

Final Report

Emergency Medical Services System Study Page County, Virginia April, 2009

Prepared for:
Virginia Department of Health
Office of Minority Health and Public Health Policy

Prepared by:



Virginia Office of Emergency Medical Services

109 Governor Street, Suite UB-55

Richmond VA 23219

(804) 864-7600

(800) 523-6019

Table of Contents

I. Executive Summary	Page 3
II. Introduction	Page 4
III. Purpose and Methods of the EMS System Study	Page 6
IV. Study Results	Page 8
V. Key Findings and Recommendations	Page 17
VI. Appendices	Page 22

I. Executive Summary

The Virginia Department of Health, Office of Emergency Medical Services (hereinafter mentioned as “OEMS”) was engaged by the Virginia Department of Health, Office of Minority Health and Public Health Policy (hereinafter mentioned as “OMHPPH”) to provide a comprehensive assessment of the Emergency Medical Services (hereinafter mentioned as “EMS”) system surrounding the Critical Access Hospital (hereinafter mentioned as “CAH”), Page Memorial Hospital (hereinafter mentioned as “PMH”), located in Luray, Page County, Virginia, which is one of seven hospitals in Virginia that has been designated as a CAH facility. This assessment is part of a larger study, evaluating EMS systems in the counties surrounding the Critical Access Hospitals (hereinafter mentioned as “CAH”) in the Commonwealth of Virginia. CAH Designation criteria are defined as follows:

- Physical location in a state that has an established Medicare Rural Hospital Flexibility Program (Flex Program)
- Be located in a rural area
- Provide 24 hour emergency care services, using on site or on call staff
- Provide no more than 25 inpatient beds
- Have an average length of stay of 96 hours or less; and
- Be either 35 miles from another hospital or another CAH, or 15 miles in areas with mountainous terrain or only secondary roads.

During the latter half of 2008, and early 2009, staff from OEMS performed the assessment of both the hospital itself, and the agencies that serve the county the hospital is located in. This assessment included development and distribution of surveys, interviews with system stakeholders, and review of pertinent documents.

II. Introduction

Page County, Virginia is a predominantly rural county located in the Shenandoah Valley portion of the Commonwealth of Virginia, nestled between the Blue Ridge Mountains to the east, and the Massanutten Mountains to the west. It is bordered by Greene, Madison, Rappahannock, Rockingham, Shenandoah, and Warren Counties. (See Map 1).

Map 1 – Page County and Bordering Counties



According to the 2000 Census, the population of Page County is 23,177 people. The county size is 314 square miles, with a population density of 74 people per square mile.

The age distribution among the residents of Page County is as follows:

- 23% are under the age of 18.
- 7.7% are in the 18 to 24 age group.
- 28.3% are in the 25 to 44 age group.
- 25.3% are in the 45 to 64 age group.
- 15.7% are 65 or older.

The median age is 39 years old.

Additionally, the gender distribution is 100 women to 96.2 men; and 100 women to 94.4 men over 18 years of age.

Race distribution is as follows:

96.2% White

2.2% African American

1.1% Hispanic/Latino

Less than 1% of the following groups, respectively:

Native American, Asian, and “other”.

The county seat of Page County is the town of Luray, which is also the location of PMH, Page County EMS, the Luray Volunteer Rescue Squad, and the county sheriff and county administration offices.

PMH is a not for profit hospital which at the time of the evaluation was independently owned, but was to become part of the Valley Health System, which also is the owner of another CAH facility, Shenandoah Memorial Hospital in Woodstock in the neighboring county of Shenandoah. PMH received designation as a CAH facility in October of 2005. During their designation process, no deficiencies were noted, no recommendations for specific needs or initiatives related to the EMS system were made during the designation process, and no significant changes in any policy or procedure have taken place as a result of designation. PMH has also been accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). PMH has a capacity of 25 beds in the entire facility. PMH is the only hospital within the geographic boundaries of Page County.

The PMH Emergency Department (ED) is open and staffed 24 hours a day/7 days a week, and has a seven bed capacity, including a trauma room., and two “quick care” rooms, to treat patients with minor injuries or illnesses. PMH also has a OEMS licensed EMS transport service, which is primarily responsible for interfacility transfers.

There are six EMS agencies in Page County that are licensed by OEMS. They are Luray Volunteer Rescue Squad, Page County EMS, Page Memorial Hospital Transport Service, Shenandoah Rescue Squad, Stanley Volunteer Fire Department, and Stanley Volunteer Rescue Squad. Page County EMS employs EMS providers to augment volunteer staffing at the Luray Volunteer Rescue Squad, Shenandoah Rescue Squad, and Stanley Volunteer Rescue Squad. PMH also employs two full time EMS providers to staff their ambulances.

