital will change if WAH relocates to the new site. However, **no zip codes experiencing an increase in travel distance will have that distance increase to more than 6 miles if the hospital relocates.** The new site also will allow the Hospital more fully to develop accessible outpatient services, would provide better access for Montgomery County EMS, creates opportunities to reuse the Takoma Park campus in ways that could enhance public health, allows Adventist Rehabilitation Hospital of Maryland to develop its services at the current location, and would avoid the disruptions that are associated with a major rebuilding project on an existing hospital campus.

Regarding the cost of care, Adventist HealthCare estimates that capital cost to relocate WAH to a new site would be in the range of \$250-300 million, not including amounts required to modify portions of the current Takoma Park campus for its potential future role in meeting community needs. A multi-phased rebuilding plan on the current site would cost more in the terms of direct capital costs and business interruption. In addition to capital cost savings, relocating the Hospital to a new site would allow WAH to realize several operational efficiencies in a newly designed hospital facility.

In terms of **quality** of care, relocating WAH to the new site is likely to have the following benefits:

- **Ability to Consolidate and Build Rehabilitation Services.** Relocating services licensed under WAH may allow the separately licensed Adventist Rehabilitation Hospital of Maryland to develop a more comprehensive continuum of inpatient and outpatient rehabilitation services in the best space that can be offered by the current facilities in Takoma Park.
- **Private Rooms for Patients.** Relocation will allow WAH to offer 100 percent private rooms for patients, which provides both public health and operational benefits.
- **Overall Service Volumes.** If WAH is relocated to the new site, the Hospital is likely to support higher patient care volumes. At the new site, WAH would be the closest hospital to more people than in the current location. The new site also would include increased emergency room capacity and would be more accessible by County EMS.
- **Ability to Establish Dedicated Spaces/Facilities for Psychiatric Services.** Relocating WAH to the new site provides the opportunity to design dedicated spaces that are optimal for patients that need this important service, including dedicated Psychiatric Emergency Service space that provides appropriate privacy from other Emergency Room activities and improved facilities for WAH's partial hospitalization program. The 40-bed inpatient psychiatric unit also could be housed in quarters that are specifically designed to optimize care for mental health patients.

- Additionally, the medical needs of WAH's psychiatric patients can best be met if that program remains in close proximity to WAH's medical-surgical services.

Relocating Washington Adventist Hospital thus would have several positive public health impacts. Relocation would relieve the organization of several constraints that have affected its ability to meet community needs. The new site would be more accessible for emergency room patients, would provide the opportunity to develop Medical Office Building space that would help attract physicians to the area, conserve capital resources, enhance the environment for mental health patients, and provide several operational efficiency benefits.

In our assessment, the analysis highlights three concerns regarding quality of care that should be the subject of short-term planning efforts:

**Ability to Meet the Medical Needs of Rehabilitation Patients.** If WAH is relocated to the new site and Adventist Rehabilitation Hospital of Maryland continues to operate at the current location, procedures and resources will need to be developed so that ARHM patients maintain access to needed medical resources. The planning for urgent or freestanding emergency room services that would be developed in Takoma Park should take these needs into account.

**Ability to Meet Medical Needs of Patients at Area Nursing Homes.** WAH has developed relationships with many local nursing homes and assisted living facilities. Planning will be needed to continue serving the needs of residents in these settings.

**Ability to Provide Back-Up Services for Area Clinics.** WAH also has relationships with clinics that operate in the hospital's primary and secondary service areas. The Hospital is a site where clinic patients are referred for emergency care.

Our assessment indicates that it will be important for Adventist HealthCare, together with the Takoma Park and surrounding communities to consider the following initiatives:

- Designing and studying the feasibility of a freestanding emergency room or urgent care capacity that would be appropriate for the Takoma Park campus, with hours of operation and the ability to handle an appropriate level of patient acuity;
- Collaborating with existing providers to increase clinic capacity in Takoma Park, Long Branch, and Langley Park and augmenting these services to serve the needs of the low-income uninsured, as well as those of Medicaid obstetrics and mental health patients who historically have relied on WAH for services;
- Developing a specific plan for the scope of rehabilitation services to be operated by Adventist Rehabilitation Hospital of Maryland on the Takoma Park campus;
- Continuing and enhancing current outreach programs operated by WAH in the primary service area;
- Confirming or further developing referral relationships with nursing homes and assisted living facilities in the WAH service areas;
- Providing opportunities for physicians and others, such as operators of birthing centers, to lease space in Takoma Park, particularly primary care providers;

- Commencing discussion with organizations that may be interested in relocating to the WAH Takoma Park campus, consistent with the emerging reuse plan;
- Demonstrating the financial feasibility of the Vision for Expanded Access, including estimating the amount of operational savings that would be possible by developing WAH at the new location and how these operational savings could offset portions of the capital cost associated with new construction; and
- Working with the various stakeholders, including the City of Takoma Park, Montgomery County, Columbia Union College and other nearby organizations and residents to develop an effective and viable reuse plan that helps build a healthier community and addresses how the identified public health risks associated with relocating WAH to a new site would be addressed.

Any public health concerns associated with the Vision for Expanded Access Plan could be substantially addressed through the above initiatives.

## INTRODUCTION AND PURPOSE OF STUDY

In 2000, Washington Adventist Hospital (“WAH” or “the hospital”) began considering alternative plans to modernize its facilities and to address various constraints associated with the current Takoma Park campus. The Hospital currently operates in buildings that were constructed in the 1950s, 1970s, 1980s, and 1990s. Because of the hospital’s location, patients, neighbors, employees, and others find accessing the hospital challenging. Parking is very problematic on the campus for patients and staff – and many employees now are bused to work from an off-campus location. Private rooms that provide patients with privacy and the hospital with more flexibility in serving patients are not available at WAH, but are the standard at other facilities. The Emergency Department operates in cramped quarters. For these and other reasons, outpatient services are underdeveloped at the hospital, and WAH is finding it increasingly challenging to meet growing community needs and assure its long-term viability.

WAH, together with leadership from Adventist HealthCare, began a process of developing and assessing options that would address these concerns. In 2005, work on developing the first major option, the renovation of the existing hospital on the current site in Takoma Park, culminated in filing a Certificate of Need (“CON”) application to the State of Maryland. The 2005 CON called for a Phase 1, \$133 million project that would include a new patient tower to house 60 acute care private hospital beds, renovation of current inpatient units, expansion of the hospital’s Emergency Department, expansion and renovation of the existing Labor and Delivery Unit and Nurseries, and upgrades to the Hospital’s Central Plant and elevators, among other components. Hospital administration also considered including in the project a new 150,000 square foot multi-purpose building that would house expanded ambulatory care services and physician offices. That component of the project, and the 2005 CON, ultimately would be withdrawn.

Leadership then began considering other options for the Hospital. One idea, the relocation of the Hospital to another part of Montgomery County, became public in the Fall of 2005. The Washington Adventist Hospital and Adventist HealthCare Boards both approved the relocation in September of that year. The decision committed the organization(s) to the implementation of a “Vision for Expanded Access,” through which the Boards approved the following actions:

1. Development of a health care center in the Long Branch community to improve access to care. The location for this proposed facility is near the intersection of Flower Avenue and Piney Branch Road. The health care center will offer primary health care services.
2. Development of a Center on Health Disparities that works to identify and remove barriers to accessing care.
3. A contribution to the completion of the health center/gymnasium that is part of the re-development of the Takoma Park municipal building.
4. Working with various partners to expand available health care resources to underserved communities in Montgomery and Prince George's counties.
5. A commitment to provide uncompensated care at significant levels.
6. Re-development of the Hospital's Board of Directors to better reflect the diversity of the community served by the Hospital.

7. Initiation of the process of moving Washington Adventist Hospital to a new campus within the Hospital's current service area which will enhance the Hospital's ability to meet the needs of all residents. In addition, the Hospital will retain the current Takoma Park campus for re-use for health care and community service needs.

Adventist HealthCare has continued to plan the "Vision for Expanded Access" implementation. The planning process has included financial analysis, continual market assessment, implementation of several programs designed to improve access to care in the Hospital's service areas, and careful assessment of the potential impacts of the "Vision" on public health.

To date, Adventist HealthCare has made notable progress to making this vision a reality:

- The Montgomery County Planning Board has approved the Long Branch facility, but the decision has been appealed by area residents.
- A Blue Ribbon Panel has made recommendations and set priorities for the Center on Health Disparities. An Executive Director has been named, and actively is implementing the Panel's recommendations.
- WAH has made a commitment to support a portion of the project cost associated with developing a health center/gymnasium and is awaiting approval of development.
- WAH is supporting Mobile Medical Care, Inc. in the operation of its mobile medical van service. The service targets Latino, Asian and African American communities in the Hospital's service areas. WAH also (together with its sister hospital Shady Grove Adventist Hospital) is providing additional support of a mobile medical van service that serves an African American congregation and operates as an extension of a clinic. This mobile medical van operates 2.5 days/week in Washington Adventist Hospital's service area and 2.5 days/week in Shady Grove Adventist's service area.
- WAH is committed to a community service grant of \$650,000 over five years to Mary's Center for Maternal and Child Care, a federally qualified, comprehensive health center based in Washington, DC. Mary's Center works to build better futures for local residents through programs that deliver health care, education and social services, regardless of ability to pay. With WAH's support, Mary's Center will open its first primary care clinic in Maryland this year. This facility, in the Long Branch area of Montgomery County, will open in November.
- WAH participates in a program sponsored by Montgomery County that provides prenatal care and delivery services to uninsured, low income women in Montgomery County. During the County's July 2006 to June 2007 fiscal year, the Hospital has committed to double the number of women in its care, from 500 to 1,000.
- The Hospital has provided support for the development of a comprehensive pre-school program, sponsored by Centro Familia and designed to meet the early childhood needs of low-income, non-English speaking families.
- Washington Adventist Hospital has pledged to meet or exceed the average of the Hospital's 2003, 2004, and 2005 uncompensated care rates for the next decade, (as a percent of hospital revenue).

- Five new community members were appointed to the Board of Washington Adventist Hospital, increasing the Board's diversity.
- Adventist HealthCare has purchased land to relocate Washington Adventist Hospital near the White Oak section of Montgomery County, approximately six miles from the current hospital and central to Washington Adventist Hospital's primary service area with major interconnecting roads. Hospital officials are engaging the community in discussion about future uses for the Takoma Park campus, including health services.

Adventist HealthCare retained The Lewin Group to assist with the public health impact assessment. This report documents findings of that assessment.

Based on Adventist HealthCare leadership's continued assessment of options for the future of WAH and its Vision, management plans to move WAH to another location and reuse the current campus for health care services and other activities consistent with the results of several studies and surveys currently being conducted by WAH and the City of Takoma Park.

The current WAH campus is located in a densely populated neighborhood, which is essentially fully developed. The potential for reuse of the current campus represents a unique opportunity to impact a number of issues, including the provision of appropriate health care services, traffic relief and congestion, expansion of education and job training, affordable housing, wellness and fitness, elderly services, and others. The most critical health care services appear to be primary care and chronic disease management, continued access to urgent and emergency care, behavioral health, obstetrics care, and rehabilitation. All of the above health and human services issues need to be balanced to provide for the improvement of the health and well-being of people in the surrounding neighborhoods.

The following services would be relocated to a new hospital built at the new location: Washington Adventist Hospital as currently configured, which included an Emergency Department (with re-located heli-pad), cardiovascular surgery and cardiology, obstetrics, medical/surgical, and psychiatry programs. WAH would operate at the new location, and would continue to oversee the services which will remain or which will develop at Takoma Park.

This Report considers the possible public health impacts of the proposed plan, in comparison to the alternative plan contemplated in the 2005 CON. One framework for identifying a "public health impact" is to identify and assess potential changes to health care Access, Quality, or Cost for the communities historically served by an organization that are associated with a new development, like the possible relocation of health care facilities.

- *Access* concerns can be further grouped into "geographic access" such as travel times, and "financial access" that can be affected by an organization's financial assistance policies.
- *Quality* is difficult to measure definitively; however, many studies have found better health care outcomes associated with higher volumes of care (e.g., hospitals with more deliveries or open heart surgery cases on average can show better outcomes than hospitals with comparatively low volumes of care for these programs).

- *Cost* issues can fall into two categories: operating costs (the efficiency of hospital operations) and capital costs (the total project cost for construction and its associated financing). Capital costs also affect annual operating expenses, principally through the interest and depreciation expenses that are a by-product of capital investment.

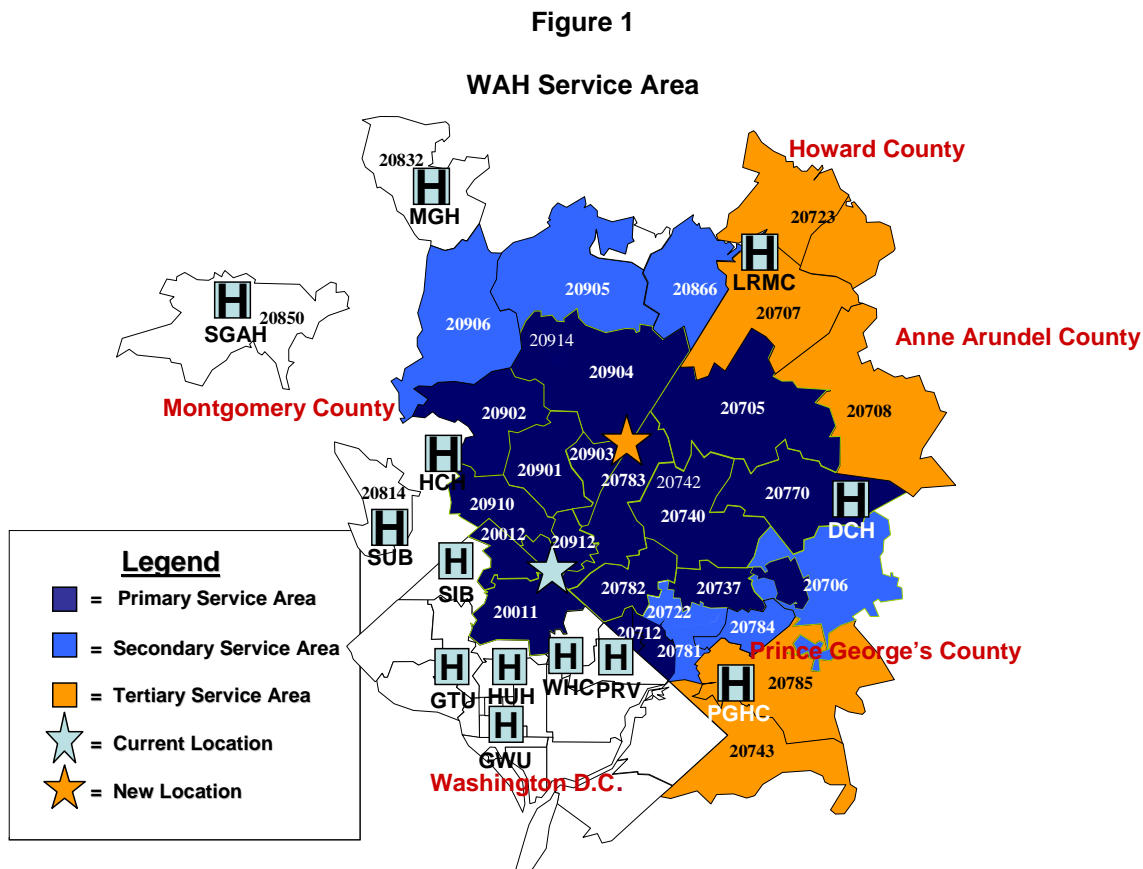
This report is organized to assess these types of potential public health impacts by addressing the following questions:

1. What geographic areas have been historically served by Washington Adventist Hospital?
2. What are the most significant health care and health status needs and problems in these service areas?
3. What services are provided by Washington Adventist Hospital? What roles do these services play that are important to public health?
4. What other providers are available to meet community needs?
5. What problems are associated with the current Washington Adventist Hospital campus that have implications for the hospital's viability and its effectiveness in addressing community needs?
6. What are the public health advantages and disadvantages of the proposed alternatives for Washington Adventist Hospital?
7. What initiatives may mediate potential public health concerns associated with the Vision for Expanded Access?

