

M001
Chronic Disease Services
 Department of Health and Mental Hygiene

Operating Budget Data

(\$ in Thousands)

	<u>FY 07</u> <u>Actual</u>	<u>FY 08</u> <u>Working</u>	<u>FY 09</u> <u>Allowance</u>	<u>FY 08-09</u> <u>Change</u>	<u>% Change</u> <u>Prior Year</u>
General Fund	\$38,961	\$38,867	\$41,583	\$2,717	7.0%
Special Fund	4,566	4,846	4,847	1	0.0%
Reimbursable Fund	474	451	587	136	30.1%
Total Funds	\$44,002	\$44,164	\$47,017	\$2,853	6.5%

- The fiscal 2009 allowance represents a \$2.9 million increase over the fiscal 2008 working appropriation. The increase is due in large part to health insurance and long-term post employment benefit liability funding, which account for \$2.7 million of the total increase.
- Adjusting for the health insurance and long-term employment benefit liability costs, the proposed budget increases only \$0.1 million over the fiscal 2008 working appropriation, or 0.3%.

Personnel Data

	<u>FY 07</u> <u>Actual</u>	<u>FY 08</u> <u>Working</u>	<u>FY 09</u> <u>Allowance</u>	<u>FY 08-09</u> <u>Change</u>
Regular Positions	568.30	568.30	566.30	-2.00
Contractual FTEs	19.73	17.71	17.71	0.00
Total Personnel	588.03	586.01	584.01	-2.00

Vacancy Data: Regular Positions

Turnover, Excluding New Positions	26.16	4.62%
Positions Vacant as of 12/31/07	57.75	10.16%

Note: Numbers may not sum to total due to rounding.

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- In the fiscal 2009 allowance, 2.0 full-time equivalent (FTE) positions are abolished at Western Maryland Hospital Center (WHMC), to reflect the expected decision by the Board of Public Works to reduce PINs across all agencies.
- The projected fiscal 2009 turnover rate of 4.62% is 5.54 percentage points lower than the current vacancy rate of 10.16%. To achieve the proposed turnover rate in fiscal 2009, it will be necessary to maintain 26 vacancies. Currently, the department has 57.75 vacancies, 3.75 of which have been vacant for 12 months or longer as of January 1, 2008.

Analysis in Brief

Major Trends

Medication Error Rates Consistently Lower Than Internally Established Benchmarks: Between fiscal 2004 and 2007, the medication error rates have remained well below the internal historical benchmarks of 12.8 and 6.9 errors per 1,000 patient care days, at WMHC and Deer’s Head Hospital Center (DHHC), respectively. Although the rate at WMHC rose by 1.9 points due to a change in reporting procedures to more accurately reflect medication errors, the hospital still remains well below its benchmark.

Recommended Actions

	<u>Funds</u>
1. Increase turnover expectancy to more accurately reflect vacancies.	\$ 169,656
Total Reductions	\$ 169,656

Updates

Cost Recovery Continues to Decrease for Renal Dialysis: The renal dialysis units at WMHC and DHHC, funded by both general and special funds, continue to experience decreasing cost recovery ratios due to changes in the types of drugs administered and costs rising faster than Medicare reimbursement rates, particularly for hospital services. In fiscal 2004, the cost recovery rate was 78% at WHMC and 95% at DHHC. By fiscal 2007, those rates had plummeted to 52% at WMHC and 71% at DHHC. DHMH estimates a rise in cost recovery in fiscal 2008 and 2009, but not enough to match the fiscal 2004 cost recovery levels.

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Operating Budget Analysis

Program Description

The State's two chronic hospital centers, Western Maryland Hospital Center (WMHC) and Deer's Head Hospital Center (DHHC), provide specialized services for those in need of complex medical management, comprehensive rehabilitation, long-term care, or dialysis. Specifically, both centers provide:

- chronic care and treatment to patients requiring acute rehabilitation, at a level greater than that available at a nursing home, for management of complex medical issues such as respiratory, coma, traumatic brain injury, spinal cord injury, wound management, dementia, cancer care, and quarantined tuberculosis;
- long-term nursing home care for patients no longer in need of hospital-level care but unable to function in traditional nursing homes; and
- inpatient and outpatient renal dialysis services.