III. Purpose and Methods of the EMS System Study

As outlined in the scope of services within the Memorandum of Agreement between the OMHPHP and OEMS, the following areas are to be addressed in the pages to follow:

1. Examination of Network Agreements for CAH Certification
2. Study Survey
 - 2a. Questions for EMS Personnel for assessing EMS capabilities in agencies in areas served by the CAH.
 - 2b. Develop questions for CAH personnel for the purpose of assessing the overall function of the local EMS system
3. Study Components
 - 3a. Demographics of the CAH area
 - 3b. Staffing of the local EMS System
 - 3c. Placement of units on basis of call volume and population density
 - 3d. Training Initiatives
 - 3e. Communications
 - 3f. Resource Management
 - 3g. Fiscal Support
 - 3h. Medical Direction
 - 3i. Quality Assurance
 - 3j. Mass Casualty Preparedness
 - 3k. System Partnerships
 - 3l. Hospital Capabilities
4. Recommendations

To accomplish this task, the Virginia Office of EMS:

1. Formal interviews and site visits were conducted with various stakeholders of the EMS System in Page County. Additionally, formal interviews and a site visit was conducted with staff from PMH, including the Chief Executive Officer. These interviews and site visits were held to gather information regarding the relationship between the CAH and the EMS System, and vice versa, as well as to determine the capabilities of both the CAH, and the EMS System in Page.
2. Representatives from the Luray Volunteer Rescue Squad, Page County EMS and Stanley Volunteer Rescue Squad all participated in a survey to gather some additional information about the EMS system capability, as well as the relationship with the CAH.

A copy of the survey, as well as the responses from the participants is attached to this report, as "Appendix 1"

3. Several documents were reviewed in preparation for the study report, including:
 - All documents related to the CAH designation by PMH.
 - EMS network agreements for PMH, as required in the original CAH certification application.
 - OEMS licensure database information to determine the number and age of EMS vehicles of each of the agencies operating within Page County.
 - OEMS PPCR database information for all EMS calls within Page County for calendar years 2006 and 2007.
 - OEMS Technician database information for all certified EMS providers within Page County.
 - Mutual Aid agreements existing between agencies in Page County.
 - Rescue Squad Assistance Fund (RSAF) information for all EMS agencies within Page County for 1998-2008 grant cycles, including items awarded and denied.

IV. Study Results

The results of the study of the EMS System and the Critical Access Hospital in Page County brought forth a great deal of information. As mentioned previously in the purpose and methods of the study, several components were examined.

Demographics:

Demographic information for Page County was mentioned in the Introduction section of this report, and seems to be relatively similar to other rural counties and areas within the Commonwealth of Virginia, and other counties that were examined as part of the CAH Study.

Staffing:

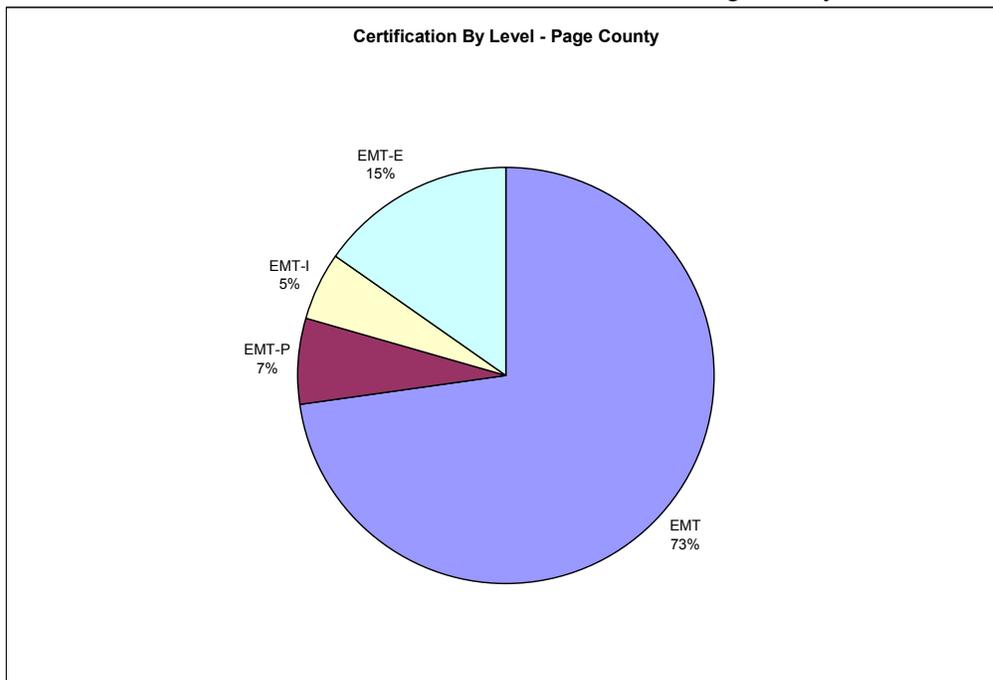
There are 92 certified EMS providers in Page County. The distribution of providers by level is below:

