Strategic Health Resources Plan and Need Assessment
Four-County Fort Stewart Growth Management Partnership Region

SEPTEMBER 2012

PREPARED FOR:
Fort Stewart Growth Management Partnership
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Strategic Health Resources Plan and Need Assessment for Fort Stewart Growth Management Partnership Region

EXECUTIVE SUMMARY

Report Objectives

The Fort Stewart Growth Management Partnership (FSGMP) charged PDA to determine the impact of expected BRAC-driven (Base Realignment and Closure) military build-up on the local health care delivery system in Georgia’s Bryan, Liberty, Long and Tattnall Counties. FSGMP set the planning horizon at the year 2030. In response, PDA compiled this report from statistics provided by the Georgia Department of Public Health, Fort Stewart, Winn Army Community Hospital, TRICARE representatives, and others. Interviews with area health care providers, PDA databases and other professional literature, informed the analysis and conclusions.

Figure 1. Relationship of Four Georgia Counties to Fort Stewart Boundaries

![Map of Georgia counties and Fort Stewart boundaries](image)

Source: Fort Stewart Growth Management Partnership, Fort Stewart/HAAF Regional Growth Plan, 2010

This report concludes that new military troops expected by 2030 will have less impact on the civilian health care delivery system than variability associated with military deployments. Most BRAC-associated build-up occurred in 2005. Additions since then have been relatively small, and until the next BRAC initiative that will not begin until 2013, no more are planned.
An 18-year forward strategic plan for the local health care delivery system must also consider changing health care needs of both civilian and military populations in the context of national and state health system changes. The report starts with capacity gaps in 2010 and estimates gaps and surpluses in 2030. It addresses capacity in facilities, professionals and issues associated with supporting development of health care professionals, along with special needs for coordinated behavioral health services.

**Observations**

Three distinct health care delivery systems serve the four counties: military, Veterans Health Administration (VHA) and civilian. Veterans can use all three systems; military can use military and civilian; and civilians can use only the civilian system.

All systems, civilian, military, and VHA, have the same goal of providing convenient access and the highest possible quality of service to their users. However, separate systems, complicated by even more fragmentation inside the civilian system, make it difficult to coordinate care for individuals, particularly those with complex problems. An analysis of current / projected socio-demographic and economic data indicates that response to dominant forces shaping the military and civilian health care delivery system in Bryan, Long, Liberty, and Tattnall counties requires a structure that can support significant increases in provider communication.

Among the three distinct health care delivery systems, some progress has occurred in coordination of care, but there is substantial room for improvement. PDA observed some coordination between the VHA and the military, some between military and civilian, and virtually none between VHA and civilian. The military and VHA have single electronic medical records that follow individuals around the world, and the two data systems are beginning to share information. The civilian “system” is not truly a system, but a collection of independent providers, each governed by separate funding streams, separate governance and differing policy directives; and each has multiple medical records for the same individual.

Coordination of behavioral health services across all three systems is a problem for military families and non-military local residents, as well. One significant, visible result of weak coordination is the growing prevalence of abuse of prescription drugs, which is troubling local industry, military and civilian providers. Drug seekers successfully manipulate the system, moving from one to the next, once they are detected.

Adding to the complexity, in all three systems, most tertiary level services are provided outside the four counties. As a result, at one time or another, most people in the region travel outside for services. By comparison to the civilian and VHA systems, the military is doing a better job of providing local (on post) primary care for active duty service members. Family members and those who live more than 30 miles off post may also leave the four counties for primary care.
The Winn Army Community Hospital and other Fort Stewart/Hunter Army Airfield (HAAF) health care budgets are designed to maintain primary medical home and dental homes and behavioral health support for the 25,000 to 30,000 active duty military assigned to the Army 3rd Infantry Division, either at home or deployed. Deployments can include up to 14,000 active duty personnel, as was the case in 2010. In 2012, 11,000 soldiers from four units are scheduled to deploy to Afghanistan in the spring and summer.

Depending on space availability, Winn Army also provides primary medical home services to about 35,000 military dependents or military retirees. Active duty, dependents and retirees are covered by the military health insurance program, TRICARE, which is used to purchase off-post services. Some Fort Stewart/HAAF tertiary (specialty) health services are referred out, some to the VHA in Charleston and some to the civilian system(s) in Savannah. When Winn Army has capacity issues, dependents and retirees are directed to use their TRICARE benefits in the civilian system. Many seek service in the four counties. Others go out, largely to Savannah. These referral events are not entirely predictable. Summer, when post personnel change over, is a fairly regular out-referral time. A shortage of behavioral health providers at Winn Army makes that service a regular candidate for referrals out. Most family and retirees are directed first to the civilian system. They may petition to use the military system.