The report is based on The Lewin Group's independent assessment of a full range of publicly available reports (e.g., needs assessments), data from the Health Services Cost Review Commission, findings from interviews with Adventist HealthCare staff and with representatives of area Departments of Health and Social Services, and data from the hospital and its affiliates.

## WASHINGTON ADVENTIST HOSPITAL SERVICE AREA

The geographic areas historically served by Washington Adventist Hospital are portrayed in the map below. The hospital is located in zip code 20912. The proposed site for the new WAH campus is in the southernmost part of zip code 20904.



The Lewin Group identified the geographic areas historically served by Washington Adventist Hospital using a standard approach that examines both the volume of inpatients and emergency room patients treated at WAH by zip code of residence, and WAH's inpatient market share of the relevant zip codes compared to that of other hospitals. According to that analysis:

- The *primary service area* includes Takoma Park, Langley Park, much of Silver Spring, College Park, and north Hyattsville. Residents of these communities account for about 52 percent of WAH's discharges in 2006.

The primary service area includes seventeen zip codes and a population of 463,396 in 2006<sup>1</sup>. For six of these zip codes and for less than one third of the area's 132,722 residents<sup>2</sup>, WAH is the closest hospital. Holy Cross Hospital is the closest hospital

<sup>1</sup> Source: Claritas.

<sup>2</sup> In 2006, WAH was the closest hospital for 29 percent of the residents of the primary service area zip codes, measured from a central point in each zip code.

facility for about 37 percent of the residents of the WAH primary service area (171,686 residents).

- The *secondary service area* includes Lanham and southern Hyattsville communities. Prince George’s Hospital Center is the closest facility for three out of seven of these communities<sup>3</sup>. About 7-10 percent of WAH’s inpatient and emergency room volume has originated from these zip codes in recent years.
- We also defined a *tertiary service area*; it includes five zip codes in Laurel Hyattsville and Capitol Heights. Laurel Regional Hospital and Prince George’s Hospital Center are currently the closest facilities for residents of these four zip codes.

WAH’s patient origin statistics demonstrate its dual role as both a regional referral center and a community hospital that meets local needs. About 34 percent of WAH discharges historically have been accounted for by people living outside of the three identified service areas. This is an unusually high percentage, and is explained in large part by the hospital’s substantial interventional cardiology and psychiatry programs that have drawn patients from across Maryland.

*Table 1* portrays the number of 2006 WAH discharges and emergency room visits by geographic market area.

**Table 1**  
**Patient Origin: WAH Discharges and Emergency Room Visits**  
**(CY 2006)**

Number of Discharges			Number of Emergency Room Visits		
Service Area	Number of Total Discharges	Percentage of Discharges	Service Area	Number of Visits	Percentage of Visits
Primary	9,666	52%	Primary	32,112	73%
Secondary	1,785	10%	Secondary	3,146	7%
Tertiary	871	5%	Extended	1,078	2%
Out-of-Area	6,365	34%	Out-of-Area	7,932	18%
<b>Total</b>	<b>18,687</b>	<b>100%</b>	<b>Total</b>	<b>44,828</b>	<b>100%</b>

Note: Discharges exclude newborns.  
Source: WAH Records.

*Table 2* portrays WAH 2006 discharges by zip code and by service area. The zip code accounting for the largest number of WAH discharges is 20783, in Prince George’s County. It is important to note that zip code 20912 (where WAH currently is located) and 20904 (the zip code for the proposed new campus) are the “number 2” and “number 3” zip codes for the Hospital, and accounted for about the same number of inpatient discharges in 2006. The Hospital is proposed to move from one area of high inpatient volume to another.

<sup>3</sup> Closest facility for the remaining four communities is split between DCH, HCH, MGH and LRH

**Table 2  
Patient Origin of WAH Discharges (CY 2006)**

Service Area	Zip Code	City	Total Discharges	Percentage of Total Discharges	Cumulative Percentage of Discharges
<b>Primary Service Area</b>					
Prince George's County	20783	Langley Park/Hyattsville	1,619	9%	9%
<b>Montgomery County</b>	<b>20912</b>	<b>Takoma Park</b>	<b>1,296</b>	<b>7%</b>	<b>16%</b>
<b>Montgomery County</b>	<b>20904</b>	<b>Silver Spring, Colesville</b>	<b>1,004</b>	<b>5%</b>	<b>21%</b>
Prince George's County	20782	Hyattsville	993	5%	26%
Montgomery County	20901	Silver Spring, Four Corners	748	4%	30%
Montgomery County	20903	Silver Spring, Woodmoor	770	4%	34%
Montgomery County	20910	Silver Spring, Blair	671	4%	38%
Montgomery County	20902	Silver Spring, Wheaton	446	2%	40%
Prince George's County	20740	College Park	448	2%	43%
Prince George's County	20705	Beltsville	382	2%	45%
Washington D.C.	20011	Washington, DC	325	2%	47%
Prince George's County	20770	Greenbelt	282	2%	48%
Prince George's County	20737	Riverdale	301	2%	50%
Prince George's County	20712	Mount Rainier	229	1%	51%
Washington D.C.	20012	Washington, DC	139	1%	52%
Prince George's County	20742	College Park	8	0%	52%
Montgomery County	20914	Silver Spring	5	0%	52%
		<b>TOTAL</b>	<b>9,666</b>	<b>52%</b>	
<b>Secondary Service Area</b>					
Montgomery County	20906	Silver Spring, Aspen Hill	526	3%	55%
Prince George's County	20706	Lanham	325	2%	56%
Prince George's County	20784	Hyattsville	254	1%	58%
Prince George's County	20781	Hyattsville	238	1%	59%
Montgomery County	20905	Silver Spring, Colesville	154	1%	60%
Montgomery County	20866	Burtonsville	161	1%	61%
Prince George's County	20722	Brentwood	127	1%	61%
		<b>TOTAL</b>	<b>1,785</b>	<b>10%</b>	
<b>Tertiary Service Area</b>					
Prince George's County	20743	Capitol Heights	195	1%	62%
Prince George's County	20707	Laurel	179	1%	63%
Prince George's County	20708	Laurel	166	1%	64%
Prince George's County	20785	Hyattsville (Landover)	228	1%	65%
Prince George's County	20723	Laurel	103	1%	66%
		<b>TOTAL</b>	<b>871</b>	<b>5%</b>	
<b>All Other Zip Codes</b>			<b>6,365</b>	<b>34%</b>	
<b>TOTAL</b>			<b>18,687</b>		

Source: Lewin analysis of WAH internal data and HSCRC data (2006). Data exclude newborns.

Table 3 portrays WAH's inpatient market shares by zip code. The table confirms the assignment of zip codes to the three distinct market areas: primary, secondary, and extended service areas.

**Table 3**  
**WAH Discharges and Service Area Market Share of Maryland Hospitals**  
**(CY 2006)**

Service Area	Zip Code	City	Total Discharges	Percentage Market Share, Maryland Hospitals
<b>Primary Service Area</b>				
Prince George's County	20783	Langley Park/Hyattsville	1,619	49%
<b>Montgomery County</b>	<b>20912</b>	<b>Takoma Park</b>	<b>1,296</b>	<b>58%</b>
<b>Montgomery County</b>	<b>20904</b>	<b>Silver Spring, Colesville</b>	<b>1,004</b>	<b>20%</b>
Prince George's County	20782	Hyattsville	993	47%
Montgomery County	20901	Silver Spring, Four Corners	748	24%
Montgomery County	20903	Silver Spring, Woodmoor	770	35%
Montgomery County	20910	Silver Spring, Blair	671	24%
Montgomery County	20902	Silver Spring, Wheaton	446	11%
Prince George's County	20740	College Park	448	27%
Prince George's County	20705	Beltsville	382	19%
Washington D.C.	20011	Washington, DC	325	32%
Prince George's County	20770	Greenbelt	282	16%
Prince George's County	20737	Riverdale	301	16%
Prince George's County	20712	Mount Rainier	229	41%
Washington D.C.	20012	Washington, DC	139	40%
Prince George's County	20742	College Park	8	25%
Montgomery County	20914	Silver Spring	5	16%
		<b>TOTAL</b>	<b>9,666</b>	
<b>Secondary Service Area</b>				
Montgomery County	20906	Silver Spring, Aspen Hill	526	7%
Prince George's County	20706	Lanham	325	9%
Prince George's County	20784	Hyattsville	254	10%
Prince George's County	20781	Hyattsville	238	24%
Montgomery County	20905	Silver Spring, Colesville	154	13%
Montgomery County	20866	Burtonsville	161	16%
Prince George's County	20722	Brentwood	127	26%
		<b>TOTAL</b>	<b>1,785</b>	
<b>Tertiary Service Area</b>				
Prince George's County	20743	Capitol Heights	195	5%
Prince George's County	20707	Laurel	179	6%
Prince George's County	20708	Laurel	166	7%
Prince George's County	20785	Hyattsville (Landover)	228	6%
Prince George's County	20723	Laurel	103	5%
		<b>TOTAL</b>	<b>871</b>	
<b>All Other Zip Codes</b>			<b>6,365</b>	
<b>TOTAL</b>			<b>18,687</b>	

Source: Lewin analysis of WAH internal and HSCRC data (2006)

Statistics indicate that WAH has a market share of discharges that exceeds 50 percent for only one zip code: the Hospital's home zip code of 20912. This means that for only one zip code, WAH serves the majority of inpatient health care needs.

The geographic origin of Washington Adventist Hospital inpatient services varies significantly by service. *Table 4*, which arrays the hospital's inpatient volume by County of patient residence and by service, shows that 41 percent of WAH's 2005 inpatients were residents of Prince George's County, 40 percent originated from Montgomery County, 7 percent from Washington, D.C., and 13 percent from other areas. However, the distribution of inpatients by type of service is not uniform.

**Table 4  
Number of WAH Discharges by Region and Service (CY 2006)**

Region	Number of Discharges by Service (CY 2006)					Total	Percentage of Total
	Obstetrics & Neonate	Psychiatry	Interventional Cardiology (*)	Medical/Surgical/Other			
Prince George's County	1,619	676	1,017	4,297	7,609	41%	
Montgomery County	1,324	982	1,284	3,873	7,463	40%	
Washington D.C.	128	161	92	838	1,219	7%	
Out-of-Area	197	259	1,069	871	2,396	13%	
<b>Grand Total</b>	<b>3,268</b>	<b>2,078</b>	<b>3,462</b>	<b>9,887</b>	<b>18,687</b>	<b>100%</b>	

Source: Health Services Cost Review Commission

Values exclude normal newborns

\* Includes 487 open heart surgery cases

While the interventional cardiology service accounts for 19 percent of all WAH discharges, it accounts for 45 percent of all discharges from people who live outside of Montgomery County, Prince George's, and Washington, DC. These out-of-area regions include Anne Arundel County, Frederick County, Howard County, and Southern Maryland. The Hospital's geographic location is more important for some services such as those that are linked to the Hospital's emergency room, than for others.

Washington Adventist Hospital is also home to the Adventist Rehabilitation Hospital of Maryland - a separately licensed "Hospital within a Hospital." The discharges for that program operating within WAH are not included in the above tables. Like WAH's interventional cardiology services, the Adventist Rehabilitation Hospital of Maryland program also serves a regional role and admits patients from across the State of Maryland and from Washington, DC. The Vision for Expanded Access contemplates that this program is likely to remain at the current Takoma Park campus.

# HEALTH STATUS AND HEALTHCARE NEEDS IN THE WASHINGTON ADVENTIST HOSPITAL SERVICE AREA

The relocation of all or some WAH programs would affect geographic access to care in the areas historically served by the hospital. This section discusses health care needs in WAH’s service areas, particularly those needs that could be affected by the Vision for Expanded Access. Some hospital programs play a more significant public health role than others, and relocation of certain WAH services could place some of the more vulnerable consumers at greater risk than others. The findings from recent needs assessments have been reviewed for this study to highlight health status and public health problems that are currently present in the region. It is important to understand the findings of these needs assessment when examining the possible public health impacts of WAH’s plans.

## A. Vulnerable Populations in the Washington Adventist Hospital Service Areas

This section profiles vulnerable populations in WAH’s service areas to better understand where they are located, what their service needs are, and how they currently are being served. These populations typically have more challenges in accessing health care services, and include people living in poverty, selected minority groups, residents of medically underserved communities, frail or poor elderly, and consumers with significant health status problems or disparities.

### 1. Immigrant Populations and Minority Groups

Montgomery and Prince George’s Counties have become increasingly diverse in recent years. According to the 2000 census, 27 percent of the Montgomery County population consisted of foreign-born residents. *Table 5* shows that Montgomery County has been home to a larger percentage of Asian/Pacific Islanders and Hispanic/Latino residents than Maryland as a whole. About two-thirds of the Prince George’s County population is African-American.

**Table 5**  
**County Population by Race**  
**U.S. Census Bureau Estimate**

	Montgomery County	Prince George’s County	State of Maryland
<b>Total Population</b>	<b>927,583</b>	<b>846,123</b>	<b>5,600,388</b>
Percentage White	69%	28%	64%
Percentage Black	16%	66%	29%
Percentage Asian/Pacific	15%	4%	5%
Percentage reporting two or more races	2%	2%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Hispanic/Latino/Other	13%	10%	5%

Source: U.S. Census Bureau QuickFacts; data derived from Population Estimates, 2000 Census of Population and Housing Available at [www.quickfacts.census.gov/qfd/states/24/24033.html](http://www.quickfacts.census.gov/qfd/states/24/24033.html)

- The Latino population is the fastest growing ethnic group in the County, having grown by over 80 percent since the 1990 census<sup>4</sup>. The majority of the Latino population in Montgomery County resides in WAH's primary service area. The Latino population is concentrated in the communities of Wheaton-Glenmont, Silver Spring and Gaithersburg City, with the remainder dispersed in slightly smaller percentages in Aspen Hill, Takoma Park, Rockville and Germantown.
- WAH's service area is also home to a large percentage of the 150,000 Asian Americans who live in Montgomery County. The Asian American population in the Silver Spring and Takoma Park areas is largely represented by Vietnamese, Cambodian, and Asian Indian communities.
- Local surveys and clinic records indicate that minority families are more likely to lack health insurance<sup>5</sup>. In Montgomery County, Latino households have the lowest median income when compared to other groups. A recent report documents that 27 percent of Latino households earn less than \$30,000 per year, while the County-wide average is 14 percent<sup>6</sup>.
- Growth in the Latino population and in other minority populations has generated increased demand on safety net clinics and increased after-hours volume in hospital emergency rooms. The demand for expanded capacity in community-based clinics has been cited in several evaluations conducted for the County<sup>7</sup>.
- Interviews indicate that non-English speaking residents in the area have difficulty accessing care due to language barriers and other challenges in navigating the health system. For some of these residents, current health care settings do not have an optimal social and cultural approach. Others lack knowledge of the value or availability of health care services and when to use these resources.