Table 1 – Distribution of Certified Providers in Page County

Certification Level	Number of Certified Providers
Emergency Medical Technician (EMT)	67 (73% of total providers in county)
EMT – Intermediate (EMT-I)	14 (15%)
EMT – Paramedic (EMT-P)	6 (7%)
EMT – Enhanced (EMT-E)	5 (5%)
Total	92

Source: Virginia OEMS Division of Educational Development Provider Database

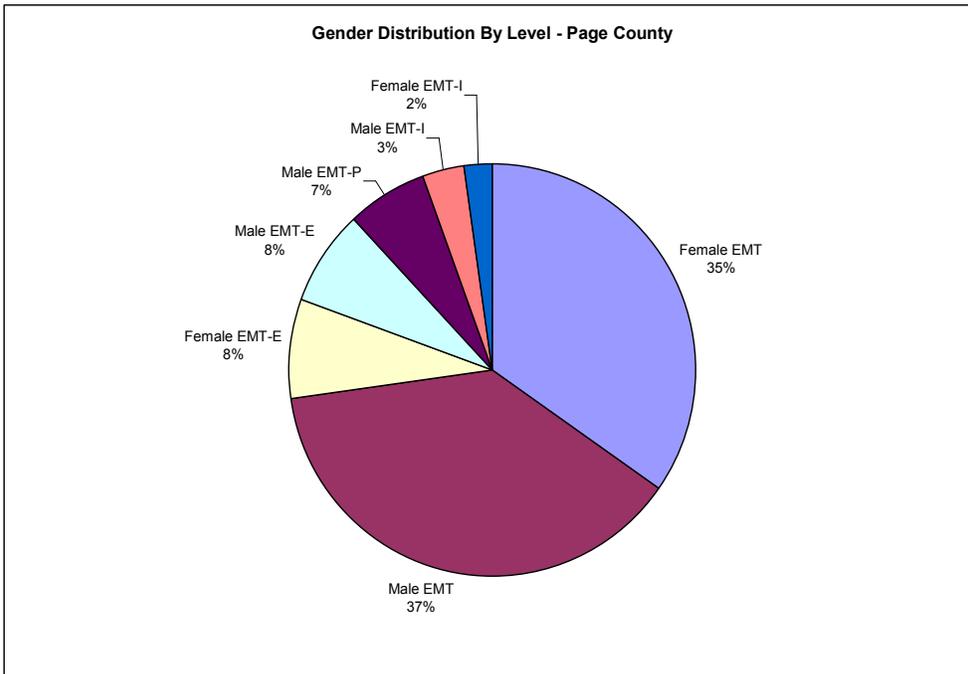
Chart 1 - Distribution of Certified Providers in Page County



Source: Virginia OEMS Division of Educational Development Provider Database

Additionally, there is a distribution of certified EMS provider by gender and level, as outlined in the following chart:

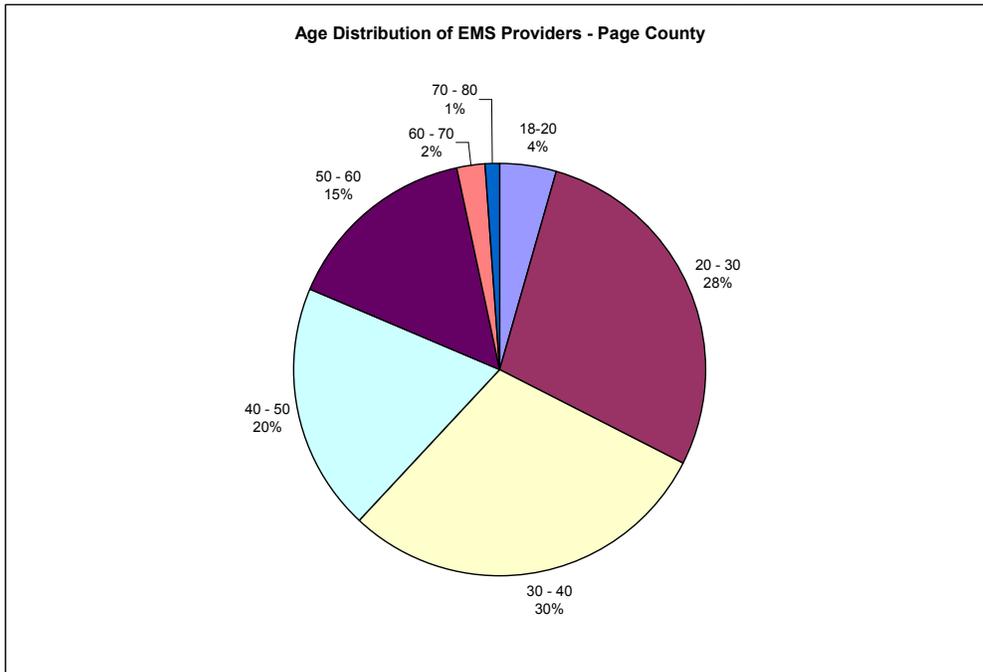
Chart 2 - Distribution of Certified Providers in Page County by Level and Gender



Source: Virginia OEMS Division of Educational Development Provider Database

The age distribution of EMS Providers in Page County is reflected in the graph below:

Chart 3 – Age Distribution of Certified Providers in Page County



Source: Virginia OEMS Division of Educational Development Provider Database

EMS Coverage to Page County

Staffing of local EMS agencies within Page County varies from volunteer to career agencies; and in numbers as well. As mentioned previously, Luray Volunteer Rescue Squad, Page County EMS, Page Memorial Hospital Transport Service, Shenandoah Rescue Squad, Stanley Volunteer Fire Department, and Stanley Volunteer Rescue Squad are licensed services in Page County, with Stanley Fire Department licensed as a non-transport agency. Page County EMS provides paid staff to the Luray Volunteer Rescue Squad, Shenandoah Rescue Squad, and Stanley Volunteer Rescue Squad. The remainder of EMS coverage is provided by volunteer providers on a 24 hour day/ 7 day week basis. The transport service of PMH staffs it’s ambulance roughly 50% of the time using two full time providers, and several per diem paid providers.

The only career EMS service is Page County EMS, which has two providers staff the Luray Volunteer Rescue Squad from 6am to 6pm Monday thru Friday, the Shenandoah Rescue Squad with one provider from 7am to 3pm Monday thru Friday, and the Stanley Volunteer Rescue Squad with one provider from 7am to 3pm Monday thru Friday. Page County EMS has requested that the Page County administration change the current 8 hour per day staffing at Stanley VRS shift to a 12 hour per day position.

The table below outlines the coverage of Page County by each agency:

Table 2 – EMS Coverage in Page County by Agency

Agency	24/7 Service	In-house	Standby (pager)
Luray VRS	Yes	Daytime paid staff, night time volunteers	Rarely needed
Page Mem. Hosp.	No	Per-diem and Part time	None
Shenandoah RS	Yes	Daytime paid staff, night time volunteers	Unknown
Stanley VRS	Yes	Daytime paid staff, night time volunteers	Occasionally overnight hours

Source: OEMS interviews with Page County EMS Agency representatives

Recruitment and retention initiatives currently in place for these agencies are letter drives to area residents, informational sessions at the local high school, open houses held at the station, and community awareness initiatives. Representatives from the Stanley Volunteer Rescue Squad stated that the squad has no recruitment or retention initiatives in place currently.

Response Times and Strategic Placement of EMS Units

For the purposes of this evaluation, response time is defined as dispatch (call processing time) time (time from initial receipt of call by PSAP until EMS unit is alerted) plus reaction time (time from initial receipt of call by EMS unit until wheels are rolling) plus travel time (time from wheels rolling on EMS unit until arrive on scene.).

Countywide, the average response time for EMS agencies were 10 minutes and 9 minutes, respectively, in 2006 and 2007, based on the review of PPCR data submitted by those agencies. Individually, response times ranged from 6 minutes to 12 minutes for both 2006 and 2007. None of the agencies utilize strategic placement of vehicles based on call volume, but on occasion will move vehicles to different areas of their response territory if a neighboring agency transports a patient out of the county, or will have a long transport to the hospital.