Every person who has served in the military is a veteran. However, the Department of Veterans Affairs (VA) covers only service-connected disabilities, five-year care for veterans who served in Iraq or Afghanistan, and full care for some very low-income veterans. Only about 25 percent of veterans are eligible for VA care. The military and VHA systems are supported by multi-year federal budgets, and the VHA can also bill fee-for-service payments to veterans who do not have full VA coverage. The civilian system is entirely dependent on fee-for-service, contracts and grants, hence is subject to a higher level of month-to-month fluctuation.

The four-county civilian system is further challenged by the ratio of insured to uninsured users. The U.S. (United States) Census reports 137,700 residents in the four counties in 2011; however, excluding TRICARE, VA beneficiaries and prison inmates, leaves only 66,600 who are regularly served by the civilian system. The military system, including TRICARE, provides care for 63,000 individuals: active duty military, military retirees and their dependent families. TRICARE beneficiaries can use both the military and the civilian system, but national Department of Defense (DoD) policy favors use of the military system as much as possible.

The uninsured represent 33 percent of the 66,600 regular users of the civilian system. This ratio of one uninsured to two insured is far higher than the national average of one to seven and is the reason that civilian providers that provide care to uninsured persons need subsidies from tax bases, grants or philanthropy to survive.

1 Lieutenant Colonel Jose Bonilla and Jeff Loomis, Winn Army Community Hospital, phone interview with PDA, August 2012.
The U.S. Census predicts the four-county population will increase by approximately 40,000 people by 2030. Most of these will not be active duty military. Planned reductions in the DoD budget starting in 2013 may hold the Fort Stewart military population constant, or at best, keep pace with growth in the national labor force (0.7 percent a year). Pentagon budgets call for reductions in Army and Marine troop size, along with reductions in military health care coverage.¹

Coverage determines access in the U.S. health care delivery system. Coverage relationships in the Fort Stewart region have a more substantive impact because of the concentrations of uninsured persons and the low payments associated with Medicaid and TRICARE reimbursement.

Adding more stress to the civilian system is the shortage of certain health professionals. As the military/TRICARE and VHA work to meet access goals, the military and VHA sometimes recruit staff from the civilian system. Professionals recruited by the civilian system are attracted by the more financially secure military and VHA systems. This puts the civilian system in a continuous recruiting mode and at risk for high turnover.

Health Care Resources Needed

Health care resource requirements are a function of population and of the extent to which that population stays in the region for care. The total regional population is projected to grow by 39,930 people in the four counties from 2010 to 2030.

Table 1. Projected Total Regional Population, 2010-2030

<table>
<thead>
<tr>
<th>County</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>Total Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bryan</td>
<td>30,233</td>
<td>33,647</td>
<td>37,471</td>
<td>41,731</td>
<td>46,476</td>
<td>16,243</td>
</tr>
<tr>
<td>Liberty</td>
<td>63,453</td>
<td>65,120</td>
<td>66,916</td>
<td>68,762</td>
<td>70,659</td>
<td>7,206</td>
</tr>
<tr>
<td>Long</td>
<td>14,464</td>
<td>16,422</td>
<td>18,646</td>
<td>21,172</td>
<td>24,040</td>
<td>9,576</td>
</tr>
<tr>
<td>Tattnall</td>
<td>25,220</td>
<td>27,006</td>
<td>28,614</td>
<td>30,319</td>
<td>32,125</td>
<td>6,905</td>
</tr>
<tr>
<td>Region</td>
<td>133,370</td>
<td>142,195</td>
<td>151,647</td>
<td>161,984</td>
<td>173,300</td>
<td>39,930</td>
</tr>
<tr>
<td>Five-year change</td>
<td>8,825</td>
<td>9,452</td>
<td>10,337</td>
<td>11,316</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: PDA forecast based on U.S. Census 2010 and Claritas-Nielsen 2012

Presently a large percentage of residents leave of the four counties for inpatient acute care. Data for outpatient care are less available, but small area studies of outpatient care generally show patterns are comparable, but fewer out-migrate for primary medical care. Specialty outpatient patterns mirror inpatients.