Interviews also suggest that there is a growing demand for physicians, hospital/medical office, and clinic staff who are linguistically and culturally competent to respond to the diversity presented by the patient population in the region.

- Health disparities are receiving greater attention nationally as evidence documents the disproportionate disease burden and poorer health outcomes of minority groups. In the region, Hispanics aged 54 years and older in Maryland, for example have 20 to 30 percent higher rates of End-Stage Renal Disease relative to non-Hispanic whites. This finding is similar to national experience that Hispanics across the United States demonstrate higher rates of hypertension and diabetes<sup>8</sup>. Prevalence of asthma, heart disease, diabetes, HIV/AIDS, and infant mortality are higher among African Americans

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<sup>4</sup> Source: Latino Health Initiative of the Montgomery County Department of Health and Human Services. Blueprint for Latino Health in Montgomery County, Maryland. (2002).

<sup>5</sup> Source: The League of Women Voters. Montgomery County's Response to the Health Care Needs of the Immigrant Community. (July 2006).

<sup>6</sup> Source: Latino Health Initiative of the Montgomery County Department of Health and Human Services. Blueprint for Latino Health in Montgomery County, Maryland. (2002).

<sup>7</sup> E.g.: Capital Link. Facility Space Needs Associated with Expanded Safety Net System of Montgomery County, Maryland., completed for The Primary Care Coalition of Montgomery County. (June, 2005). And Montgomery County Commission on Health. Improving the Health of Our Community: Montgomery County Community Health Improvement Plan. (September 2001).

<sup>8</sup> Source: Latino Health Initiative of the Montgomery County Department of Health and Human Services. Blueprint for Latino Health in Montgomery County, Maryland. (2002).

than among whites in Montgomery County, and African Americans in Maryland have the highest overall cancer incidence and cancer mortality of any racial or ethnic group in the State<sup>9</sup>.

If geographic or financial access to services becomes more difficult for the above populations, the identified disparities and problems could worsen.

## **2. Lower Income and Medically Underserved Communities**

Montgomery County often has been recognized for its success in integrating lower income and middle income housing, and preventing densely concentrated low income neighborhoods from developing<sup>10</sup>. As a result, low income households and the underserved populations tend to be distributed across communities rather than concentrated in any one or two zip codes. However, there are identifiable areas with comparatively higher percentages of households living in poverty, and there are geographic clusters designated as medically underserved.

The WAH Takoma Park campus is located in an area formally designated as a Medically Underserved Area. The specific areas in the WAH service areas defined by this designation include Takoma Park and Langley Park, and the Prince George's communities of Chillum, Brentwood, Mount Rainier, Cottage City and Colmar Manor. Medically Underserved Areas are designated based on an "Index of Medical Underservice" that involves four variables: the number of primary care physicians per 1,000 persons, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 years and older. Reuse of the current campus should be focused at least in part on addressing these factors.

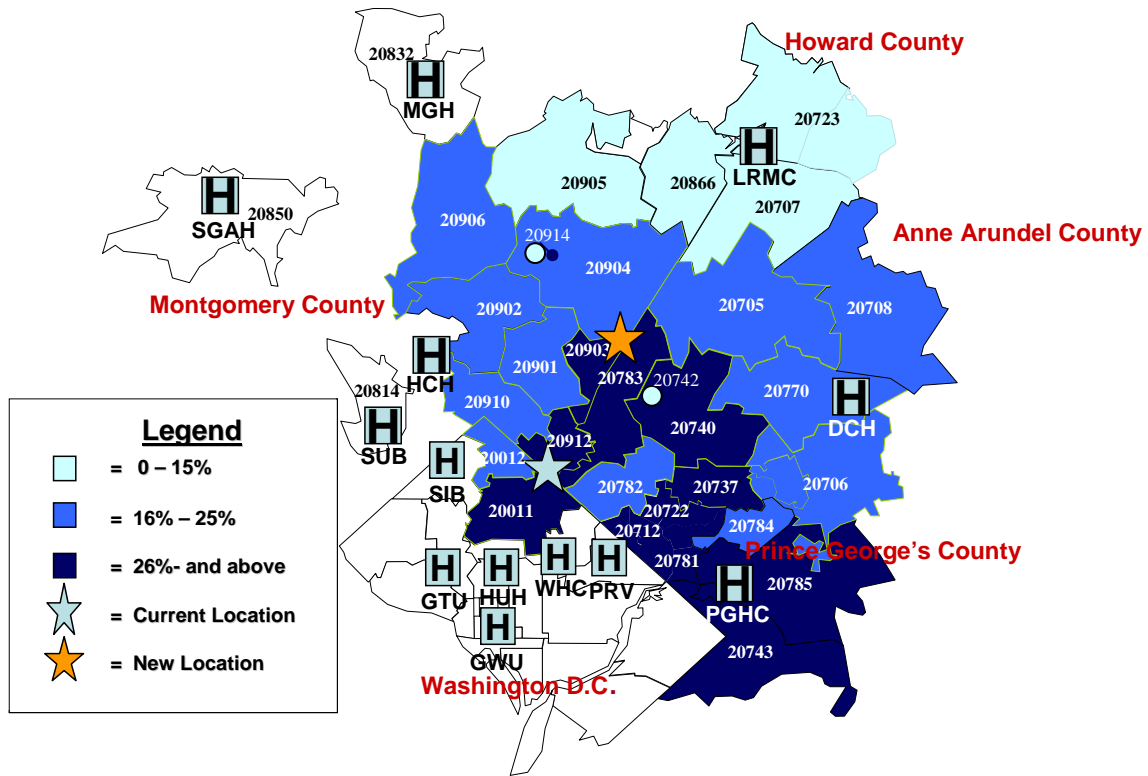
The map below identifies zip codes with a greater proportion of households living between zero and 200 percent of the Federal Poverty Level ("FPL") in 2006. **The new WAH site is farther away from some zip codes with a higher proportion of people in poverty (e.g., 20011 and 20912) but is closer to others, e.g., 20903 and 20783. In the new location, the Hospital will continue to serve patients with similar socioeconomic characteristics.**

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<sup>9</sup> Source: African American Health Program. Beating the Odds: Achieving Health Parity. (May 2003).

<sup>10</sup> Source: Montgomery County Commission on Health. Improving the Health of Our Community: Montgomery County Community Health Improvement Plan. (September 2001).

**Figure 2**  
**Percentage of Population below 200 Percent of Federal Poverty Level**



A recent study prepared for Montgomery County sought to locate and estimate the number of medically underserved people. That analysis produced zip code-specific estimates of a population defined as:

- uninsured;
- with incomes under 250 percent of the Federal Poverty Limit; and
- not reported to be served at safety net clinics in the area.

In WAH’s primary service area, 16,000 residents with all three characteristics were found. They appear concentrated in six Silver Spring communities and in Takoma Park. These six communities are listed in the table below, along with an assessment of travel distances for these residents to the current WAH site in Takoma Park, to the proposed new site, and to the closest hospital.

**Table 6**  
**Estimated Number of Low Income, Medically Uninsured**  
**WAH Service Area**  
**Montgomery County, Only**

Zip Code	Community	Estimated Number of Uninsured, <250% of Poverty and not seen in Clinics	Distance (Miles)				
			Current WAH Campus	Current Closest Hospital	New WAH Site	Closest Hospital with Complete Relocation	Closest ER if Takoma Park ER is Maintained
20901	Four Corners	1,073	3.3	1.7	5.0	1.7	1.7
20902	Wheaton	2,889	5.8	2.8	7.5	2.8	2.8
20903	Woodmoor	1,784	<b>2.5</b>	2.5	<b>4.8</b>	4.8	2.5
20904	Colesville	1,704	8.0	6.2	<b>2.0</b>	2.0	2.0
20905	Colesville	420	9.7	6.2	<b>6.1</b>	6.1	6.1
20906	Aspen Hill	4,602	9.9	6.3	9.1	6.3	6.3
20910	Silver Spring	3,338	2.7	1.9	6.8	1.9	1.9
<b>Total / Weighted Average</b>		<b>15,810</b>	<b>6.1</b>	<b>4.0</b>	<b>6.7</b>	<b>3.8</b>	<b>3.5</b>

Source: Lewin analysis using Google maps.

The analysis supporting *Table 6* indicates that:

- Washington Adventist Hospital is currently the closest hospital for **one** of these communities: zip code 20903 (1,784 persons). Holy Cross Hospital is the closest facility for 20901, 20902, 20904, 20906, and 20910 (13,606 persons). Montgomery General Hospital is most proximate to 20905.
- If WAH relocated all hospital services to the proposed new site, it would be the closest hospital facility for **three** of these zip codes: 20903, 20904, and 20905 (3,908 persons). Zip code 20904 is closer to the new site than to Holy Cross Hospital, which is currently the most proximate facility.
- If WAH redevelops some type of emergency service at the Takoma Park site, it would be the closest ER available to the same three zip codes (20903, 20904, and 20905) with 3,908 low-income, uninsured residents.

**Overall, it appears that access to the nearest hospital for this group of highly vulnerable patients would not change materially if WAH were to relocate all services to the proposed new location.**

### 3. Low Income Elderly

Table 7 portrays the total number of people residing in the WAH service areas, by age cohort. The table indicates that the fastest growing age groups between 2000 and 2011 are in cohorts aged 45-64 and 65-74. The service areas are expected to age in the coming years.

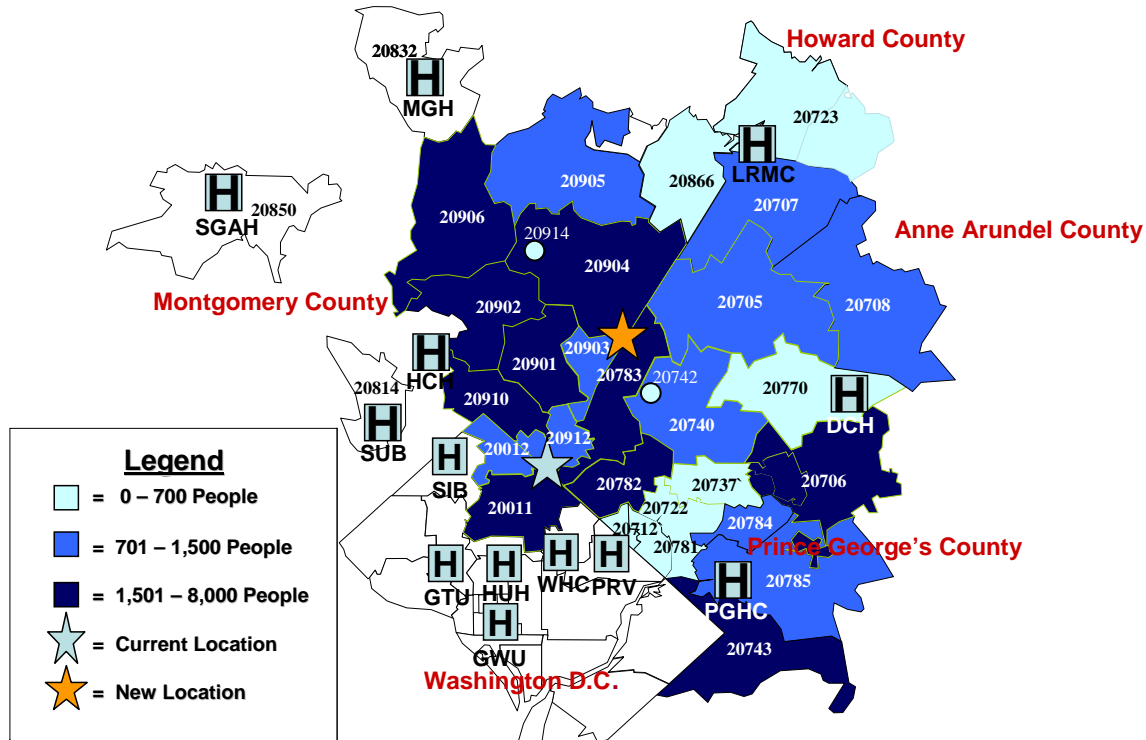
**Table 7**  
**Population Growth by Age Cohort - WAH Service Areas**

Age Cohorts	2000	2006	2011	# Change	Percentage Change 2000-2011
<5	55,158	58,517	57,102	1,944	4%
5-17	139,327	143,819	148,697	9,370	7%
18-44	342,722	326,614	310,716	(32,006)	-9%
45-64	165,881	195,503	220,016	54,135	33%
65-74	41,918	46,035	56,800	14,882	36%
75+	37,578	40,859	43,633	6,055	16%
<b>Total Population</b>	<b>782,584</b>	<b>811,347</b>	<b>836,964</b>	<b>54,380</b>	<b>7%</b>

Source: Lewin analysis of Claritas data

Currently, the elderly population is most heavily concentrated in the Silver Spring communities of WAH's service area.

**Figure 3**  
**Distribution of Residents Age 75+ (Claritas 2005)**



A 2002 survey conducted in Montgomery County estimated the number of low income elderly over the age of 75 to be 16,800 people<sup>11</sup>. The survey found that of this population, almost two-thirds had one or more significant unmet needs such as healthcare, mental healthcare, activities of daily living, access to services, and social supports. In coming years, services that (1) are highly accessible for regularly scheduled, ongoing treatment requirements such as dialysis and cancer treatment services, (2) attend to the aging immigrant population who may not be as familiar with accessing services; and (3) promote awareness among families of available mental health services for geriatric patients are likely to experience growing demand.

## **B. Identified Public Health Problems in the Washington Adventist Hospital Service Areas**

The “Community Health Improvement Plan” prepared for Montgomery County in 2001-2002 identified the following health care priority areas for the County. These areas were established as priorities after reviewing health status indicators (both in total and by race), considering the potential for change, and assessing socioeconomic factors in the County relevant to access, utilization patterns, and lifestyle.

- **Asthma:** The rate of hospitalization for children with asthma is higher than the national target published in Healthy People 2010, and 60 percent higher than the County-wide average for African American children.
- **Cardiovascular Disease:** Cardiovascular Disease is the second leading cause of death in Montgomery County, and African Americans experience substantially higher rates of mortality from stroke (e.g., 59 cases per 100,000 versus the County-wide average of 48) and from heart disease.
- **Colorectal Cancer:** Both Asians and African Americans incur a higher incidence of colorectal cancer, and a lower percent of cases are diagnosed in Montgomery County (26 percent) at an early stage than in the State as a whole (33 percent).
- **Diabetes:** Obesity-related diabetes is increasing and affecting more people at a younger age. Hospitalization rates for diabetes related problems have been three times higher for African Americans than rates for whites (157.9 per 100,000 versus 59.5 per 100,000). Mortality rates also reflect this disparity. Latino adults in Maryland report 50 percent more diagnosed cases than white adults.
- **HIV/AIDS:** The number of new cases among African Americans (42.2 per 100,000) continues to be much higher than for whites in the County (2.2 per 100,000).
- **Infant Mortality:** By 2010, Montgomery County hopes to achieve an infant mortality rate of 4.0 per 1,000 live births. In 2001, the rate for African Americans was 10.5 per 1,000 and for Whites, 5.9 per 1,000. A lack of timely prenatal care has been identified as a problem.
- **Cultural Barriers:** Cultural barriers exist in Montgomery County. Analysts indicate that medical providers could improve their level of cultural competency. Certain ethnic

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<sup>11</sup> Source: Galen, Steven, Executive Director, The Primary Care Coalition of Montgomery County. Telephone interviews. (August 2006/January 2007).

groups do not take advantage of preventive services (e.g., Asians have the lowest level of breast cancer screening, and only 15 percent of foreign-born Hispanics have been immunized).