EMS Training Initiatives

The EMS training and continuing education (CE) opportunities for agencies and providers in Page County are relatively plentiful. EMS providers in the county are fortunate in the fact that many course offerings are available in county, and do not require travel outside of the county, which providers in similarly rural counties often have to do in order to receive the training that they need.

Much of the training and CE is provided by Page County EMS itself, and involves both ALS and BLS training and CE.

During interviews, it seems that PMH is not directly involved in training and/or continuing education of EMS providers.

Additionally, many of the agencies in Page County report obtaining CE through the use of the Emergency Medical Services Satellite Training (EMSAT) Program which is a training and information program developed and produced by the Virginia OEMS for Virginia EMS and Fire personnel, giving category III continuing education credit for viewing EMSAT DVDs..

Communications

Page County has had Enhanced – 911 (E-911) since 1992. EMS dispatch is provided through cross trained dispatchers employed by Page County Sheriff's office, and utilize Emergency Medical Dispatch (EMD) pre arrival instructions when receiving 911 medical calls to the dispatch center. All of the EMS agencies in Page County utilize radio and/or cellular phone communication to communicate with the CAH; however, certain areas of Page County have "dead areas" where radio and cell phone communication are difficult. These agencies provide patient report information prior to their arrival to the hospital 75 to 100% of the time. Additionally, Page County agencies do not own cardiac monitors with the ability to transmit telemetry information to PMH, but PMH does have telemetry receiving capability.

Resource Management

There are 20 permitted EMS vehicles among the 6 agencies in Page County. This includes 12 Ambulances, five ALS first response vehicles, two BLS non transport vehicles and a utility vehicle.

As of the last inspections of each agency in Page County by OEMS field representatives conducted between September of 2007 and October of 2008, all vehicles were in good working condition, without any mechanical failures noted in inspection reports. The vehicles range in age from one to 14 years of age at the time of inspection. Luray VRS, PMH, and Shenandoah VRS are due for vehicle inspections in 2009.

In terms of aeromedical service, Page County is primarily served by UVA Pegasus Flight Operations out of the University of Virginia Medical Center in Charlottesville, and PHI AirCare IV, based out of Winchester, VA. Based on review of PPCR data from 2006 and 2007, aeromedical agencies responded to calls in Page County 52 times, and 87 times, respectively.

Fiscal Support

For Fiscal Year 2006 and 2007, Page County received \$46,780.50 in “Return to Locality” (RTL) funding from the Virginia Department of Health from the “Four for Life” revenues from passenger vehicle registration. The Code of Virginia states that the Department of Health shall return twenty-six percent (26%) of the registration fees collected to the locality wherein such vehicle is registered to provide funding for EMS Training of volunteer or salaried emergency medical service personnel of licensed, nonprofit emergency medical service agencies; or for the purchase of necessary equipment and supplies for licensed, nonprofit emergency medical service agencies. Page County uses these funds to assist in matching funds for equipment purchases by the EMS agencies within Page County.

The funding distribution for both 2006 and 2007 are reflected in the tables below:

Table 3 – RTL Funding Distribution - Page County

Page County – Return to Locality – Fiscal Year 2006				
Agency Receiving Funds	Summary of Use of Funds			
	Training	Equipment	Supplies	Total
Luray VRS	\$640.00	\$2,932.00	\$2,932.04	\$6,504.04
Stanley VRS	\$426.00	\$3,200.00	\$2,878.04	\$6,504.04
Shenandoah VRS	\$0.00	\$13,504.04	\$0.00	\$6,504.04
Carryover (Funds Not Expended)				\$0.00
Totals	\$1,066.00	\$19,636.04	\$5,810.08	\$26,512.12

Page County – Return to Locality – Fiscal Year 2007				
Agency Receiving Funds	Summary of Use of Funds			
	Training	Equipment	Supplies	Total
Luray VRS	\$0.00	\$2,347.60	\$4,408.53	\$6,756.13
Stanley VRS	\$1,300.00	\$3,797.86	\$1,658.27	\$6,756.13
Shenandoah VRS	\$0.00	\$6,756.12	\$0.00	\$6,756.12
Carryover (Funds Not Expended)				\$0.00
Totals	\$1,300.00	\$12,901.58	\$6,066.80	\$20,268.38

Source: OEMS RTL Reports from Page County

These funds were reported as used for training and equipment, but reports are not required by OEMS to specify what training and equipment needs were satisfied by these funds.