Table 2. Out-Migration for Acute Inpatient Hospital Care, 2008-2010

<table>
<thead>
<tr>
<th>County (b)</th>
<th>Use of Non-Military General Hospitals Located Outside the Four Counties (a) (Three-Year Average Percent of Total County Discharges)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bryan</td>
<td>99.6%</td>
</tr>
<tr>
<td>Liberty</td>
<td>74.5%</td>
</tr>
<tr>
<td>Long</td>
<td>71.8%</td>
</tr>
<tr>
<td>Tattnall</td>
<td>84.8%</td>
</tr>
</tbody>
</table>

Source: 2010 Georgia Discharge Database System, the Georgia Hospital Association
Prepared by Georgia Community Health, Division of Health Planning
http://dch.georgia.gov/00/article/0,2086,31446711_32470831_178409925,00.html

Notes:

a. Newborn records were excluded from counts. Swing bed discharges were not reported.

b. Patient county was based exclusively on the patient zip code. This introduces some errors whenever a zip code crosses county lines.
The civilian system struggles to recruit and retain physicians and mid-level medical professionals, in large part because of the rural nature of the four counties and the absence of training programs in the four counties. Many professionals who work in the four counties live an hour or more away in Savannah or Brunswick. Recruiting professionals requires incentives, such as monetary payments or professional development opportunities.

The military system periodically loses professional staff as a result of deployments and annual changes in duty stations. During this time, the military/TRICARE beneficiaries become more dependent on the civilian system. These increased demands are temporary and are not large enough for the civilian system to develop sufficient staffing to absorb the military need. The resultant service delays affect the entire community.

The civilian system is also subject to fluctuations in professional staffing levels from other forces that are beyond its control. Professionals who work in hospitals and clinics are free agents and can move for any reason. Compounding the problem, the civilian system has no external independent source of funding to build the capital for responding to fluctuating military, dependent and military retiree demand for services. Presently, the military has no mechanism for permitting civilians or civilian providers to use its capital resources or to supplement civilian budgets. These factors combine to produce temporary periods of long waits for access to civilian services. The waits and delays encourage military beneficiaries and others to seek care outside the four counties.

To provide locally all of the health care needed in 2010, the four counties would need at least 81 more health care professionals. To serve the expected population in 2030, the area will need 187 more medical, behavioral health and dental professionals. Details of these calculations are described in Chapter Two, Tables 77 and 78.

Estimates in this report separate need for facilities and services by system: Civilian, Active Duty Military and Veteran. They also include two crossover groups: Civilian with Military Affiliated and Active Duty with Military Affiliated. Military Affiliated residents (retirees and dependents) alternate between the civilian and military systems, depending on military treatment facility capacity, location of residence and, sometimes, personal preference. Totals represent the sum of Civilian + Active Duty and Military Affiliated + Veteran.

Forecast estimates assume use patterns will resemble managed care markets and use of services will increase over time, as the population ages. Behavioral health is based on 2010 Georgia average use rates. Forecasts likely underestimate behavioral health requirements. Another scenario that assumes eight annual behavioral health visits for military shows large deficits of behavioral health professionals. This is discussed in detail in Chapter Two, page 115. Dentist estimates use HRSA standards. All calculations are net of 2010 supply.
Table 3. 2030 Surplus (Deficit) of Medical Professionals – Mature Medical Home Model

<table>
<thead>
<tr>
<th>Profession</th>
<th>Civilian</th>
<th>Civilian &amp; Military Affiliated</th>
<th>Active Duty Military &amp; Military Affiliated</th>
<th>Active Duty Military</th>
<th>Veterans</th>
<th>Total *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>87,103</td>
<td>132,882</td>
<td>74,435</td>
<td>28,656</td>
<td>11,762</td>
<td>173,300</td>
</tr>
<tr>
<td>Primary Care</td>
<td>(15)</td>
<td>(51)</td>
<td>(30)</td>
<td>6</td>
<td>(9)</td>
<td>(54)</td>
</tr>
<tr>
<td>Specialists</td>
<td>(10)</td>
<td>(64)</td>
<td>(77)</td>
<td>(23)</td>
<td>(14)</td>
<td>(100)</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>(5)</td>
<td>(21)</td>
<td>4</td>
<td>20</td>
<td>(4)</td>
<td>(21)</td>
</tr>
<tr>
<td>Dentists</td>
<td>(5)</td>
<td>(20)</td>
<td>(18)</td>
<td>(3)</td>
<td>(4)</td>
<td>(27)</td>
</tr>
<tr>
<td>Total</td>
<td>(35)</td>
<td>(156)</td>
<td>(121)</td>
<td>2</td>
<td>(31)</td>
<td>(187)</td>
</tr>
</tbody>
</table>

Note: * Includes only civilian, active duty military and military affiliated and veterans

Out-migration reduces the actual demand for health care beds in the four counties. However, if all residents were served in the four counties, the population could support 359 acute and behavioral hospital beds in 2030. The area has 112 beds in three facilities: 72 at Winn Army, 25 at Liberty Regional Medical Center and 25 at The Doctors Hospital of Tattnall in Reidsville. Calculations assume that in 2030, demand will remain at the 2010 average per capita use rates; and that 85 percent capacity is sufficient to absorb normal census fluctuations.