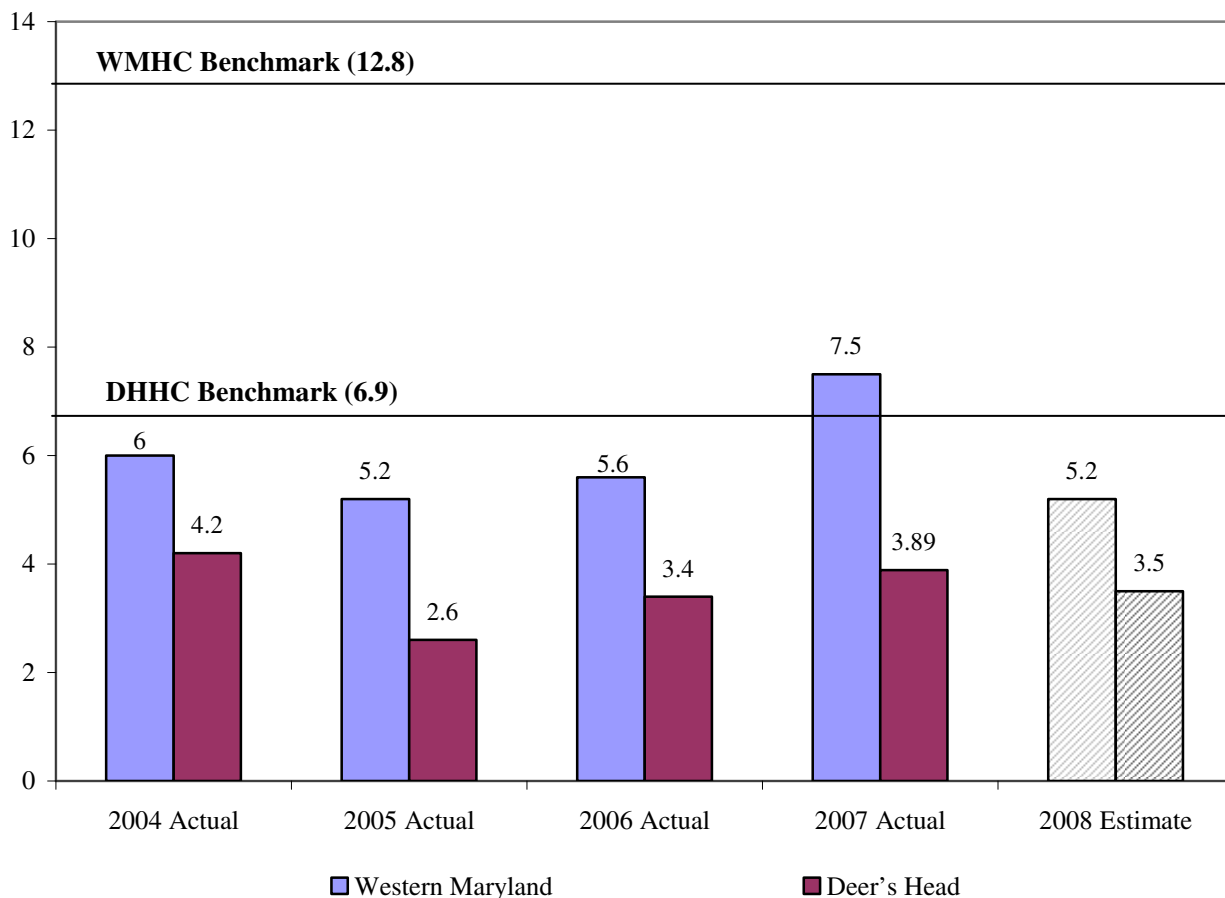
Performance Analysis: Managing for Results

The first goal as stated in the Managing for Results report submitted by the agency is to operate with a "Culture of Safety" to keep patients, residents, and staff members safe at both WMHC and DHHC. This includes safety measures such as accidents, injuries, and medication errors.

Exhibit 1 shows the medication error rate per 1,000 patient care days (PCD) at WMHC and DHHC.¹ The National Coordinating Council for Medication Error Reporting and Prevention defines a medication error as any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in control of the health care professional, patient, or consumer. According to the Food and Drug Administration, medication errors cause at least one death every day and injure approximately 1.3 million people annually in the United States.

¹ Patient care days are calculated by multiplying the average daily population by the number of days in a month.