All of the EMS agencies in Page County have a fee for service program in place. Luray Volunteer Rescue Squad, Page County EMS, and the Stanley Volunteer Rescue Squad all fall under a fee for service program that Page County EMS has contracted with Diversified Ambulance Billing in Virginia Beach, VA. This program has been in place since November of 2008, and the rate of reimbursement could not be determined for this report due to the close timeframe of the launch of the program. Shenandoah Volunteer Rescue Squad bills for service independent of Page County.

Rescue Squad Assistance Fund – Recent History

Page County agencies have participated in the RSAF grant process in reviewing RSAF records since 1998.

In that time, all of the EMS agencies in Page County have been awarded funds for vehicle and equipment purchases at a total of \$206,676.29.

Items of note include the fact that Stanley Volunteer Rescue Squad has not applied for any RSAF funding since December of 2004.

Table 4 - RSAF Awards for Page County – June 1998 to June 2008:

Luray Volunteer Rescue Squad			
Grant Cycle	Item	Amount	Percent of Fund Match By Agency
06/2003	1 Defibrillator	\$7,089.00	50%
12/2003	1 Defibrillator	\$7,089.00	50%
12/2003	1 Automatic Defibrillator	\$1,360.00	50%
12/2004	1 Training Manikin	\$2,400.00	50%
12/2004	1 IV Training Arm	\$225.00	50%
12/2004	1 Pediatric Training Manikin	\$550.00	50%
06/2006	1 Ambulance Stretcher	\$4,221.00	50%
06/2006	1 Defibrillator	\$10,500.00	50%
12/2006	Pediatric Training Equipment	\$2,302.50	50%
12/2006	1 Desktop Computer	\$1,250.00	50%
06/2004	1 Vehicle Rechassis	\$38,477.50	50%
Total Award Amounts		\$75,412.50	

Page County EMS			
Grant Cycle	Item	Amount	Percent of Fund Match By Agency
12/2007	ALS/BLS Training Equipment	\$2,500.00	50%
Total Award Amounts		\$2,500.00	

Page Memorial Hospital			
-------------------------------	--	--	--

Grant Cycle	Item	Amount	Percent of Fund Match By Agency
06/2007	1 Defibrillator	\$10,500.00	50%
06/2007	1 Ambulance	\$56,583.00	50%
	Total Award Amounts	\$72,083.00	

Shenandoah Rescue Squad			
Grant Cycle	Item	Amount	Percent of Fund Match By Agency
12/1998	1 Defibrillator	\$5,101.00	50%
12/1999	1 Outdoor Illuminated Sign	\$1,200.00	N/A
09/2000	1 Computer System	\$1,000.00	0%
06/2008	1 Defibrillator	\$4,000.00	50%
06/2008	1 LCD TV and DVD Player	\$399.99	50%
	Total Award Amounts	\$11,700.99	

Stanley Volunteer Fire Department			
Grant Cycle	Item	Amount	Percent of Fund Match By Agency
09/2000	1 Computer System	\$1,000.00	0%
09/2000	1 Automatic Defibrillator	\$3,000.00	0%
06/2001	Extrication Equipment	\$1,100.00	50%
06/2007	LCD Projector & Screen	\$840.00	20%
06/2007	Laptop Computer & Software	\$760.00	20%
	Total Award Amounts	\$6,700.00	

Stanley Volunteer Rescue Squad			
Grant Cycle	Item	Amount	Percent of Fund Match By Agency
06/1998	1 Ambulance	\$24,982.80	20%
06/1999	2500 Newsletters	\$1,497.00	N/A
09/2000	1 Computer System	\$1,000.00	0%
12/2004	1 Desktop Computer	\$499.50	50%
06/2008	1 Defibrillator	\$10,300.00	50%
	Total Award Amounts	\$38,279.30	

Source: Virginia OEMS RSAF Grant Awards Database

Medical Direction

There are two Operational Medical Directors (OMD) affiliated with the agencies in Page County, Drs. Thomas Kuhlman, and Eric Kramer. Dr. Kuhlman is the OMD for Luray VRS, Page County EMS, PMH Transport Service, and Stanley VFD and Stanley VRS, and is also affiliated with the CAH itself. Dr. Kramer is the OMD for Shenandoah RS. As a member of the Lord Fairfax EMS Council's (LFEMS) Medical Direction Committee, Dr. Kuhlman has been intimately involved in the development, review, and revision of all treatment and transport protocols utilized by EMS agencies and providers in Page County, and is increasing his involvement in agency PI programs for the agencies that operate under his license.