An additional priority was established by The Department of Health and Human Services of Montgomery County in its Strategic Plan, to “Increase the effectiveness of behavioral health treatment to improve outcomes and consequently decrease the number of people with behavioral health needs inappropriately in the homeless system, jails, and hospital emergency rooms.”

The Prince George’s County Health Department also incorporated in its priorities a strategy for lowering the relatively high rates of substance abuse and associated mental health problems that exist in the County. This Health Department identified the need to expand substance abuse and mental health treatment staff in community sites, and to establish a medically-monitored detoxification unit.

### **C. Public Health Initiatives to Address Identified Problems**

The Community Health Improvement Plan defined targets goals, and outlined public health strategies to address each of these high priority issues. Most of these initiatives are heavily dependent on health care educators, community health nurses, and screening/early detection services (*Table 8*).

**Table 8  
Area Public Health Needs and Strategies**

<b>Priority Area</b>	<b>Public Health Strategies</b>
<b><i>Asthma</i></b>	<ul style="list-style-type: none"> <li>• Education: Families, schools, medical providers</li> <li>• Eliminating exposure</li> </ul>
<b><i>Cardiovascular</i></b>	<ul style="list-style-type: none"> <li>• Community-based screening and educational programs</li> <li>• Smoking cessation programs</li> </ul>
<b><i>Colorectal cancer</i></b>	<ul style="list-style-type: none"> <li>• Screening/early detection programs, especially targeted to low-income minority groups</li> <li>• Program integration with safety net clinics for follow-up care</li> <li>• Educational campaigns</li> <li>• Outreach and health education programs specifically targeted to minority communities</li> </ul>
<b><i>Diabetes</i></b>	<ul style="list-style-type: none"> <li>• School-based programs: Prevention and management</li> <li>• Prescription drug coverage for low-income Medicare beneficiaries</li> <li>• Diabetes management and education classes sponsored by minority clinics</li> </ul>
<b><i>HIV/AIDS</i></b>	<ul style="list-style-type: none"> <li>• Highly targeted education programs those identified as high risk</li> <li>• Direct health care services: Expansions</li> <li>• Expanded screening activity for high-risk groups</li> </ul>
<b><i>Infant mortality: Montgomery County</i></b>	<ul style="list-style-type: none"> <li>• Community health nurse for case management through pregnancy</li> <li>• Community health nurses from delivery through home visits</li> </ul>
<b><i>Infant mortality: Prince George's County</i></b>	<ul style="list-style-type: none"> <li>• Women's Wellness Centers to provide preconception health care to uninsured/underinsured women at risk for poor pregnancy outcomes; increased focus on psychosocial factors</li> <li>• Partnership between Health Department and Dimensions Healthcare System to provide high-risk obstetrical services at Health Department clinics</li> </ul>
<b><i>Substance abuse and mental health: Prince George's County</i></b>	<ul style="list-style-type: none"> <li>• Additional mental health staff in key treatment sites</li> <li>• Development of plan for multi-level residential substance abuse facility by July 2007, to include a medically monitored detoxification unit with the capacity to serve individuals with coexisting mental health and substance abuse disorders</li> </ul>

Several elements of the Washington Adventist Hospital Vision for Expanded Access are well aligned with addressing the identified public health concerns. For example, the development of a health center in an area identified as medically underserved (Long Branch – zip code 20901). Other examples include: The Center on Health Disparities, and WAH's commitments to charity care and to working with partners to expand available health care resources to under-served communities in Montgomery and Prince George's counties.

WAH also is developing relationships with principals in the Prince George's County public schools closest to the hospital in response to interest in programs focused on health and hygiene. The Hospital participates in a program sponsored by Montgomery County that provides prenatal care and delivery services to uninsured, low income women in Montgomery County.

## WASHINGTON ADVENTIST HOSPITAL SERVICES AND THEIR ROLE IN MEETING COMMUNITY NEEDS

The services provided by Washington Adventist Hospital meet community needs and influence public health. This section describes the major programs provided by the Hospital.

### A. Emergency Room Services

The distinctive roles played by the WAH Emergency Room include:

- A resource for both Montgomery County's and Prince George's County Emergency Medical Systems. The WAH ER receives approximately an equal number of transports from each of the two counties.
- The Emergency Room is where mental health patients arrive at the hospital for assessment. Some patients are transported there by Montgomery County or Prince George's County EMS, others by law enforcement, and others arrive on their own (or with friend/family assistance). About 40 percent of mental health patients arriving via EMS are transported from Prince George's County, and 60 percent are transported from Montgomery County. ER-based mental health staff also operates a crisis line for phone contact with patients who need assessment.
- The Emergency Room has become a high volume intake site for a large number of inebriated/intoxicated patients. These patients have an average length of stay of ten hours in the ER, and a significant percentage of patients present with injuries or medical needs. After stabilization, WAH staff begin the process of service and referral or discharge planning.
- The Emergency Room also serves as an "after-hours" provider that enhances services offered by community clinics that operate in the area. The demand for care reflects the limited hours of these clinics, and also reflects the large immigrant population that often lacks a source of primary care. Approximately eight emergency room visits per day at WAH (seven percent of daily visits) are categorized as "non-urgent," an additional thirty visits per day are categorized as "stable". Many of these represent visits that could be managed in a physician's office or clinic setting.

Some patients are transferred out of the WAH ER to other facilities after being stabilized. For example, neurosurgery patients are referred to the Washington Hospital Center or to Georgetown University Hospital. Children and Kaiser Patients also are transferred to other facilities.

Between 2000 and 2005, visits to Maryland Emergency Rooms increased 4.2 percent across the State. ER visits in the Metropolitan Washington region grew more dramatically than any other region in Maryland, faster than the growth in the region's population. Between 2005 and 2006, ER visit volume declined at some hospitals, likely reflecting a shift to freestanding centers and capacity limitations (*Table 9*).

**Table 9  
Emergency Room Visits at Selected Hospitals  
CY2004-2006**

	Total Emergency Room Volume			Percentage Change 2004-06
	2004	2005	2006	
Doctor's Hospital	53,427	53,869	53,625	0.4%
Holy Cross Hospital	64,665	63,682	67,692	4.7%
Laurel Regional	38,492	37,506	35,729	-7.2%
Montgomery General	29,751	28,755	32,395	8.9%
Shady Grove Adventist (*)	91,332	107,146	87,935	-3.7%
Suburban Hospital Center	39,031	39,041	39,302	-0.7%
Prince George's Hospital	53,511	50,050	47,973	-10.3%
Washington Adventist	43,467	44,828	44,268	1.8%
<b>TOTAL</b>	413,676	424,877	408,419	-1.5%
Bowie Health Center	N/A	N/A	37,883	

(\*) Note: Shady Grove Adventist opened its freestanding Emergency Center in Germantown during 2006.

Source: Health Services Cost Review Commission Financial Data Set, reported through the Maryland Health Care Commission

According to analyses prepared by the State of Maryland, nearly one-third of all ER visits in the State can be classified as “non-emergent”<sup>12</sup>. The largest users of non-emergent care are patients without insurance, followed closely by Medicaid recipients. African American and biracial patients are also the largest users of emergency rooms for non-emergent, primary care treatable visits. This reflects the lack of insurance, the lack of primary care providers, the limited hours of operation of community-based clinics, and the long waits for physician appointments.

## **B. Psychiatric Services**

Washington Adventist Hospital operates a spectrum of inpatient and outpatient psychiatric services, including a 40-bed inpatient unit that has a daily census that has averaged 33 patients in recent years. WAH also operates an outpatient, partial hospitalization program and other ambulatory services. The Hospital’s outpatient partial hospitalization program averages a census of about 20 patients, and the Senior Adult program averages 13 patients per day. WAH also offers substance abuse services, and helps those who are dually-diagnosed with mental health and substance abuse service needs.

- WAH is the only full service, acute care hospital in Montgomery County that accepts involuntary psychiatric admissions.
- WAH’s Emergency Room is the principal point of entry for the Hospital’s mental health services; about 70 percent of admissions to the Hospital’s inpatient unit first arrived at the WAH emergency room or at another hospital emergency room in the area.

<sup>12</sup> Source: Maryland Health Care Commission. Use of Maryland Hospital Emergency Departments,” Maryland Health Care Commission (January 2007).

- WAH's program is a regional referral site for psychiatric patients with medical management needs. The Emergency Room receives 1-2 psychiatric transfers per day from other hospitals, in part because the program is distinguished by its ability to serve mental health patients with physical health needs. An average of six mental health evaluations are conducted in the emergency room each day (with a typical number ranging from four to twelve).
- Physical health needs of patients in the WAH inpatient psychiatric unit typically are met by hospitalist physicians who provide coverage at WAH on a 24-hour per day basis. According to interviews, about one-half of the mental health patients in the acute unit at WAH have a medical co-morbidity. Hospitalists address needs in the unit such as those associated with diabetes, kidney failure, congestive heart failure, and periodic issues associated with patient responses to mental health medications. Some patients on the unit also are expectant mothers, so consultations with OB/GYN physicians sometimes are warranted.
- WAH has the highest market share of inpatient psychiatric services in virtually every zip code within the primary service area, as shown in *Table 10*.

**Table 10**  
**WAH Psychiatry Discharges, CY 2006**  
**Patient Origin and Market Share: Maryland Hospitals, Only**

Service Area	Zip Code	City	Psychiatry Discharges	Percentage Market Share, Maryland Hospitals
<b>Primary Service Area</b>				
Prince George's County	20783	Langley Park/Hyattsville	101	73%
Montgomery County	20912	Takoma Park	192	87%
Montgomery County	20904	Silver Spring, Colesville	108	49%
Prince George's County	20782	Hyattsville	69	65%
Montgomery County	20901	Silver Spring, Four Corners	89	72%
Montgomery County	20903	Silver Spring, Woodmoor	78	65%
Montgomery County	20910	Silver Spring, Blair	81	55%
Montgomery County	20902	Silver Spring, Wheaton	72	39%
Prince George's County	20740	College Park	34	37%
Prince George's County	20705	Beltsville	22	27%
Washington D.C.	20011	Washington, DC	28	56%
Prince George's County	20770	Greenbelt	27	27%
Prince George's County	20737	Riverdale	29	33%
Prince George's County	20712	Mount Rainier	25	67%
Washington D.C.	20012	Washington, DC	10	71%
Prince George's County	20742	College Park	5	42%
Montgomery County	20914	Silver Spring	1	50%
<b>TOTAL</b>			<b>971</b>	
<b>Secondary Service Area</b>				
Montgomery County	20906	Silver Spring, Aspen Hill	63	21%
Prince George's County	20706	Lanham	25	15%
Prince George's County	20784	Hyattsville	38	28%
Prince George's County	20781	Hyattsville	19	40%
Montgomery County	20905	Silver Spring, Colesville	14	23%
Montgomery County	20866	Burtonsville	14	25%
Prince George's County	20722	Brentwood	7	37%
<b>TOTAL</b>			<b>180</b>	
<b>Tertiary Service Area</b>				
Prince George's County	20743	Capitol Heights	29	11%
Prince George's County	20707	Laurel	16	11%
Prince George's County	20708	Laurel	17	16%
Prince George's County	20785	Hyattsville (Landover)	22	10%
Prince George's County	20723	Laurel	4	5%
<b>TOTAL</b>			<b>88</b>	
<b>All Other Zip Codes</b>			<b>839</b>	
<b>TOTAL</b>			<b>2,078</b>	

Source: Health Services Cost Review Commission data provided by WAH

Note: Figures do not include out migration to District of Columbia hospitals; WAH market share thus is likely overstated

The program operates collaboratively with the Potomac Ridge Behavioral Health System, which also is operated by the Adventist HealthCare. Potomac Ridge provides a full range of behavioral health services for adolescents and adults (*Table 11*).

**Table 11**  
**Potomac Ridge Behavioral Health System Programs and Services**

Potomac Ridge Program	Services Provided
Potomac Ridge Behavioral Health Center	Services include an acute inpatient psychiatric care for adolescents and adults, intensive outpatient substance abuse treatment for adolescents and adults, a residential treatment center with separate male and female units, adolescent dual diagnosis substance abuse treatment, adolescent partial hospitalization program, special and general education school for students grades 6 – 12, group home services for adolescents and a Children’s Unit.
Potomac Ridge Behavioral Health System at Anne Arundel	Services include a residential treatment center with separate male and female units, special and general education school for students grades 8 – 12, and group home services for adolescents.
The Ridge School of Montgomery County	Services include a special and general education school for students grades 6 – 12.
The Ridge School of Anne Arundel County	Services include a special and general education school for students grades 8 – 12.
The Potomac Ridge Residential Treatment Center at Rockville	Services include a residential treatment center with separate male and female units.
The Potomac Ridge Residential Treatment Center of Anne Arundel County	Services include a residential treatment center with separate male and female units.
Potomac Ridge Manor at Silver Spring	Services include long term assisted living for adults with mental illness.
The Potomac Ridge Cottage at Annapolis	Services include a group home for male adolescents.
The Potomac Ridge Cottage at North Potomac	Services include a co-ed group home for adolescents.
The Potomac Ridge Cottage at Rockville	Services include a co-ed group home for adolescents.
The Reginald S. Lourie Center for Infants and Young Children	Services include therapeutic nursery program, early head start, school, outpatient counseling

County assessments, community surveys and interviews have identified the need for more mental health services in the region, including the following:

- Mental health services for the Spanish-speaking population
- Treatment programs designed to respond to specific needs of the Asian refugee community
- Greater availability of outpatient programs scheduled during evening hours

- Dedicated resources for management, triage, and social services of intoxicated patients in Emergency Rooms who may require treatment
- Development of a detoxification unit in the region

### **C. Maternal Health/Obstetrics Services**

Maternal Health represents another core program for WAH. The Hospital's Obstetrics/Gynecology service to the uninsured and to the immigrant population is likely to grow significantly as WAH becomes a more important contractor with the Montgomery County Maternity Partnership Program.

- In 2006, WAH discharged 2,767 obstetrics (and neonatal) patients. More of these patients lived in Prince George's County (49 percent) than in Montgomery County (41 percent). WAH contracts with Montgomery County to provide prenatal services for uninsured County residents. Under the Maternity Partnership Program, WAH has committed to serve up to 1,000 new patients. This role will extend WAH's role geographically as it begins to serve more people from the Germantown and northern Silver Spring communities.
- WAH has always served a large number of immigrants, but more recently it is seeing an influx of African immigrants in its obstetrics programs. The obstetrics service has identified a growing number of HIV-infected pregnant women. This has broadened pregnancy management to include intensive education and specialty medical services.
- WAH recently launched a new high-risk perinatal service which allows obstetricians in the community to refer high-risk pregnancy cases to a local specialist affiliated with WAH. Patients no longer will have to seek this service off campus.
- Together with Adventist HealthCare, WAH provides nearly 700 classes annually as part of the Maternal and Child Health Education program, with programs held in communities across the region. More than 7,000 area residents participate in these classes, which focus on childbirth, breastfeeding, newborn care, infant safety, and parenting issues. As with other WAH outreach programs, these events serve as entry points into the health care system.