**Exhibit 1
Medication Error Rate
Per 1,000 Patient Care Days
Fiscal 2004-2008**



Source: Department of Health and Mental Hygiene

Between fiscal 2004 and 2007, the medication error rate at both hospitals has remained well below the internal historical benchmarks of 12.8 and 6.9 errors per 1,000 PCD at WMHC and DHHC, respectively. The error rates at both hospitals have remained relatively stable, with the exception of a 1.9 point increase at WMHC in fiscal 2007. During fiscal 2007, WMHC made changes to the format used to report medication errors resulting in a simplified and streamlined reporting procedure. The new format has contributed to greater reporting compliance and a higher number of reports and reported errors, which accounts for the 1.9 point increase.

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Research suggests that different patient populations, reporting methods, definitions, and cultures prevent the development of a universally accepted national standard for medication error rates. Instead, WMHC and DHHC maintain their own distinct benchmarks and strive to show an internal decline in the medication error rate from year to year.

There is a marked difference between the populations at WMHC and DHHC, which helps to explain the difference in benchmarks and actual medication error rates. The higher medication error rates at WMHC are due to more chronic hospital patients and fewer nursing home patients as compared to DHHC. Chronic hospital patients are typically sicker and require more medications, which naturally leads to more opportunities for errors.

To maintain a culture of safety, medication errors are reviewed monthly at WMHC and quarterly at DHHC to identify trends and to establish or revise policies and procedures as needed. Medication errors are also reviewed annually by the Office of Health Care Quality to evaluate staff competency and compliance with pertinent regulations.

The other principal measure of safety at the chronic hospitals is the rate of falls per 1,000 PCDs, illustrated in **Exhibit 2**. A “fall” is defined as an occurrence when a patient hits the floor, from any height, for any reason. Nurses assess patients for fall potential on admission and at established intervals using a fall assessment tool called the Morse Fall Scale. This tool is used to score patients on criteria related to fall risk potential which includes level of consciousness/mental status, history of falls, vision status, gait or balance, blood pressure, medications, and predisposing diseases. Use of the Morse Fall Scale also helps to initiate fall prevention interventions. Precautions implemented to prevent falls include using bed and wheelchair alarms, adjusting bed heights, establishing a clutter free environment, and placing a falling leaf sign outside of a patient’s room as a reminder to the staff.

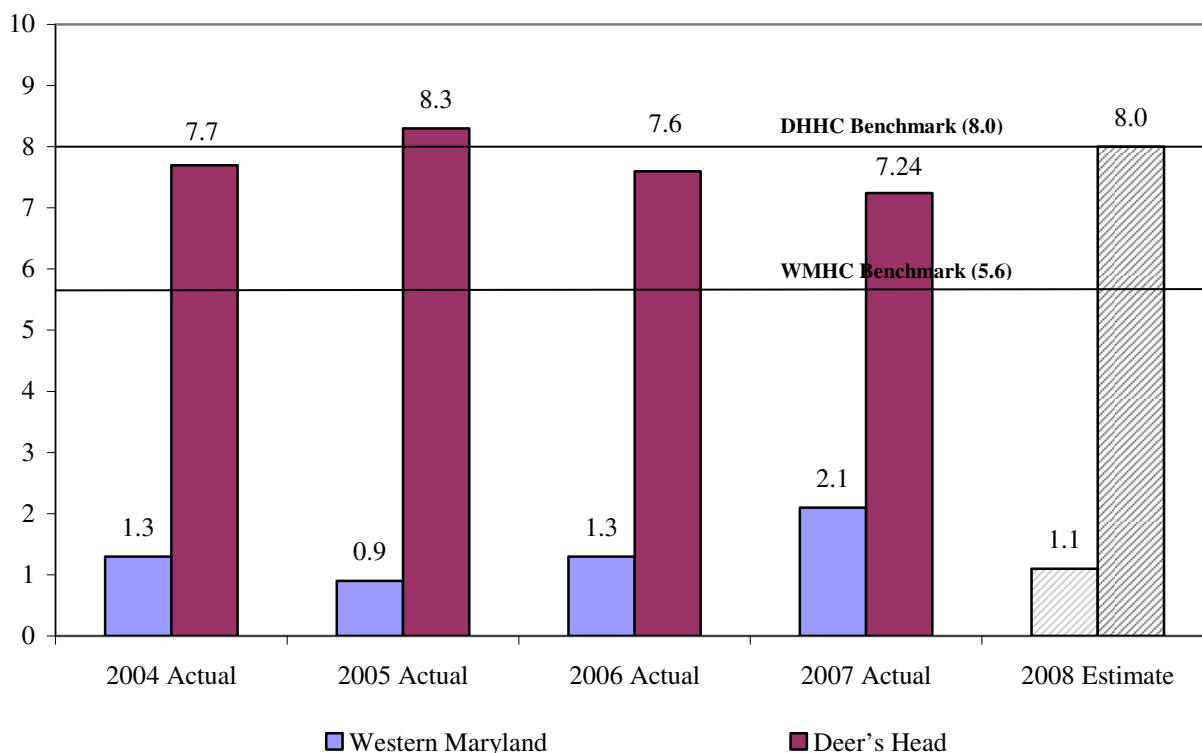
As shown in Exhibit 2, between fiscal 2004 and 2007, the fall rate at WMHC has remained well below the internal historical rate of 5.6 falls per 1,000 PCDs. At DHHC, the fall rate has fluctuated above and below the internal historical benchmark of 8.0 falls per 1,000 PCDs since fiscal 2004, ranging from a high of 8.3 in fiscal 2005 to a low of 7.24 in fiscal 2007. The higher fall rates at DHHC are due to a difference in reporting requirements and a higher number of ambulatory patients. Although no universally accepted national benchmark exists for fall rates, a range between 11.0 to 24.9 falls per 1,000 PCDs is generally accepted. The fall rate at both hospitals remains well below this range. To reduce fall rates, patient safety is discussed at regular intervals or immediately if a patient demonstrates a change in condition.