Table 4. 2030 Surplus (Deficit) of Hospital Beds

<table>
<thead>
<tr>
<th>Hospital Bed Type</th>
<th>Civilian</th>
<th>Civilian &amp; Military Affiliated</th>
<th>Active Duty Military &amp; Military Affiliated</th>
<th>Active Duty Military</th>
<th>Veterans</th>
<th>Unduplicated Total *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>87,103</td>
<td>132,882</td>
<td>74,435</td>
<td>28,656</td>
<td>11,762</td>
<td>173,300</td>
</tr>
<tr>
<td>Acute Care</td>
<td>(176)</td>
<td>(295)</td>
<td>(134)</td>
<td>(15)</td>
<td>(31)</td>
<td>(341)</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>(15)</td>
<td>(23)</td>
<td>(1)</td>
<td>7</td>
<td>(2)</td>
<td>(18)</td>
</tr>
<tr>
<td>Total</td>
<td>(191)</td>
<td>(318)</td>
<td>(135)</td>
<td>(8)</td>
<td>(33)</td>
<td>(359)</td>
</tr>
</tbody>
</table>

* Includes only civilian, active duty military and military affiliated and veterans. Details of these calculations are described in Chapter Two.

The 2030 demand for outpatient services was estimated by assuming that 2010 visit rates remain constant through 2030; only population changes. Demand for outpatient services in the Fort Stewart region is high for the age of the population. Data in Tables 5 and 6 show two scenarios for outpatient visit projections. The first is a managed care model without medical homes. The second forecasts with the 2010 use rates at Winn Army. Military use rates include physician visits, which, until very recently, have not been included in counts of civilian hospital outpatient departments. Table 6 calculations incorporate services provided to people who migrate in from other counties. True need is likely far less than Table 6 and far more than Table 5 predict.
Table 5. 2030 Acute Outpatient Service Demand: Managed Care Metrics

<table>
<thead>
<tr>
<th>Notes</th>
<th>Outpatient Service</th>
<th>Civilian</th>
<th>Civilian &amp; Military Affiliated</th>
<th>Active Duty Military &amp; Military Affiliated</th>
<th>Active Duty Military</th>
<th>Veterans</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>87,103</td>
<td>132,882</td>
<td>74,435</td>
<td>28,656</td>
<td>11,762</td>
<td>173,300</td>
</tr>
<tr>
<td>a</td>
<td>Outpatient Visits</td>
<td>27,786</td>
<td>42,389</td>
<td>23,745</td>
<td>9,141</td>
<td>3,752</td>
<td>55,283</td>
</tr>
<tr>
<td>b</td>
<td>ED Visits</td>
<td>32,394</td>
<td>49,419</td>
<td>27,682</td>
<td>10,657</td>
<td>4,374</td>
<td>64,451</td>
</tr>
</tbody>
</table>

See notes below following table.

Table 6. 2030 Acute Outpatient Service Demand: Military Metrics

<table>
<thead>
<tr>
<th>Notes</th>
<th>Outpatient Service</th>
<th>Civilian</th>
<th>Civilian &amp; Military Affiliated</th>
<th>Active Duty Military &amp; Military Affiliated</th>
<th>Active Duty Military</th>
<th>Veterans</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>87,103</td>
<td>132,882</td>
<td>74,435</td>
<td>28,656</td>
<td>11,762</td>
<td>173,300</td>
</tr>
<tr>
<td>c</td>
<td>Outpatient Visits</td>
<td>682,097</td>
<td>1,040,586</td>
<td>582,891</td>
<td>224,402</td>
<td>92,104</td>
<td>1,357,092</td>
</tr>
<tr>
<td>d</td>
<td>ED Visits</td>
<td>50,471</td>
<td>76,997</td>
<td>43,130</td>
<td>16,604</td>
<td>6,815</td>
<td>100,417</td>
</tr>
</tbody>
</table>

Notes:

a. Population divided by 100 and multiplied by 31.9, the rate of national outpatient visits per 100 persons in non-federal short-stay hospitals in 2009 according to the National Hospital Ambulatory Medical Care Survey, 2009, Table 1, as reported by the CDC, [http://www.cdc.gov/nchs/fastats/hospital.htm](http://www.cdc.gov/nchs/fastats/hospital.htm).