In addition to the OMD support, Page County EMS providers utilize the protocols established by the LFEMS Medical Direction Committee for off-line medical direction, and are able to receive on-line medical direction from the PMH ED at any time.

Quality Assurance

In calendar years 2006 and 2007, a total of 3,458 and 3,679 PPCR reports were submitted to OEMS by agencies in Page County. This number is based on EMS responses based in Page County only. Out of the total number of EMS call for 2006, 78.7% of those calls were BLS, and 81% of the calls in 2007 were BLS.

Based on PPCR data, PMH received 46.4% and 48.5% of patients transported by Page County agencies in 2006 and 2007, respectively. Of note is the fact that the Shenandoah RS only transports between 7-9% of its patients to PMH, with the majority of their patients going to Rockingham Memorial Hospital (hereinafter mentioned as "RMH"), in Harrisonburg, in the neighboring county of Rockingham. This figure seems relatively consistent compared to other agencies in counties served by CAH hospitals whose primary response areas are on the edge of that county, and are closer to other hospitals. Also of note is the fact that agencies had "no hospital listed" as a disposition in 27% and 30% of calls for 2006 and 2007, respectively. It is unknown if this number is representative of entry errors, or if it is representative of patient refusals, cancelled calls, and other non-transports, but it would seem that it may be a combination of both.

In terms of response data, agencies in Page County have varied response times, and transport times from scenes to hospitals. Based on data from 2006 and 2007, agencies average 10 and 9 minutes, respectively. Response time is defined as dispatch (call processing time) time (time from initial receipt of call by PSAP until EMS unit is alerted) plus reaction time (time from initial receipt of call by EMS unit until wheels are rolling) plus travel time (time from wheels rolling on EMS unit until arrive on scene.).

For transfers from PMH to other hospitals, a variety of factors come into play each of which affect the amount of time it takes to transfer a patient to another facility. Transfers are typically dependent on patient diagnosis, available beds at receiving hospitals, and patient preference. For 2006, 541 patients were transferred from PMH to other facilities in reviewing data submitted by PMH Transport Service, for 2007, 384 patients were transferred. The majority of all transfers were for services that were not available at PMH, the highest percentage of those being cardiology, neurology, and orthopedic services that are not offered at PMH, or at a capability to best treat the patient's particular injury or illness. In 2006, 29% of transfers went to the University of Virginia Medical Center (hereinafter mentioned as "UVA"), in Charlottesville, VA, UVA is 61 miles from PMH, and is typically about a 1 hour and 15 minute drive, and 15 minutes by air. Additionally, 27% of patients transferred went to Winchester Medical Center (hereinafter mentioned as "WMC"), located in Winchester, VA. WMC is 50 miles from PMH and about 60 minutes drive time. Another 17% of transferred patients went to RMH in Harrisonburg, which is 30 miles from PMH and about 45 minutes drive time.

The overwhelming majority of patient transfers out of PMH are done by PMH Transport Service. On rare occasions, Luray VRS have done transfers, but are not compensated for doing so. In addition, PMH administration reports that PMH has roughly 100 patients transferred by air annually, with the majority transferred to UVA. PMH and UVA are also partnering to establish an Automated Weather Observing System (AWOS) to help better inform flight crews of weather patterns in the area.

As was stated previously, all agencies in Page County have established PI programs, but have varying degrees of activity. These programs usually involve regular reviews of PPCR reports completed by the respective agency, but seem to have limited OMD participation. PMH does have representation on the Regional PI and Trauma PI committees by Julie Miller, a registered nurse in the Emergency Department.

Additionally, in reviewing PPCR submission compliance information for 12 quarters for calendar years 2006-2007, all agencies were compliant with their submissions.

Mass Casualty Preparedness

Agencies in Page County utilize the LFEMS Regional MCI Plan, which is reviewed and revised on an annual basis by the Lord Fairfax Emergency Planning Committee (LEPC). It is unclear if representatives from Page County, or PMH are involved on that committee. There is also no evidence of disaster planning or training.

System Partnerships

All of the Fire and EMS Agencies within Page County have mutual aid agreements in place, both with each other, and with agencies in counties that adjoin Page. There is also a fair working relationship that exists between the county EMS agencies, the county administration, and the county sheriff's office.

Based on interviews conducted and review of survey information, it does seem to be that EMS has a pretty clear understanding of their role as it pertains to the CAH. The relationship has been reported by both PMH and EMS agency representatives to have been strained at times, all parties agree that they are "on the right track", and interested in what is in the best interest of the EMS system in Page County, and what is in the best interest of patient care to the citizens of Page County.