Fiscal 2008 Actions

Impact of Cost Containment

Cost containment actions approved by the Board of Public Works reduced the fiscal 2008 general fund appropriation for Chronic Disease Services by \$0.5 million, which resulted in decreased funding for contractual services and supplies. This decrease is anticipated to be offset by savings realized from Medicare Part D.

**Exhibit 2
Patient Fall Rate
Per 1,000 Patient Care Days
Fiscal 2004-2008**



Source: Department of Health and Mental Hygiene

Governor’s Proposed Budget

The Governor’s allowance for Chronic Disease Services, as shown in **Exhibit 3**, represents a \$2.9 million increase over the fiscal 2008 working appropriation. General fund support increases by \$2.7 million, a 7% increase; special fund support remains virtually unchanged; and reimbursable fund support increases by \$0.1 million, a 30.1% increase.

The majority of the increase in the fiscal 2009 allowance is due to health insurance and long-term Other Post Employment Benefit (OPEB) liability funding, which account for \$2.8 million of the total increase. Excluding these costs, the proposed budget increases only \$0.1 million, or 0.3%, over the previous working appropriation.

Exhibit 3
Governor’s Proposed Budget
DHMH – Chronic Disease Services
(\$ in Thousands)

How Much It Grows:	General Fund	Special Fund	Reimb. Fund	Total
2008 Working Appropriation	\$38,867	\$4,846	\$451	\$44,164
2009 Governor’s Allowance	<u>41,583</u>	<u>4,847</u>	<u>587</u>	<u>47,017</u>
Amount Change	\$2,717	\$1	\$136	\$2,853
Percent Change	7.0%	0.0%	30.1%	6.5%

Where It Goes:

Personnel Expenses	\$3,607	
Health Insurance – reduce long-term Other Post Employment Benefits liability.....		\$1,884
Employee and retiree health insurance – pay-as-you-go costs		883
Increments and other compensation		618
Fiscal 2008 Budget Section 45 – one-time hiring freeze savings		290
Other fringe benefit adjustments.....		56
Turnover adjustments		20
Abolished positions (2.0 full-time equivalents).....		-144
Other Changes	-\$754	
Increase contractual physician services to meet regulatory and accreditation standards		126
Outpatient and off-ground medical services		-63
Other		-77
Construction completed for new patient waiting area for Brain Injury Program		-226
Medical Supplies including prescription drugs and other medicines		-514
Total		\$2,853

Note: Numbers may not sum to total due to rounding.

Personnel

Excluding the health insurance and OPEB liability funding, personnel costs are increasing by \$0.8 million. Two positions are abolished, resulting in \$0.1 million in reduced funding. The abolished positions include a carpenter (1.0 FTE), a speech pathologist audiologist III (0.5 FTE), and a physician clinical specialist (0.5 FTE). As of January 1, 2008, the abolished positions had been

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vacant for 6 months, 8 months, and 24 months, respectively. The remainder of the change is captured in increased increments, \$0.6 million, and the fiscal 2008 hiring freeze, \$0.3 million.