b. Use rate of 37.2 visits per 100 population, average ED visit rate for the region from 2007 to 2010, from Georgia OASIS

c. Use at Winn Army rate of 783.1 outpatient visits per 100 military and military affiliated resident in 2010

d. Use at Winn Army rate of 57.9 ED visits per 100 military and military affiliated in 2010

The area has adequate nursing home and home health capacity to serve the population through 2030. At current use rates trends, age-adjusted, the area has a surplus of 424 nursing home beds. Similarly, we found no immediate deficits in rehabilitation services.
Recommendations

Because the nature of the Fort Stewart/Hunter Army Airfield mission is to support conflict worldwide, year to year shifts of as much as 20 percent of the population will likely continue. This will cause significant variability in demand for service from the civilian system, even with no additional BRAC build-up. The civilian health care system in the four counties will need resources to effectively respond to frequent changes in demand.

Together, these circumstances represent an excellent opportunity for creation of a “different model” for addressing the delivery needs for health care services to all residents of the region. To strengthen access and quality of care for all residents of the four-county area, the health care delivery system could be improved with a formal structure that brings representatives of the three systems together regularly.

Meeting current and future health resource needs with a high level of quality requires a consensus among the principal players, and a common reliable voice regarding how best to address the short-, medium- and long-term goals for achieving convenient, affordable, quality health care outcomes for the military, VHA and civilian populations in the four counties. The keys to success are communication and coordination. Fort Stewart Growth Management Partnership should champion a coordinated, sustained planning effort across the three systems.

Successful achievement of the health care system improvement goals will require:

a. Identification of a leadership constituency that can effectively represent the interests of the military (active duty, retirees and their dependents), veteran (VA-eligible) and civilian populations.

b. Recognition that economic influence and size is clearly tilted toward the military and that the military is heavily dependent on the civilian system.

c. Proactive economic development within the civilian sector to provide a positive influence for growth.

d. Recognition that a satisfactory solution can be reached through some form of creative problem solving among the civilian public/private sector leaders of the four counties and their military counterparts.

e. Ongoing staff support for the problem solving effort.

One mechanism to organize the effort is formation of a sustaining locally-based health care alliance among the leaders of the military, VHA and civilian sectors to provide direction, collaboration and continuity for resolving care requirements that occur as a result of the changing nature of the military, cycles of economic conditions, and political change. One such model is working at Fort Sill, Oklahoma. There, leaders from Reynolds Army Community Hospital meet with civilian local providers regularly to coordinate care.
To strengthen the four-county response, organizers should consider inviting to the table external players, starting with those, like Mayo, Memorial Health and Saint Joseph’s/Candler Health System, the two regional health departments, regional representatives of state and private behavioral health services; and others who are serving people from the four counties. This will assist in addressing challenges which may be beyond the capacity of individual local provider constituents, such as Winn Army, the Hospital Authority of Liberty County, Gateway Behavioral, the Coastal Health District, the Fraser Center, Diversity Health Center and others.

A health care alliance could encourage and actively participate in development of pilot projects, focused on the priority health care and economic needs of the region. Immediate issues identified in this study include:

a. Prescription drug abuse, a major concern to employers and providers that could be more successfully addressed by such an alliance than by individual providers. The abuse is facilitated by weak coordination of care among the three health care delivery systems.

b. A mechanism for coordinating behavioral health services across all three systems, without violating patient privacy, but incorporating resources that could address the high rates of domestic violence.

c. Development of local capacity to continuously recruit health care professionals for the area.

Previous efforts by local health care providers to sustain civilian health care planning, such as the Fort Stewart Regional Health Care Steering Committee, have had temporary successes but faltered for lack of sustained staff support. Leadership should approach DoD, Office of Economic Adjustment and other funding sources like the U.S. Department of Health and Human Services, Health Resource and Services Administration, Office of Rural Health, private foundations, or external systems that benefit from local referrals to support these recommendations. Funding would support:

a. Organization of the local civilian health care delivery system to a level at which civilian institutions can engage with the military to collaborate on health care outcomes.

b. A feasibility study to estimate the number of military who use the civilian system at highest and lowest demand levels over a deployment cycle (about three years) and what impact that has on:
   i. The ability of the civilian health care delivery system to respond,
   ii. Health care outcomes of military and dependents who are served in the community, and
   iii. The capacity of the civilian health care system to sustain operations.

c. Identification of barriers and opportunities for coordinating behavioral and medical health care for military and non-military residents.