WAH management recognizes the value of providing access to prenatal care in Takoma Park and the surrounding communities.

### **D. Rehabilitation Services**

Rehabilitation services are provided across multiple service sites.

- An inpatient rehabilitation hospital operates within Washington Adventist Hospital as well. Adventist Rehabilitation Hospital of Maryland (ARHM) operates in 22 separately-licensed beds located on the 5<sup>th</sup> floor of the current hospital. This facility is the only acute inpatient rehabilitation hospital operating in Montgomery County.
- ARHM serves post-acute patients discharged from WAH and referred from other hospitals and long-term care facilities. Patients recovering from stroke, brain injury,

cardiovascular surgery, orthopedic surgery, and other problems are served by the unit. The program's goal is to return patients to the community or home. Seventy-five percent are discharged to their homes, while 25 percent are admitted to another institutional setting.

- As a separately licensed hospital, ARHM provides its own nursing, therapy, administrative, and billing services. WAH supplies services to ARHM, such as housekeeping, linen, food, laboratory, radiology, respiratory therapy, and wound care. ARHM reimburses WAH for the cost of these services. ARHM has its own medical staff. Many of the rehabilitation patients receive a medical consultation (either from an internist or family practice physician).
- There are two to four admissions every month from ARHM to WAH. Patients are evaluated in the emergency department for whether or not admission to inpatient medical/surgical services is warranted.
- Outpatient rehabilitation services (physical therapy, occupational therapy, and speech therapy) are located on the first floor of the hospital and are quite space constrained. ARHM operates outpatient rehabilitation services at a freestanding center in Silver Spring.

The plans for rebuilding WAH should consider how to maintain and support ARHM with essential services, such as laboratory, radiology, and others, and also how to meet the medical needs of ARHM patients if WAH relocates and ARHM remains in Takoma Park.

## **E. Resource for Area Nursing Facilities**

According to interviews, the WAH Emergency Room serves patients transported from some of the area's largest nursing facilities, including several located in Prince George's County. WAH medical staff members also visit area nursing facilities and provide consultations for long-term care patients.

Adventist HealthCare operates a number of long-term care facilities and programs in the region. These programs interact with WAH services on a regular basis.

- Sligo Creek, for example, is located across the street from WAH, and is a 102-bed facility with 51 skilled nursing and 51 long-term-care beds. The program emphasizes rehabilitation. According to the Adventist HealthCare, about 60 percent of Sligo Creek patients were referred for admission from WAH.
- Springbrook is a 99-bed facility located about 4 miles away from WAH. The program has a strong dialysis emphasis, and operates an 11-chair dialysis unit for inpatients and outpatients who visit the facility for care.
- Fairland Nursing and Rehabilitation Center is a 92-bed facility, located about 7 miles away from WAH. Fairland has 17, Medicare-certified skilled nursing beds in addition to its remaining long-term care beds. The nursing home has a ventilator unit that receives virtually all of its patients from WAH.

- The Adventist HealthCare Shady Grove campus includes a 120-bed facility with 45 skilled nursing beds and 75 long-term care beds. There also is a 50-bed assisted living facility (Kingshire Manor Assisted Living) located next door to Shady Grove Adventist Hospital.
- Bradford Oaks Nursing and Rehabilitation Center is a 180-bed facility located in Clinton, Maryland (Prince Georges County). The Center provides 60 skilled nursing and 120 long-term care beds.
- Glade Valley Nursing and Rehabilitation Center is a 124-bed facility located in Walkersville, Maryland (Fredrick County).

The plans for rebuilding WAH should consider how to provide continued support to these and other long-term care facilities in the region.

## F. Cardiac Services

WAH operates one of the nine open heart surgery programs in Maryland. Patient origin statistics highlight the Hospital’s role as a regional provider; nearly two-thirds of its cardiac surgery cases originated from residents living outside the defined service areas (*Table 12*).

**Table 12**  
**Geographic Origin of Cardiac Interventional Procedure Inpatients**

	Discharges		Percentage of Discharges	
	Cardiac Interventional Procedures	Other WAH Services	Cardiac Surgery	Other WAH Services
Primary	729	8,943	21%	59%
Secondary	352	1,433	10%	9%
Tertiary	193	678	6%	4%
Out-of-Area	2,188	4,179	63%	27%
<b>Total</b>	<b>3,462</b>	<b>15,233</b>	<b>100%</b>	<b>100%</b>

Source: Lewin Analysis of WAH Internal Data.

WAH attracts cardio vascular procedural volumes from eight different counties in Maryland and Washington, DC (*Table 13*).

**Table 13**  
**Patient Origin of Cardiac Interventional Program (Inpatient and Outpatient) Cases at WAH**  
**(CY 2006)**

<b>County</b>	<b>IP Discharges</b>	<b>(%IP)</b>	<b>OP Visits</b>	<b>(%OP)</b>	<b>TOTAL</b>	<b>(%TOTAL)</b>
Montgomery County	1,284	37%	2,654	32%	<b>3,938</b>	34%
Prince George's County	1,017	29%	2,304	28%	<b>3,321</b>	28%
Other Areas	311	9%	636	8%	<b>947</b>	8%
Frederick	187	5%	770	9%	<b>957</b>	8%
Howard	173	5%	449	5%	<b>622</b>	5%
Calvert	151	4%	471	6%	<b>622</b>	5%
Anne Arundel	132	4%	325	4%	<b>457</b>	4%
Washington D.C.	92	3%	258	3%	<b>350</b>	3%
Charles	82	2%	285	3%	<b>367</b>	3%
St. Mary's	33	1%	126	2%	<b>159</b>	1%
<b>Total</b>	<b>3,462</b>		<b>8,278</b>		<b>11,740</b>	

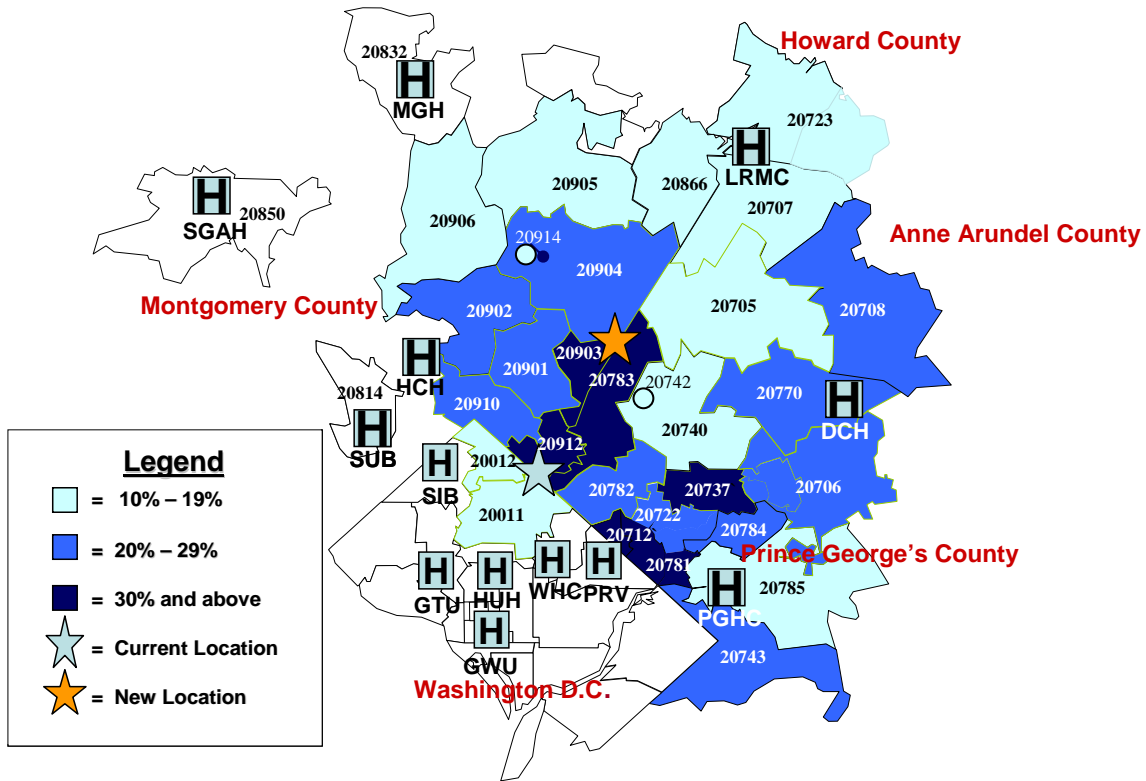
Source: Lewin analysis of WAH internal data and HSCRC data (2006).

The distribution by county of inpatients and outpatients who use WAH's interventional cardiology services has been roughly equivalent.

**G. WAH Services to Uninsured (“Self Pay”) and Medicaid Patients**

The map that follows portrays the concentration of 2006 Medicaid and self pay discharges in WAH's service area zip codes.

**Figure 4**  
**Percentage of Medicaid/Self Pay Discharges (CY 2006)**



In zip codes 20903, 20912, and 20783, 30 percent or more of the inpatients admitted to hospitals either were Medicaid recipients or were uninsured (self-pay). The proposed location for the new WAH site remains proximate to this area. As a result, WAH has had, and will continue to have one of the highest market shares for patients that are uninsured or with Medicaid.

WAH's market share of Medicaid discharges and self pay discharges from this area is presented in *Table 14*. In 2006, WAH discharged 23 percent of all Medicaid/Self Pay patients residing in its primary service area, and 7 percent of all Medicaid/Self Pay patients from its secondary service area. Market shares vary only slightly by payer category when examined by service area, indicating that the Hospital's services have been available to patients with all sources of coverage, including the uninsured. WAH's Vision for Expanded Access initiatives, including the new hospital coupled with a redevelopment of its current campus and linkages to primary care centers in the these zip codes, would continue to position WAH as an important provider of health care services in these areas.

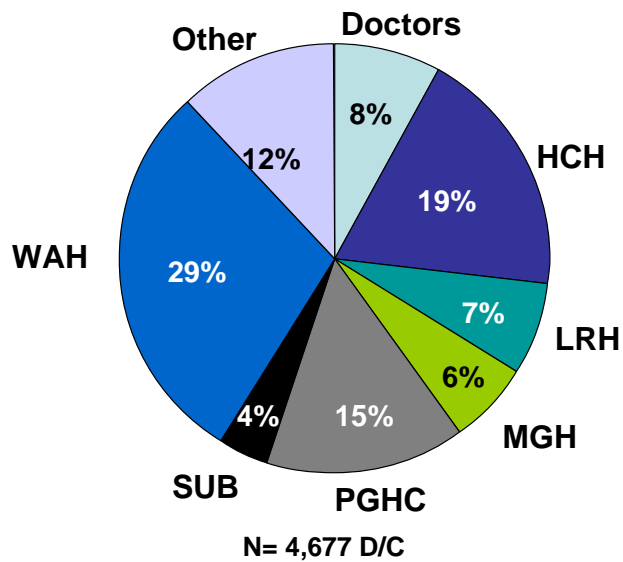
**Table 14**  
**WAH Service Area Market Share by Payer (CY 2006)**

WAH Service Area	Payer Category			Total Market Share
	Medicare	Medicaid/ Self Pay	All Other	
Primary Service Area	24%	23%	20%	22%
Secondary Service Area	11%	7%	10%	10%
Combined PSA and SSA	21%	19%	18%	19%

Source: Lewin Analysis of HSCRC data.

Across the primary and secondary services areas, WAH serves the largest share of self pay discharges of all hospitals drawing patients from these areas.

**Figure 5**  
**Market Share of Self Pay Discharges**  
**WAH Service Area (2006)**



Source: Lewin Analysis of HSCRC 2006 data.

**Table 15**  
**Combined Primary, Secondary and Tertiary Service Area Market Share of Self Pay and Medicaid Discharges by Service (CY 2006)**

Other Medical/Surgical			Psychiatry			Obstetrics		
Hospital	Medicaid Market Share	Self Pay Market Share	Hospital	Medicaid Market Share	Self Pay Market Share	Hospital	Medicaid Market Share	Self Pay Market Share
WAH	13%	26%	WAH	30%	50%	Holy Cross	45%	39%
Holy Cross	24%	20%	Mont. Gen	9%	16%	WAH	12%	27%
PGHC	32%	16%	PGHC	39%	9%	PGHC	28%	13%
Other	10%	11%	Laurel	10%	8%	Other	5%	7%
Doctors	10%	10%	Other	5%	8%	LRH	7%	6%
Laurel	7%	7%	Suburban	4%	5%	Mont. Gen.	1%	4%
Suburban	1%	5%	How. Co. Gen	2%	3%	How. Co. Gen	1%	3%
Mont. Gen.	3%	5%	Holy Cross	1%	1%	Doctors	1%	1%
<b>Total Medical/Surgical Discharges</b>	<b>8,056</b>	<b>3,854</b>	<b>Total Psychiatry Discharges</b>	<b>1,000</b>	<b>552</b>	<b>Total Obstetrics Discharges</b>	<b>5,515</b>	<b>271</b>

Source: Lewin Analysis of HSCRC 2006 data.

WAH historically has been a leader in providing uncompensated care in the region. In 2006, the Hospital provided nearly \$22 million in uncompensated care, or about 9 percent of WAH's revenue. This percentage of revenue is above the Montgomery County and Maryland Hospital averages, even though WAH's outpatient services have been comparatively under-developed due to constraints associated with the Takoma Park campus.

**Table 16**  
**Three Year Comparison of Uncompensated Care provided by Montgomery County Hospitals**

Hospital	2004	2004	2005	2005	2006	2006
	Uncompensated Care (\$)	Uncompensated Care (%)	Uncompensated Care (\$)	Uncompensated Care (%)	Uncompensated Care (\$)	Uncompensated Care (%)
<b>WAH</b>	<b>\$13.47 MM</b>	<b>6.24%</b>	<b>\$18.92 MM</b>	<b>7.56%</b>	<b>\$21.87 MM</b>	<b>8.63%</b>
MGH	\$5.75	6.06%	\$ 6.06	6.13%	\$ 8.41	7.87%
SGAH	\$12.74	5.57%	\$17.62	6.88%	\$18.45	7.35%
HCH	\$14.34	5.37%	\$20.47	7.01%	\$23.33	6.99%
SUB	\$ 6.88	4.68%	\$ 6.60	4.27%	\$ 7.12	4.44%
<b>Mo. Co. Total</b>	<b>\$53.18</b>	<b>5.58%</b>	<b>\$69.67</b>	<b>6.62%</b>	<b>\$79.18</b>	<b>7.15%</b>
State of MD Total	\$ 529.40	6.30%	\$ 683.58	7.40%	\$766.71	7.58%

Source: Lewin Analysis of Maryland Hospital Association data.

The assessments in the above section indicate that WAH is and will remain an important resource for uninsured patients and for those with Medicaid coverage.