Operating Expenses

Operating expenses, excluding personnel, decrease \$0.8 million from the fiscal 2008 working appropriation. One of the major decreases is in the area of medical supplies and prescription drugs, which is reduced by \$0.5 million. The availability of Medicare Part D, prescription drug coverage, for many of the chronic hospital patients and renal dialysis patients will result in lower drug costs in fiscal 2009. Also, funding for office and medical equipment decrease \$0.2 million over the fiscal 2008 working appropriations due to completion of a patient area for the new Brain Injury Program at WMHC. The costs for that project were incurred in fiscal 2007 and the first quarter of fiscal 2008.

Lastly, funding for contractual physician services increases by \$0.1 million in the fiscal 2009 allowance. A majority of that increase occurs at WMHC due to a new requirement to contract with board certified physicians to serve as medical directors of the Pulmonology Department, the Brain Injury Program, and the Laboratory. Regulatory and accreditation standards stipulate that the physician who oversees each program hold board certifications for each respective medical specialty. In previous years, WMHC was granted a waiver of this requirement due to the chief of staff's extensive experience in ventilator management and other crucial areas. With the retirement of the chief of staff, that waiver has been disallowed, and the hospital is required to provide medical directors for these programs with requisite board certifications.

Recommended Actions

	<u>Amount Reduction</u>	
1. Increase turnover expectancy from 4.62% to 5.24% to more accurately reflect long-term vacancies.	\$ 152,690	GF
	16,966	SF
Total Reductions	\$ 169,656	
Total General Fund Reductions	\$ 152,690	
Total Special Fund Reductions	\$ 16,966	

Updates

1. Cost Recovery Continues to Decrease for Renal Dialysis

The Kidney Dialysis Unit at Western Maryland Hospital Center and Deer’s Head Hospital Center are supported with general funds and special funds generated by collections from patients and third-party payers. The percent of expenses recovered is influenced by many factors including the number of treatments provided, patient acuity, patient case mix (outpatients vs. inpatients), drug costs, and third-party reimbursement rates. **Exhibit 4** shows the fluctuations in revenues and expenditures since fiscal 2004. The overall rate of cost recovery has fallen sharply since fiscal 2004. At WMHC, the recovery rate has fallen from 78% in fiscal 2004 to 52% in fiscal 2007. At DHHC, the recovery rate has fallen from 95% in fiscal 2004 to 71% in fiscal 2007.

Exhibit 4
Renal Dialysis Costs and Revenues
Fiscal 2005-2009

	<u>2004</u> <u>Actual</u>	<u>2005</u> <u>Actual</u>	<u>2006</u> <u>Actual</u>	<u>2007</u> <u>Actual</u>	<u>2008</u> <u>Approp.</u>	<u>2009</u> <u>Estimate</u>
Western Maryland Hospital Center						
Special funds	\$575,829	\$526,117	\$407,974	\$495,471	\$514,752	\$624,828
General funds	158,869	223,612	601,249	454,172	476,774	441,866
Total	\$734,698	\$749,729	\$1,009,223	\$949,643	\$991,526	\$1,066,694
Percentage recovered	78%	70%	40%	52%	52%	59%
Deer’s Head Hospital Center						
Special funds	\$4,049,719	\$3,903,334	\$2,860,058	\$2,829,734	\$2,958,844	\$3,054,425
General funds	219,677	961,877	1,118,026	1,156,853	1,202,402	1,278,313
Total	\$4,269,396	\$4,865,211	\$3,978,084	\$3,986,587	\$4,161,246	\$4,332,738
Percentage recovered	95%	80%	72%	71%	71%	70%

Source: Department of Health and Mental Hygiene

Losses experienced by the two facilities are primarily the result of costs rising faster than Medicare reimbursement rates, particularly for hospital services. Additionally, both centers are seeing an increase in the number of chronic hospital inpatients requiring dialysis. This is likely due to an aging population and a higher prevalence of obesity in our society. The dialysis units, however, cannot bill directly for treatments provided to chronic hospital inpatients due to the hospitals’ federal all-inclusive rates. The hospital bills the third-party payers directly, and the reimbursement is deposited into the general fund. The portion of the reimbursement that is attributable to the dialysis

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treatment is returned to the dialysis unit as special funds. However, these rates are lower than the rates the dialysis unit bills for outpatient services. Therefore, inpatient billing is not as lucrative as billing for outpatient services. Outpatient treatments have decreased by about 5% each year which results in less revenue and a smaller base on which to spread fixed costs.