## H. Current Area Clinic Resources

Other resources are available in the WAH service areas, including a network of safety net clinics in Montgomery County. The network consists of eight clinic organizations and 20 mobile sites. Montgomery County estimates that there are 40,000 medically underserved residents; the network of clinics reportedly served 14,000 patients this past year and is expected to serve 17,000 patients this coming year. Reports suggest that most of these clinics continue to have available capacity. WAH’s service area is particularly well-funded and clinics are concentrated in the Silver Spring area. Several of these clinics are sponsored by minority organizations, and several are supported by hospitals:

**Table 17**  
**Safety Net Clinics in WAH’s Service Area (zip code)**

<p><b>The Peoples Community Wellness Center</b> <i>Silver Spring (20910/04)</i></p> <p>Spanish Catholic Center <i>Silver Spring (20903)</i> <i>Washington, DC (20010)</i></p> <p><b>Community Clinic, Inc. (CCI)</b> <i>Silver Spring (20910)</i> <i>Takoma Park (20912)</i> <i>Gaithersburg (20877)</i></p> <p><b>Mobile Medical Care, Inc</b> 19 clinic sites 3 mobile medical vans and partnered with the following 3 clinics:</p> <p>PanAsian Volunteer Health Clinic <i>Silver Spring (20902)</i></p> <p>L’A.M.I. Family Health Clinic <i>Silver Spring (20905)</i></p> <p><b>CASA: County Association of Spanish Americans</b> <i>Silver Spring</i></p>	<p>Holy Cross Hospital Health Center <i>Silver Spring (20910)</i></p> <p><b>WAH/Mary’s Center Clinic (November 2007)</b> <b>Long Branch</b></p> <p>Proyecto Salud <i>Wheaton (20902)</i></p> <p>Muslim Community Center Free Clinic <i>Silver Spring (20910)</i> <i>Silver Spring (20905)</i></p> <p>Mercy Health Clinic <i>Gaithersburg (20885)</i></p> <p>Montgomery Volunteer Dental Clinic <i>Silver Spring (20904)</i></p> <p>Walker Mill Health Center <i>Capital Heights (20743)</i></p> <p>Prime Med Corporation <i>Landover (20785)</i></p>
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Note: WAH has a relationship with the clinics in bold font.

These clinics are open to all patients, and provide primary health care, some medications, and, at some sites, selected specialty services. One site also provides full dental services and another provides psychiatric services. At multiple sites, full-time and dedicated clinics operate to service HIV/AIDS patients, and provide oral health services. Hospitals have served a supportive role to these clinics, providing diagnostic services, facility support and direct subsidies. However, providers and health planners have identified service gaps that include a need for after-hours urgent care and assistance with the cost and management of medications.

## I. WAH Community Outreach Programs

Washington Adventist Hospital operates a series of outreach programs that benefit the community. The “Vision for Expanded Access” proposes that these programs would continue and expand in both the current primary service area and in new areas served by the new WAH campus.

The Health and Wellness Program at WAH coordinates health education classes, screening events, support groups, and special programs that are dedicated to promoting health and healing in the community. According to program statistics, in 2005, 62,107 persons were served by these activities and program costs exceeded \$920,000. Several programs target the low income and medically underserved, others are designed to reach populations at high-risk for certain disease. All of the programs that Health and Wellness sponsors aim to improve health status, eliminate disparities in access and treatments, and reduce health care costs. Its programs are conducted across the region at community centers, religious organizations, fairs, and recreation centers. The Program also collaborates with local community groups far outside its service area to promote the goals of health education and promotion.

WAH is supporting Mobile Medical Care, Inc. in the operation of its mobile medical van service. The service targets Latino, Asian and African American communities in the hospital’s service area. WAH also (together with its sister hospital Shady Grove Adventist Hospital) is providing additional support of a mobile medical van service that serves an African American congregation and operates as an extension of a clinic. This mobile medical van operates 2.5 days/week in WAH’s service area and 2.5 days/week in Shady Grove Adventist’s service area.

Washington Adventist will continue its Maternity Partnership Program contract with the County. These patients reside both in the Takoma Park area as well as in Germantown and Silver Spring. Plans include operating clinic sites both in Takoma Park and at the new hospital campus.

Washington Adventist also conducts outreach and screening programs on an ongoing basis that include educational programs, blood pressure, colorectal exams, and mammogram testing. These programs are often held at local community centers, churches, and community fairs, and can serve as access points to the health care system.

Washington Adventist Hospital and Adventist HealthCare have launched the “Center on Health Disparities.” The Center, sited in Takoma Park, is incorporating several focus areas including:

- Cultural awareness and skills – The Center will develop training programs to promote cultural competency skills at its own institution and provide training at other institutions.
- Community Health Disparities Report Card – The Center will work to compile community health data, and create information that is relevant to government, advocacy, service delivery, education and research.
- Patient Advocacy Program – The Center will implement a program at each Adventist HealthCare site to eliminate language and cultural barriers to patients.

## **PROBLEMS WITH THE CURRENT SITE THAT AFFECT THE HOSPITAL'S ABILITY TO ADDRESS PUBLIC HEALTH CONCERNS**

Adventist HealthCare has identified a number of problems and issues with the current Takoma Park site that affect WAH's ability to meet community needs. Several of these problems also have implications for public health. These include:

- Insufficient and poorly configured space for emergency room services;
- Concerns expressed by neighbors regarding with helicopter landings in a dense, residential area;
- Insufficient space to provide ambulatory care services and to meet on-campus demand for physician offices, and provide adequate access to primary care and chronic disease management programs;
- More difficult access to the hospital for County Emergency Medical Services (EMS) than to alternative sites;
- A lack of private as opposed to semi-private patient rooms and isolation rooms;
- Rooms insufficiently sized to meet the needs of certain patients, including bariatric and obstetrics patients, and patients with families who want to participate in the healing process;
- Inadequate capacity to house the hospital's central plant for WAH's energy needs;
- A challenging physical plant layout that affects the ability of the hospital to be operationally efficient;
- Interruption of business/patient care if a major renovation project were to occur on the current site;
- Higher capital cost to complete a phased renovation and expansion project on the current site in Takoma Park than on the new site that has been purchased by Adventist HealthCare; and,
- Insufficient parking space for hospital patrons and staff.

The Hospital is situated in a cramped residential neighborhood on 13.6 acres of land alongside schools and homes where concerns about traffic and congestion have been widely publicized.

### **A. Emergency Room Services**

During a recent visit to WAH, inspectors from The Joint Commission (TJC) – formerly the Joint Commission on Accreditation of Healthcare Organizations – commented on the emergency department's cramped quarters. Other problems that have been noted with the current emergency room include a lack of segregated spaces for psychiatric patients or others who may carry infectious diseases and should receive care in isolation.

- Psychiatric patients comprise about six percent of annual emergency department volume, and these patients need a private, secure environment that is difficult to provide in the current space.
- Having additional treatment rooms with negative pressure capability would help WAH serve patients with multiple co-morbidities and chronic infections more effectively.

Between 2003 and 2005, visits to the Emergency Room at WAH increased slightly from 44,214 to 44,828 (1.4 percent). A decline in patient visits to 44,268 for 2006 has been attributed to the ER's capacity constraints. However, the State continues to forecast growth in ER utilization, and WAH continues to view Emergency Room expansion as a priority to meet demand and to address patient safety and customer service concerns.

## B. Ambulatory and Physician Services

Due to space constraints and difficult access to the Takoma Park campus, there are several types of outpatient and physician services that are underdeveloped at WAH.

According to the State, between 1997 and 2004 outpatient surgical cases grew more than 75 percent in Montgomery and Prince George's Counties. Due to space constraints, WAH has not been able to recruit surgeons to accommodate this level of increased demand in Takoma Park.

In addition to outpatient surgery, the following services have also been problematic because WAH has not been able to develop on-site capacity to meet identified demand:

- **Outpatient cancer services.** The number of cancer patients has grown, and the advances in cancer treatment have generated great demand for outpatient facilities. With these advances, cancer is now becoming a "chronic condition," increasingly being managed over an extended time period with frequent outpatient visits. As a result, it has become even more important to provide these patients, many of whom are frail, a convenient, local treatment site.

Outpatient chemotherapy increasingly is being provided in physician offices, but WAH has not had the office space to provide this service on campus. As a result, WAH has not been able to offer this service to patients close to their homes. Demand for radiation therapy has also grown, but WAH's facilities have not allowed the Hospital to meet this community demand.

- With four beds, the **Sleep Lab** at WAH has been operating at full capacity with a waiting list. The Hospital believes existing and projected demand would allow a larger unit to operate successfully.
- Due to space constraints, WAH's **outpatient rehabilitation** program has to limit its service offerings. While WAH is a leading provider of cardiac services, the Hospital has not had the space to provide the full suite of cardiac rehabilitation and pulmonary rehabilitation services that most hospitals offer.
- Space constraints at WAH have limited the hospital's ability to bring state-of-the-art diagnostic and therapeutic **imaging services** to the community. One of the most significant examples is the hospital's lack of Positron Emission Tomography (PET)

capacity. Demand for this technology has been acute, but PET requires significant space which the hospital cannot offer without displacing inpatient beds. According to WAH management, the lack of PET capacity on-site has led to the departure of valuable members of the WAH medical staff who want this technology available to their patients.

- After operating for just a few months, the WAH clinic for Maternity Partnership Program patients is close to having outgrown its current space.

**Medical office building space** provides several benefits to nearby hospitals and patients. These office buildings facilitate group practice, and allow physicians to share administrative, diagnostic, and support services. Patients can then access physician care in a more convenient location and receive physician and diagnostic care in close proximity. The medical office space on and around the WAH campus is limited compared to buildings present on other hospital campuses.

Current office space within WAH is not optimal for physicians. Current medical staff members are not able to establish procedure rooms or add new technologies. The Hospital's efforts to recruit and retain medical staff members has suffered, which over time is affecting WAH's ability to meet community needs.

As a result of the above challenges, WAH's outpatient programs are underdeveloped. That affects not only the hospital's patient care programs, but also its revenues and financial performance. *Table 18* portrays the distribution of hospital revenue between inpatient and outpatient services for all hospitals in Maryland and for those located in Montgomery County.

**Table 18**  
**Percentage of Inpatient and Outpatient Revenue**  
**(Calendar Year 2006)**

	<b>Inpatient</b>	<b>Outpatient</b>
<b>State of Maryland</b>	<b>66.3%</b>	<b>33.7%</b>
<b>Montgomery County</b>	<b>71.5%</b>	<b>28.5%</b>
<b>Washington Adventist</b>	<b>79.8%</b>	<b>20.2%</b>
Holy Cross	71.1%	28.9%
Montgomery General	72.3%	27.7%
Shady Grove	67.4%	32.6%
Suburban	66.6%	33.4%

Source: Lewin Analysis of Maryland Hospital Association Financial Condition Report

At 20.2 percent, WAH's percent of total revenue generated by outpatient services is the lowest among hospitals in Montgomery County and is well below the state-wide average of 33.7 percent.

### **C. Access to the Hospital by County EMS**

As part of its assessment of the possible relocation of certain hospital services, Adventist HealthCare requested an analysis regarding the impact of a new location on travel times to the

Hospital, from several high-volume locations served by the Montgomery County EMS. According to that analysis, prepared by County EMS staff, transportation times for EMS units from Stations 12, 15, and 24 will be reduced, in most cases, by 65 to 80 percent. This data are based on all EMS incidents that occurred throughout Eastern Montgomery County during CY 2004.

Additionally, because heavy traffic in the region is a major contributor to EMS transportation times, WAH's proposed location will reduce the amount of time on the road for those patients in Eastern Montgomery County in the most critical situations. The following chart demonstrates the calculated and actual travel distance/time for WAH's current location compared to high call volume locations. Note that the actual time, based on EMS transportation data, is often greater than the calculated time which is based on the Rand Institute's time-distance model. However, the proposed WAH location reduces the amount of distance traveled, which means a reduction in time spent on often crowded highways in this region.

**Table 19**  
**Study of EMS Travel Distance/Time from Eastern Montgomery County Locations**

High Call Volume Locations	Current WAH Location	Proposed WAH Location	Change in Time
2101 Fairland Rd. - Fairland Nursing Home	8.8 miles/15.1 min.	2.5 miles/5.3 min.	-9.8 min.
3415 Greencastle Rd. - Holy Cross Rehabilitation	9.9 miles/16.3 min.	3.7 miles/7 min.	-9.3 min.
2501 Musgrove Rd. - Manor Care Burtonsville	7.5 miles/12.9 min.	1.3 miles/3.4 min.	-9.5 min.
3111 Gracefield Rd. - Riderwood Village	6.3 miles/11.5 min.	1.3 miles/3.4 min.	-8.1 min.
11120 New Hampshire Ave. - White Oak Center	5.3 miles/9.4 min.	2.0 miles/4.5 min.	-4.9 min.
12001 Old Columbia Pike – Residential Highrise	6.7 miles/11.9 min.	0.5 miles/2 min.	-9.9 min.
11700 Old Columbia Pike – Residential Highrise	5.7 miles/10 min.	1.6 miles/3.9 min.	-6.1 min.
11200 Lockwood Dr. – Residential Highrise	4.8 miles/8.8 min.	2.0 miles/4.5 min.	-4.3 min.
11215 Oak Leaf Dr. – Residential Highrise	4.8 miles/8.8 min.	2.1 miles/4.6 min.	-4.2 min.
9727 Mt. Pisgah Rd. – Residential Highrise	2.9 miles/5.8 min.	3.9 miles/7.5 min.	1.7 min.
12325 New Hampshire Ave. - Springbrook Nursing Home	6.4 miles/11.6 min.	2.7 miles/5.6 min.	-6 min.
11621 New Hampshire Ave. - Sunrise Assisted Living	5.5 miles/9.8 min.	1.7 miles/4 min.	-5.8 min.
601 E. Randolph Rd. - Willow Manor ALF	7.9 miles/13.7 min.	3.0 miles/6 min.	-7.7 min.
10900 New Hampshire Ave. - FDA Campus	3.9 miles/7.5 min.	2.7 miles/5.6 min.	-1.9 min.

Source: Montgomery County EMS.

## D. Private Beds

The health services literature cites numerous benefits of private rooms compared to semi-private or ward-style rooms<sup>13</sup>. These benefits include: cost savings due to fewer patient transfers, higher occupancy rates, and lower lengths of stay. Issues with infection control, patient privacy, noise and sleep, and family involvement in care are more easily managed in private patient rooms rather than semi-private or ward-style environments. WAH is committed to having all private patient rooms at the new hospital site, thus providing the emerging standard of inpatient care.

## E. Operating Costs

In recent years, the costs to operate WAH in an aging physical plant have increased rapidly, and the current facility layouts that yield inefficiencies would be corrected in the new facilities.

For example, utilities and other plant operations costs have increased to more than \$6.2 million on an annual basis (*Table 20*).

**Table 20**  
**Plant and Facilities Operations Costs**

Plant and Facilities Operations (Includes Utilities)	
CY2003	\$ 4.40 mil
CY2004	\$ 5.06 mil
CY2005	\$ 5.12 mil
CY2006 (Projected)	\$ 6.26 mil

Source: WAH Management.

The Hospital must continue to address the deficiencies arising from an aging plant to hold accountable to today's accreditation requirements. The Hospital recently was required to spend \$1 million to install a new boiler. Not surprisingly, the 1950's building does not accommodate the space and storage needs of today's medical equipment, and TJC requirements impose specific and costly demands to meet code specifications. These and other "remediation" steps add significant costs.

## F. Parking

The parking situation at WAH has long been a problem for patients, physicians, visitors, neighbors, and employees. The Hospital currently operates with only 645 parking spaces on campus. As a result, many employees park in satellite lots so that Hospital lots can be readily available for patients and visitors. Neighbors are understandably concerned about vehicles seeking parking on surface streets that surround the Hospital campus. The total cost to providing off-site parking for employees and to operating a valet service for patients and visitors is close to \$500,000 annually.

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<sup>13</sup> The Use of Single Patient Rooms versus Multiple Occupancy Rooms in Acute Care Environments. Posted on American Institute of Architects website: [http://www.aia.org/SiteObjects/files/03\\_Executive\\_Summary.pdf](http://www.aia.org/SiteObjects/files/03_Executive_Summary.pdf), November 2003.

## ALTERNATIVES FOR THE FUTURE OF WASHINGTON ADVENTIST HOSPITAL

Adventist HealthCare leadership has considered two principal alternatives for the future development of Washington Adventist Hospital. These alternatives reflect the administration's concerns for the constraints and problems associated with the current WAH campus, community need, capital cost, financial performance, and other factors.

- 1) **Rebuild WAH on the current site** by adding a new patient tower, converting semi-private beds to single, private rooms, expanding the emergency department, and relocating various programs throughout the campus.

In 2005, the hospital filed a CON application with the state detailing this option. The CON called for a Phase 1, \$133 million project that would include a new patient tower to house 60 acute care private hospital beds, renovation of existing inpatient units, expansion of the Hospital's Emergency Department, expansion and renovation of the existing labor and delivery unit and nurseries, upgrades to the Hospital's Central Plant and elevators, among other components. The plan also called for a new 150,000 square foot multi-purpose building that would house expanded ambulatory care services and physician offices. That component of the project, and the 2005 CON, were withdrawn, principally due to concerns that the multiple phases required to fully modernize the hospital's facilities would result in a sub-optimal campus to deliver care. This approach was determined to be extremely difficult to phase and manage and to be significantly more costly than building a full replacement hospital at a new site.

- 2) **Moving WAH to another location and reusing the current campus** for health care services and other community-focused activities (as determined by future studies).

The following services potentially would remain or could be developed at the Takoma Park campus under alternative (2):

- Ambulatory care services, potentially including primary care, urgent care or emergency room services;
- Inpatient and outpatient rehabilitation services that are part of the Adventist Rehabilitation Hospital - a separately licensed hospital that currently operates at WAH;
- A range of ambulatory and social services consistent with the "Vision for Expanded Access", including those operated by community organizations which would be invited to house programs on the Takoma Park site;
- The Center on Health Disparities; and
- Other educational and/or social services.

The following services would relocate to a new hospital built at the new location: Washington Adventist Hospital as currently configured, including an Emergency Department (with relocated heli-pad), cardiovascular surgery and cardiology, obstetrics, medical/surgical, and psychiatry programs. Medical office buildings will be developed at the new site under this alternative as well.

- 3) **Close the Hospital**, as the Hospital becomes weakened over time due to the described constraints associated with the current campus.

Financial projections prepared by WAH management indicate that the Hospital's financial performance is likely to deteriorate in the current location. Constraints on the Hospital's ability to develop outpatient programs, the cost to renovate and upgrade the current facilities over time, and the impact of such upgrades on WAH's operations, appear to raise real questions about financial performance on a longer-term basis.

## PUBLIC HEALTH IMPACT OF FUTURE ALTERNATIVES

This Report considers the possible public health impacts of the alternative approaches. One framework for identifying a “public health impact” is as follows: to identify and assess potential changes to health care Access, Quality, or Cost for the communities historically served by an organization that are associated with a new development like the possible relocation of health care facilities.

- *Access* concerns can be further grouped into “geographic access” such as travel times, and “financial access” that can be affected by an organization’s financial assistance policies.
- *Quality* is difficult to measure definitively; however, many studies have found better health care outcomes associated with higher volumes of care (e.g., hospitals with more deliveries or open heart surgery cases on average can show better outcomes than hospitals with comparatively low volumes of care for these programs).
- *Cost* issues can fall into two categories: operating costs (the efficiency of hospital operations) and capital costs (the total project cost for construction and its associated debt and/or equity financing). Capital costs also affect operations, principally through the interest and depreciation expenses that are a by-product of capital investment.

It is important to understand that new hospital facilities at the proposed new site would not be operational until at least 2012 (five years). During the next five years, the health care needs and the capacity available at other facilities in the area will likely change. The following pages discuss the public health impacts of the two alternatives across these three categories of variables.

### **1. Access to Care**

Regarding access to care, there are several concerns associated with the relocation alternative, including travel distance, financial access (charity care policies) that WAH would maintain, changes to the capacity of hospital services that would affect access, and others. In our assessment, we examine how this alternative would affect access to care in the following ways.

**Geographic Access.** To assess geographic access to care, The Lewin Group first analyzed travel distances for residents by examining the zip codes of areas historically served by WAH (*Table 21*).

**Table 21**  
**Geographic Access/Distance Analysis**

Service Area	Zip Code	City	2006 Population	Closest Hospital	Miles to Closest Hospital	Miles to WAH
<b>Primary Service Area</b>						
Prince George's County	20783	Langley Park/Hyattsville	46,324	WAH	2.9	2.9
Montgomery County	20912	Takoma Park	24,991	WAH	0.3	0.3
Montgomery County	20904	Silver Spring, Colesville	53,404	HCH	6.2	8.0
Prince George's County	20782	Hyattsville	30,022	PRV	2.7	3.3
Montgomery County	20901	Silver Spring, Four Corners	36,185	HCH	1.7	3.3
Montgomery County	20903	Silver Spring, Woodmoor	18,483	WAH	2.5	2.5
Montgomery County	20910	Silver Spring, Blair	37,385	HCH	1.9	2.7
Montgomery County	20902	Silver Spring, Wheaton	44,712	HCH	2.8	5.8
Prince George's County	20740	College Park	31,419	DCH	5.1	5.8
Prince George's County	20705	Beltsville	21,605	LRH	4.6	8.1
Washington D.C.	20011	Washington, DC	54,042	WHC	2.1	3.2
Prince George's County	20770	Greenbelt	22,165	DCH	2.4	7.8
Prince George's County	20737	Riverdale	20,324	PGHC	2.8	5.9
Prince George's County	20712	Mount Rainier	9,433	PRV	1.9	4.4
Washington D.C.	20012	Washington, DC	12,577	WAH	2.0	2.0
Prince George's County	20742	College Park	325	WAH	4.4	4.4
Montgomery County	20914	Silver Spring	0	HCH	5.7	7.3
		<b>TOTAL</b>	<b>463,396</b>		<b>3.1</b>	<b>4.5</b>
<b>Secondary Service Area</b>						
Montgomery County	20906	Silver Spring, Aspen Hill	63,880	HCH	6.3	9.9
Prince George's County	20706	Lanham	41,760	DCH	1.7	12.0
Prince George's County	20784	Hyattsville	25,029	PGHC	2.9	8.0
Prince George's County	20781	Hyattsville	11,856	PGHC	2.9	5.8
Montgomery County	20905	Silver Spring, Colesville	18,191	MGH	6.2	9.7
Montgomery County	20866	Burtonsville	14,542	LRH	4.5	10.0
Prince George's County	20722	Brentwood	5,559	PGHC	2.9	6.3
		<b>TOTAL</b>	<b>180,817</b>		<b>4.3</b>	<b>9.7</b>
<b>Tertiary Service Area</b>						
Prince George's County	20743	Capitol Heights	43,237	PGHC	5.2	20.0
Prince George's County	20707	Laurel	27,359	LRH	1.7	12.0
Prince George's County	20708	Laurel	27,080	LRH	3.0	16.0
Prince George's County	20785	Hyattsville (Landover)	42,772	PGHC	2.7	9.9
Prince George's County	20723	Laurel	26,686	LRH	3.9	16.0
		<b>TOTAL</b>	<b>167,134</b>		<b>3.4</b>	<b>14.8</b>
All Other Zip Codes						
<b>TOTAL</b>			<b>811,347</b>		<b>3.4</b>	<b>7.8</b>

Source: Analysis of Claritas data and data from Google Maps.

The table shows for each service area zip code: the estimated 2006 population, the hospital found to be most proximate to the mid-point of each zip code, travel distance by road from the mid-point of the zip code to the closest hospital, and travel distance from the mid-point of each zip code to WAH in Takoma Park. It is important to note that the analysis is based on the central location in each zip code, and that the travel distances as determined by mapping

software can be misleading because roads change (and travel times certainly vary by time of day and traffic conditions).

Nevertheless, several observations are warranted:

- First, **virtually all residents of the WAH service areas have a hospital located within 6 miles.** While traffic congestion can affect actual travel times to services, the residents of the WAH service areas as a whole have enjoyed good geographic access to hospital care. Residents of only three zip codes in the Silver Spring area (20904, 20905, and 20906) travel on average, more than 6 miles for hospital care.
- WAH is the closest hospital for residents of five of the zip codes in the defined service areas (and roughly 103,000 persons). Holy Cross Hospital (“HCH”) is the closest hospital for six zip codes, with 236,000 persons.
- Prince George’s Hospital Center is the closest hospital for residents of six zip codes in the area, with about 149,000 persons in 2006.

Travel distances to the closest hospital will change if WAH relocates to the new site. However, **no zip codes experiencing an increase in travel distance will have that distance increase to more than 6 miles if the hospital relocates (Table 22).**

**Table 22**  
**Geographic Access/Distance Analysis with Relocation**

Service Area	Zip Code	City	Population	Miles to Closest Hospital (before relocation)	Miles to Closest Hospital if WAH Relocates	Change	Closest Hospital After Relocation
<b>Primary Service Area</b>							
Prince George's County	20783	Langley Park/Hyattsville	46,324	2.9	4.9	2.0	New WAH
Montgomery County	20912	Takoma Park	24,991	0.3	3.4	3.1	HCH
Montgomery County	20904	Silver Spring, Colesville	53,404	6.2	2.0	-4.2	New WAH
Prince George's County	20782	Hyattsville	30,022	2.7	2.7		PRV
Montgomery County	20901	Silver Spring, Four Corners	36,185	1.7	1.7		HCH
Montgomery County	20903	Silver Spring, Woodmoor	18,483	2.5	4.8	2.3	New WAH
Montgomery County	20910	Silver Spring, Blair	37,385	1.9	1.9		HCH
Montgomery County	20902	Silver Spring, Wheaton	44,712	2.8	2.8		HCH
Prince George's County	20740	College Park	31,419	5.1	4.9	-0.2	New WAH
Prince George's County	20705	Beltsville	21,605	4.6	3.3	-1.3	New WAH
Washington D.C.	20011	Washington, DC	54,042	2.1	2.1		WHC
Prince George's County	20770	Greenbelt	22,165	2.4	2.4		DCH
Prince George's County	20737	Riverdale	20,324	2.8	2.8		PGHC
Prince George's County	20712	Mount Rainier	9,433	1.9	1.9		PRV
Washington D.C.	20012	Washington, DC	12,577	2.0	3.5	1.5	HCH
Prince George's County	20742	College Park	325	4.4	5.0	0.6	DCH
Montgomery County	20914	Silver Spring	0	5.7	4.0	-1.7	New WAH
	<b>TOTAL</b>		<b>463,396</b>	<b>3.1</b>	<b>3.1</b>	<b>0.1</b>	
<b>Secondary Service Area</b>							
Montgomery County	20906	Silver Spring, Aspen Hill	63,880	6.3	6.3		HCH
Prince George's County	20706	Lanham	41,760	1.7	1.7		DCH
Prince George's County	20784	Hyattsville	25,029	2.9	2.9		PGHC
Prince George's County	20781	Hyattsville	11,856	2.9	2.9		PGHC
Montgomery County	20905	Silver Spring, Colesville	18,191	6.2	6.1	-0.1	New WAH
Montgomery County	20866	Burtonsville	14,542	4.5	4.3	-0.2	New WAH
Prince George's County	20722	Brentwood	5,559	2.9	2.9		PGHC
	<b>TOTAL</b>		<b>180,817</b>	<b>4.3</b>	<b>4.3</b>		
<b>Tertiary Service Area</b>							
Prince George's County	20743	Capitol Heights	43,237	5.2	5.2		PGHC
Prince George's County	20707	Laurel	27,359	1.7	1.7		LRH
Prince George's County	20708	Laurel	27,080	3.0	3.0		LRH
Prince George's County	20785	Hyattsville (Landover)	42,772	2.7	2.7		PGHC
Prince George's County	20723	Laurel	26,686	3.9	3.9		LRH
	<b>TOTAL</b>		<b>167,134</b>	<b>3.4</b>	<b>3.4</b>		
All Other Zip Codes							
<b>TOTAL</b>			<b>811,347</b>	<b>3.4</b>	<b>3.4</b>		

Source: Analysis of Claritas data and data from Google Maps.

**Average travel distances across the service area to the closest hospital (weighted by population) would remain unchanged if WAH moves to the new location.**

Table 22 shows which hospital would be closest to each zip code in the WAH service areas before and after a relocation.

**Table 23**  
**Geographic Access/Distance Analysis with Relocation**

Service Area	Zip Code	City	Population	Closest Hospital	Closest Hospital After Relocation
<b>Primary Service Area</b>					
Prince George's County	20783	Langley Park/Hyattsville	46,324	WAH	WAH
<b>Montgomery County</b>	<b>20912</b>	<b>Takoma Park</b>	<b>24,991</b>	<b>WAH</b>	<b>HCH</b>
<b>Montgomery County</b>	<b>20904</b>	<b>Silver Spring, Colesville</b>	<b>53,404</b>	<b>HCH</b>	<b>WAH</b>
Prince George's County	20782	Hyattsville	30,022	PRV	PRV
Montgomery County	20901	Silver Spring, Four Corners	36,185	HCH	HCH
Montgomery County	20903	Silver Spring, Woodmoor	18,483	WAH	WAH
Montgomery County	20910	Silver Spring, Blair	37,385	HCH	HCH
Montgomery County	20902	Silver Spring, Wheaton	44,712	HCH	HCH
<b>Prince George's County</b>	<b>20740</b>	<b>College Park</b>	<b>31,419</b>	<b>DCH</b>	<b>WAH</b>
<b>Prince George's County</b>	<b>20705</b>	<b>Beltsville</b>	<b>21,605</b>	<b>LRH</b>	<b>WAH</b>
Washington D.C.	20011	Washington, DC	54,042	WHC	WHC
Prince George's County	20770	Greenbelt	22,165	DCH	DCH
Prince George's County	20737	Riverdale	20,324	PGHC	PGHC
Prince George's County	20712	Mount Rainier	9,433	PRV	PRV
<b>Washington D.C.</b>	<b>20012</b>	<b>Washington, DC</b>	<b>12,577</b>	<b>WAH</b>	<b>HCH</b>
<b>Prince George's County</b>	<b>20742</b>	<b>College Park</b>	<b>325</b>	<b>WAH</b>	<b>DCH</b>
<b>Montgomery County</b>	<b>20914</b>	<b>Silver Spring</b>	<b>0</b>	<b>HCH</b>	<b>WAH</b>
		<b>TOTAL</b>	<b>463,396</b>		
<b>Secondary Service Area</b>					
Montgomery County	20906	Silver Spring, Aspen Hill	63,880	HCH	HCH
Prince George's County	20706	Lanham	41,760	DCH	DCH
Prince George's County	20784	Hyattsville	25,029	PGHC	PGHC
Prince George's County	20781	Hyattsville	11,856	PGHC	PGHC
<b>Montgomery County</b>	<b>20905</b>	<b>Silver Spring, Colesville</b>	<b>18,191</b>	<b>MGH</b>	<b>WAH</b>
<b>Montgomery County</b>	<b>20866</b>	<b>Burtonsville</b>	<b>14,542</b>	<b>LRH</b>	<b>WAH</b>
Prince George's County	20722	Brentwood	5,559	PGHC	PGHC
		<b>TOTAL</b>	<b>180,817</b>		
<b>Tertiary Service Area</b>					
Prince George's County	20743	Capitol Heights	43,237	PGHC	PGHC
Prince George's County	20707	Laurel	27,359	LRH	LRH
Prince George's County	20708	Laurel	27,080	LRH	LRH
Prince George's County	20785	Hyattsville (Landover)	42,772	PGHC	PGHC
Prince George's County	20723	Laurel	26,686	LRH	LRH
		<b>TOTAL</b>	<b>167,134</b>		
<b>All Other Zip Codes</b>					
<b>TOTAL</b>			<b>811,347</b>		

Source: Analysis of Claritas data and data from Google Maps.