Another large part of the decreasing revenue stream is due to a change in medication used at both facilities for renal dialysis. The new medication, Aranesp, is administered only once a week compared to the previous medication, Epogen, which was administered three times a week. Although nursing costs are reduced, lower drug costs result in lower billable amounts and lower collections.

It is important to note that since the total amount of patients needing dialysis services varies from year-to-year, it is hard to estimate the total cost. However, given the fact that Medicare reimbursements are not keeping up with costs, total billing amounts have been decreasing and the fact that hospitals cannot receive any extra money from chronic hospital patients, due to the all inclusive per diem, additional general funds may be needed to supplement the overall costs in fiscal 2008 and 2009. **Exhibit 5** shows the difference in the appropriation amount and the actual costs for fiscal 2006 and 2007, the latest years for which there is complete data. In both years, there is a large discrepancy between the estimated general fund cost and the actual general fund cost at WMHC.

Exhibit 5
Renal Dialysis Costs and Revenues
Appropriation Versus Actual for Fiscal 2006-2007

	<u>2006</u> <u>Approp.</u>	<u>2006</u> <u>Actual</u>	<u>2007</u> <u>Approp.</u>	<u>2007</u> <u>Actual</u>
Western Maryland Hospital Center				
Special funds	\$604,171	\$407,974	\$664,743	\$495,471
General funds	80,612	601,249	191,281	454,172
Total	\$684,783	\$1,009,223	\$856,024	\$949,643
Percentage recovered	88%	40%	78%	52%
Deer's Head Hospital Center				
Special funds	\$3,210,722	\$2,860,058	\$3,519,558	\$2,829,734
General funds	943,065	1,118,026	1,156,856	1,156,853
Total	\$4,153,787	\$3,978,084	\$4,676,414	\$3,986,587
Percentage recovered	77%	72%	75%	71%

Source: Department of Health and Mental Hygiene

Current and Prior Year Budgets

Current and Prior Year Budgets Chronic Disease Services (\$ in Thousands)

	<u>General Fund</u>	<u>Special Fund</u>	<u>Federal Fund</u>	<u>Reimb. Fund</u>	<u>Total</u>
Fiscal 2007					
Legislative Appropriation	\$37,922	\$5,426	\$0	\$474	\$43,822
Deficiency Appropriation	0	0	0	0	0
Budget Amendments	1,039	42	0	0	1,081
Reversions and Cancellations	0	-901	0	0	-901
Actual Expenditures	\$38,961	\$4,566	\$0	\$474	\$44,002
Fiscal 2008					
Legislative Appropriation	\$38,694	\$4,806	\$0	\$451	\$43,951
Cost Containment	-470	0	0	0	-470
Budget Amendments	642	40	0	0	682
Working Appropriation	\$38,867	\$4,846	\$0	\$451	\$44,164

Note: Numbers may not sum to total due to rounding.

Fiscal 2007

In fiscal 2007, the budget for Chronic Disease Services closed out at \$44.0 million, an increase of \$0.2 million over the original legislative appropriation. The final fiscal 2007 budget also represents a \$2.2 million increase over the final fiscal 2006 budget for Chronic Disease Services.

The general fund appropriation increased by a total of \$1 million for fiscal 2007. Of that amount:

- \$560,253 was added to recognize the fiscal 2007 cost-of-living adjustments (COLA);
- an additional \$359,665 was added to account for utility rate increases at both the Deer's Head and Western Maryland facilities;
- the budget was reduced by \$200,000 to reflect savings incurred by the hiring freeze in February 2007;
- \$135,166 was added due to reallocations within the Department of Budget and Management as a result of the Annual Salary Review; and
- \$184,023 was reallocated within the Department of Health and Mental Hygiene to cover the cost of lead abatement services at Western Maryland Center as well as to cover the cost of telephone services and increased expenditure for natural gas at Deer's Head Center.

The special fund appropriation increased by \$39,234 due to COLA increases for salaries, wages, and fringe benefits at both WMHC and DHHC. There was an additional \$2,727 increase in special funds for Deer's Head Center as a result of increased donations.

At the end of fiscal 2007, \$901,441 in special funds was cancelled at Western Maryland and Deer's Head due to decreased employee food sales, decreased lease collection from the Washington County Health Department, and lower renal dialysis collection. For each of these items, actual collections turned out to be lower than estimated at the time of budget development.

Fiscal 2008

The Chronic Disease Services working appropriation for fiscal 2008 is \$0.2 million higher than the legislative appropriation.

General funds increased by a total of \$0.2 million, which reflects COLAs (\$0.5 million), increased utilities (\$0.2 million), and cost containment actions taken by the Board of Public Works (-\$0.5 million). The cost containment actions resulted in decreased funding for contractual services and supplies, which is anticipated to be offset by savings realized from Medicare Part D.

The special fund appropriation increased \$40,347 for COLAs.

**Object/Fund Difference Report
DHMH – Chronic Disease Services**

<u>Object/Fund</u>	<u>FY07 Actual</u>	<u>FY08 Working Appropriation</u>	<u>FY09 Allowance</u>	<u>FY08-FY09 Amount Change</u>	<u>Percent Change</u>
Positions					
01 Regular	568.30	568.30	566.30	-2.00	-0.4%
02 Contractual	19.73	17.71	17.71	0	0%
Total Positions	588.03	586.01	584.01	-2.00	-0.3%
Objects					
01 Salaries and Wages	\$ 31,973,244	\$ 31,861,315	\$ 35,468,423	\$ 3,607,108	11.3%
02 Technical and Spec. Fees	950,574	781,628	916,197	134,569	17.2%
03 Communication	203,827	133,318	136,727	3,409	2.6%
04 Travel	26,330	33,488	24,625	-8,863	-26.5%
06 Fuel and Utilities	1,458,105	1,579,599	1,553,830	-25,769	-1.6%
07 Motor Vehicles	44,581	40,695	41,623	928	2.3%
08 Contractual Services	2,887,713	2,474,562	2,419,786	-54,776	-2.2%
09 Supplies and Materials	5,960,893	6,744,164	6,194,689	-549,475	-8.1%
10 Equipment – Replacement	133,184	173,536	138,209	-35,327	-20.4%
11 Equipment – Additional	178,188	210,015	19,172	-190,843	-90.9%
12 Grants, Subsidies, and Contributions	71,509	34,837	24,339	-10,498	-30.1%
13 Fixed Charges	96,644	96,362	78,987	-17,375	-18.0%
14 Land and Structures	16,723	0	0	0	0.0%
Total Objects	\$ 44,001,515	\$ 44,163,519	\$ 47,016,607	\$ 2,853,088	6.5%
Funds					
01 General Fund	\$ 38,961,269	\$ 38,866,572	\$ 41,583,146	\$ 2,716,574	7.0%
03 Special Fund	4,566,327	4,846,073	4,846,903	830	0%
09 Reimbursable Fund	473,919	450,874	586,558	135,684	30.1%
Total Funds	\$ 44,001,515	\$ 44,163,519	\$ 47,016,607	\$ 2,853,088	6.5%

Note: The fiscal 2008 appropriation does not include deficiencies.

**Fiscal Summary
DHMH – Chronic Disease Services**

<u>Program/Unit</u>	<u>FY07 Actual</u>	<u>FY08 Wrk Approp</u>	<u>FY09 Allowance</u>	<u>Change</u>	<u>FY08-FY09 % Change</u>
01 Western Maryland Hospital Center	\$ 22,114,519	\$ 21,945,301	\$ 23,383,477	\$ 1,438,176	6.6%
01 Deer's Head Hospital Center	21,886,996	22,218,218	23,633,130	1,414,912	6.4%
Total Expenditures	\$ 44,001,515	\$ 44,163,519	\$ 47,016,607	\$ 2,853,088	6.5%
General Fund	\$ 38,961,269	\$ 38,866,572	\$ 41,583,146	\$ 2,716,574	7.0%
Special Fund	4,566,327	4,846,073	4,846,903	830	0%
Total Appropriations	\$ 43,527,596	\$ 43,712,645	\$ 46,430,049	\$ 2,717,404	6.2%
Reimbursable Fund	\$ 473,919	\$ 450,874	\$ 586,558	\$ 135,684	30.1%
Total Funds	\$ 44,001,515	\$ 44,163,519	\$ 47,016,607	\$ 2,853,088	6.5%

Note: The fiscal 2008 appropriation does not include deficiencies.