WAH would no longer be the closest hospital for residents of **three** zip codes: 20912 (Takoma Park), 20012 (Washington, D.C.) and 20742 (College Park). In the new location, WAH would be the closest hospital for **six** zip codes that currently are closer to other facilities. While the current WAH is the closest hospital for 103,000 residents in the Primary Service Area, WAH would be the closest hospital for 171,000 PSA residents at the new site.

Geographic access to hospital services is perhaps most critical for emergency room services, and is less critical for programs with a broadly distributed patient base.

- The study provided to Adventist HealthCare by Montgomery County EMS suggests that the new site would be significantly more accessible (with reduced travel times) for residents of the Eastern sections of the County, in part due to reduced reliance on single-lane streets through residential neighborhoods.
- Public health impacts associated with relocating the WAH emergency room could be mitigated to the extent that a freestanding emergency room or urgent care capacity would continue to be operated by Adventist HealthCare on the current Takoma Park campus. The next phases of the planning process should focus on the level of acuity that would be most helpful for the freestanding emergency room/urgent care services that may be developed by Adventist HealthCare in Takoma Park, its hours of operation, its capacity to assess mental health patients, and other issues.
- The impact of relocating the psychiatric services currently licensed as part of WAH to the new site would be substantially mitigated if the emergency room/urgent care services to be developed in Takoma Park were able to receive and assess mental health patients. Furthermore, the Takoma Park campus as a site could develop additional outpatient mental health services.
- Both the WAH interventional cardiology program and the psychiatry program receive substantial numbers of patients from outside the defined service areas, reflecting their regional characteristics. Because they have a regional draw, WAH's geographic location is less significant as a public health parameter for these services from the perspective of public health impact.

Relocation of the Hospital may have significant effects on the counties that WAH currently serves.

- Montgomery County communities are less likely to be negatively affected by changes in access and scope of services as the hospital moves more centrally into the County. Many alternatives will continue to exist for residents of these communities. The new hospital will continue to be well-positioned geographically to serve the Medicaid population of Colesville communities and Montgomery County communities stretching farther north. WAH's new location will be well-located to serve some of the highest volume zip codes of Medicaid patients.
- The new hospital location is more proximate to the higher concentrations of elderly residents in Montgomery County. At the same time, relocation will distance the hospital

from the elderly populations residing in the Hyattsville communities for whom WAH has become a principal hospital provider.

- For Prince George’s County communities, located East and South of the current hospital, relocation is likely to have more significant public health effects. The impact of relocation on these areas is heavily dependent on the scope of services maintained and/or developed on the Takoma Park campus.

In addition, it is important to note that sixty-one percent of WAH employees live within the service area and will experience, on the whole, a favorable change in travel time to get to work. Of the individuals living in the service area, the zip code with the second largest number of employees is that of the proposed new WAH facility.

**Financial Access.** As part of the Vision for Expanded Access, WAH has committed to provide uncompensated care at levels equal to or greater than historic levels and attribute any shortfall to the Montgomery Cares Program.

**WAH Capacity and Outpatient Services.** We note that relocating WAH creates several opportunities to reuse the Takoma Park campus in ways that could improve public health. For example, the campus could provide surge capacity for the region if a bioterrorism event occurs. In addition, the ability to consolidate and develop various long term care and rehabilitation programs within existing hospital space will allow increased access for the aging and disabled population.

An emergency room at the new location, coupled with emergency room/urgent care services that would be developed in Takoma Park, could have a positive effect on Emergency Room diversion rates across Montgomery County.

As previously found, WAH outpatient services are comparatively underdeveloped. Rebuilding the Hospital on a new site, with the potential for fully developed parking and easier access (not through residential neighborhoods), will allow WAH to expand outpatient programs and provide the community with better access to ambulatory care. Accordingly, it is highly likely that WAH’s reported charity care amounts will rise, with growth in outpatient activity facilitated by an expanded emergency room and better access to the new campus.

**Rehabilitation Services.** The relocation of WAH allows Adventist Rehabilitation Hospital of Maryland to develop its rehabilitation services at the current location. These programs may include long-term nursing and rehabilitation beds, shorter-term acute rehabilitation beds, and a broad range of outpatient rehabilitation services.

**Physician Offices.** If the hospital relocates, it is very likely that physician specialists (surgeons, orthopedists, obstetricians and others) who frequently admit and serve patients in hospital settings, would want to relocate their offices to be close to the new site. This potential loss in access to physician office-based specialty care could be mitigated if current medical office buildings on the Takoma Park campus are maintained and offered to primary care physicians and/or clinics and possibly specialists on a time-share basis.

**Impact of Construction on Operations.** Rebuilding WAH on a new site (rather than the existing Takoma Park campus) would be less disruptive to current patient care operations and to physical access to services. WAH management has indicated that a major rebuilding project on the current campus would significantly disrupt hospital operations, and would lead to revenue losses.

**Ability to House Community Based Organizations at the Takoma Park Campus.** Rebuilding WAH on a new site would allow Adventist HealthCare to offer space to community organizations that provide health and/or social services to area residents.

## **2. Cost of Care**

**Capital Cost.** The CON application filed in 2005 by WAH to initiate a Phase 1 project to rebuild on the current site in Takoma Park, a \$133 million project, would include a new patient tower to house 60 acute care private hospital beds, the renovation of existing inpatient units, expansion of the hospital's Emergency Department, expansion and renovation of the existing Labor and Delivery Unit and Nurseries, and upgrades to the hospital's Central Plant and elevators, among other components. All phases of WAH's development plan on the current site would cost more in terms of direct capital costs and business interruption, which Adventist HealthCare has determined is not financially feasible.

Adventist HealthCare estimates that capital cost to relocate WAH to a new site would be approximately \$250-300 million, not including any capital costs they would incur to modify portions of the current Takoma Park campus for its potential future role in meeting community needs.

**Ability to Realize Operational Efficiencies.** Adventist HealthCare should be able to realize significantly greater operational savings in a newly designed hospital facility, than if it were rebuilt on the current campus. According to financial projections prepared by Adventist HealthCare, WAH's cost per adjusted discharge is projected to be about five percent lower in the new location than if the hospital re-developed in the current location. WAH would also avoid costs associated with a potentially disruptive construction project on the current site as it builds a new tower and relocates patient services around the current campus. The cost to continue providing support to Adventist Rehabilitation Hospital of Maryland and the other services that would remain or develop on the Takoma Park campus has yet to be fully assessed.

**Stable WAH Financial Performance.** Compared to a renovation/replacement project on the current site, a relocation alternative is likely to have the following major financial effects on WAH and Adventist HealthCare:

- Lower capital costs associated with a replacement facility;
- Greater operational savings arising from the opportunity to design the new facility without the constraints of the current site and building, and without disrupting current operations;
- Greater ability to develop outpatient programs; and
- Overall better ability to increase volume due to better access by patients to the new site and the elimination of space constraints.

### 3. Quality of Care

**Benefits.** In terms of quality of care, relocating WAH to the new site is likely to have the following benefits in comparison to renovating the hospital in its current location:

**Ability to Consolidate and Build Rehabilitation Services.** Relocating services licensed under WAH allows the separately licensed Adventist Rehabilitation Hospital of Maryland (that functions as a “Hospital within a Hospital”) to develop a more comprehensive continuum of inpatient and outpatient rehabilitation services in the best space that can be offered by the current facilities in Takoma Park.

**Private Rooms for Patients.** A relocation alternative will also allow WAH to offer 100 percent private rooms for patients, with identified public health and operational benefits.

**Overall Service Volumes.** In our assessment, if WAH is relocated to the new site, the hospital is likely to support higher patient care volumes. To validate this observation, we developed volume projection for the hospital under the two alternatives: renovating and rebuilding WAH on the current campus and building new facilities at a new site. That analysis concluded that inpatient volume for WAH in the new location could be 4 to 5 percent higher than in the current location. Contributing factors include: better ability to recruit physicians, increased emergency room capacity, and better access to WAH by County EMS.

**Ability to Establish Dedicated Spaces/Facilities for Psychiatric Services.** The psychiatric services offered by WAH are important to meeting community needs. As previously mentioned, WAH is the only acute care hospital in Montgomery County that accepts involuntary psychiatric admissions, and the program serves as a regional referral site for psychiatric patients with medical management needs. Relocating WAH to the new site provides an opportunity to design dedicated spaces that are optimal for patients who need this important service. Services include dedicated Psychiatric Emergency Service space that provides appropriate privacy from other Emergency Room activities, and improved facilities for WAH’s partial hospitalization program. The 40-bed inpatient psychiatric unit could also be housed in quarters that are specifically designed to optimize care for mental health patients.

Additionally, the medical needs of WAH’s psychiatric patients can best be met if that program remains in close proximity to WAH’s medical-surgical services.

**Concerns.** In our assessment, the analysis highlights three areas of concern regarding quality of care that should be the subject of short-term planning efforts:

**Ability to Meet the Medical Needs of Rehabilitation Patients.** The medical needs of Adventist Rehabilitation Hospital of Maryland patients are assessed prior to admission to the inpatient unit. According to our interviews, there are two to four admissions every month from ARH to WAH. Patients are evaluated in the emergency department to determine whether or not admission to inpatient medical/surgical services is warranted. If WAH is relocated to the new site and ARHM continues to operate at the current location, procedures and resources will need to be developed so that ARHM patients

maintain access to needed medical resources. The planning for urgent or freestanding emergency room services in Takoma Park should take these needs into account.

**Ability to Meet Medical Needs of Patients at Area Nursing Homes.** Similarly, WAH has developed relationships with the many nursing homes and assisted living facilities that operate in its primary and secondary service areas. The WAH emergency room and other on-campus resources support the quality of care that these facilities provide.

**Ability to Provide Back-Up Services for Area Clinics.** As presented in Table 17, WAH also has relationships with clinics that operate in the hospital's primary and secondary service areas. The Hospital is a site where clinic patients are referred for emergency care.

Maintaining or improving access to hospital and appropriate outpatient care for long-term care patients and area clinic patients also should be a focus of ongoing planning efforts.

## CONCLUSIONS

Based on leadership's continued assessment of options for the future of WAH and its Vision for Expanded Access management's current plan is for WAH to move to another location and to reuse the current campus for health care services and other activities, the specifics of which would be determined through later studies and community dialog.

The following services would relocate to a new hospital built at the new location: Washington Adventist Hospital as currently configured, including an Emergency Department (with re-located heli-pad), cardiovascular surgery and cardiology, obstetrics, medical/surgical, and psychiatry programs.

WAH would operate at the new location, and would continue to have oversight of the services to remain or develop at Takoma Park.

The following services should be considered as part of planning the reuse of Takoma Park's campus:

- Urgent care or emergency services that are consistent with community needs, allowed by regulation, and financially feasible.
- Primary care services and/or chronic disease management services;
- Inpatient and outpatient rehabilitation services that are part of the "Adventist Rehabilitation Hospital" - a separately licensed hospital that currently operates at WAH;
- A range of other ambulatory and social services consistent with the "Vision for Expanded Access", including those operated by community organizations who would be invited to house programs on the Takoma Park site; and
- The Center on Health Disparities.

Community dialog and studies should consider how these interests would be balanced with other issues and potential needs affecting the neighborhood surrounding the current WAH campus, such as traffic, potential expansion of Columbia Union College, the need for affordable housing, the need for green space, Sligo Creek Park, and affordable wellness and fitness programs and services.

Relocating Washington Adventist Hospital would have positive public health impacts. Relocating WAH would relieve the organization of several constraints that have affected its ability to meet community needs. The new site would be more accessible for emergency room patients, would provide the opportunity to develop Medical Office Building space that would help attract physicians to the area, conserve capital resources, enhance the environment for mental health patients, and provide several operational efficiency benefits.

This assessment has also identified several public health risks associated with relocating the hospital. However, there are initiatives and programs that management could develop to address these potential issues and enhance the public health benefits associated with the Vision for Expanded Access. WAH operates several patient care programs that serve regional needs,

and others that are more important to local communities. Accordingly, it will be important for Adventist HealthCare, together with the Takoma Park and surrounding communities to consider the following initiatives:

- Designing and studying the feasibility of a freestanding emergency room or urgent care capacity that would be appropriate for the Takoma Park campus, with hours of operation and the ability to handle an acuity of patient that meets the needs of area residents and of other patients who would use services on the campus (e.g., Adventist Rehabilitation Hospital patients);
- Collaborating with existing providers to increase clinic capacity in Takoma Park, Long Branch, and Langley Park and augmenting these services to serve the needs of the low-income uninsured, as well as those of Medicaid obstetrics and mental health patients who historically have relied on WAH for services. In particular, these include obstetrics patients from Prince George’s County and of the Montgomery County Maternity Partnership Program;
- Developing a specific plan for the scope of rehabilitation services to be operated by Adventist Rehabilitation Hospital of Maryland on the Takoma Park campus;
- Continuing and enhancing current outreach programs operated by WAH in the primary service area;
- Confirming or further developing referral relationships with nursing homes and assisted living facilities in the WAH service areas;
- Providing opportunities for physicians and others, such as operators of birthing centers, to lease space in Takoma Park, particularly primary care services;
- Commencing discussion with organizations that may be interested in relocating to the WAH Takoma Park campus, consistent with the emerging reuse plan when opportunities become available;
- Demonstrating the financial feasibility of the Vision for Expanded Access, including estimating the amount of operational savings that would be possible by developing WAH at the new location and how these operational savings could offset portions of the capital cost associated with new construction; and
- Working with the various stakeholders, including the City of Takoma Park, Montgomery County, Columbia Union College and other nearby organizations and residents to develop an effective and viable reuse plan that helps build a healthier community and addresses how the identified public health risks associated with relocating WAH to a new site would be addressed.

The public health risks associated with the Vision for Expanded Access could be substantially addressed through the above initiatives.