Hospital Capabilities

PMH employs four full-time physicians, and 12 contract/per diem physicians. PMH has at least one physician on staff in the ED 24 hours a day, 7 days a week. Two nurses and a nursing supervisor are on staff 24 hours a day. PMH does employ EMS providers to staff the EMS Transport Unit, and those providers also staff the ED, and perform skills up to the level of their EMS certification.

PMH has had a volume of patients in the ED of roughly 10,500 patients annually, with roughly 1,312 of those patients arriving via EMS. PMH does not track information about the number of hospital users that “walk in” to the ED versus arrival via EMS transport or specific agency, nor do they track those patients that arrive via EMS for specific information, such as arrival by ALS versus BLS, or their disposition.

As mentioned previously in this report, in 2006, 541 patients were transferred from PMH to other facilities in reviewing data submitted by PMH Transport Service, and in 2007, 384 patients were transferred. The majority of patients are transported because they are in need of services that are not offered at PMH. A network agreement exists between PMH and UVA. Transfer agreements exist with other hospitals in the area, which have been listed previously.

PMH does have representation on the Lord Fairfax Regional EMS Council Board of Directors, as Julie Miller has a seat on the Board, and is an active participant on several subcommittees of the board.

Page Memorial Hospital, at the time of this evaluation, is in a time of transition, as PMH was acquired by Valley Health Systems on January 1, 2009, after operating as an independent facility for 84 years. Valley Health is one of the largest healthcare organizations in Virginia, and is the owner and operator of Shenandoah Memorial Hospital, in the neighboring county of Shenandoah. During the site visit, PMH administration reported that one of their biggest challenges was overcoming the financial burden of uninsured patients, and lack of subsidization of interfacility transfers. PMH administration were optimistic that the merger would strengthen facility infrastructure, as well as enhance the PMH transport service, as Valley Health also has a transport service, which provides service to other facilities within its network of hospitals.

V. Key Findings and Recommendations

For each area evaluated in the information in Section IV of this report, key findings, as well as some recommendations for future feasibilities will be made.

Staffing/Placement of EMS Units:

Key Findings:

In Page County, there are 92 certified EMTs for the population size of 23,177 people, or 1 EMT for every 251 people in the county. This is slightly higher than the total number of EMTs versus people in the Commonwealth of 1 to 204, and is comparable to many other counties that CAH facilities are located in.

The number of volunteer versus career EMS providers seems to be comparable to most rural counties in Virginia, with a majority of providers being affiliated with volunteer agencies. Many of the agencies that participated in interviews mentioned the recruitment or retention of EMS providers as issues that their respective agencies are currently facing, but recruitment and retention initiatives are inconsistent across the EMS agencies in the county. The age, gender, and race of EMS providers in Page seem to be relatively consistent with the demographic information of the county as a whole.

In terms of hours of EMS coverage in the county, as well as response times, the efforts by Page County to staff EMS agencies during daytime hours seems to be a positive step in ensuring adequate staffing and prompt responses. Though there are some staffing shortages that may be remedied through increased recruitment and retention efforts, it does seem that the agencies of Page County “do the best with what they have”.

Recruitment and retention initiatives are varied, from letter drives to area residents, informational sessions at the local high school, open houses held at the station, and community awareness initiatives. It was worth noting that not all the agencies in the county have recruitment and retention initiatives in place.

Recommendations:

OEMS believes that the number of EMS providers per person in Page County is alarming, at the very least. Page County is “ahead of the curve” in employing full-time EMS providers, which puts them ahead of many other systems that CAH facilities are located in, however, the provider numbers in Page certainly need to increase. OEMS recommends that volunteer agencies in Page County utilize the “Keeping the Best” series of recruitment and retention workbooks offered to all EMS agencies by OEMS, in order to maintain, and increase their agency rosters. Maintaining an emphasis on the recruitment of high-school students may continue to be valuable to the agencies in the county. Additionally, agencies should strive to provide training opportunities to their providers at free or discounted prices, if they are not already doing so. It may also be beneficial for Page County EMS to consider establishing a recruitment and retention coordinator position, or adding those tasks to a current employee profile.

EMS Training Initiatives

Key findings:

EMS Training opportunities seems to be relatively plentiful, with Page County EMS taking the lead in EMT and EMT-Enhanced courses offered in the county, as well as providing ITLS and EMS CE to providers on a routine basis. It is very concerning that there is a lack of availability of other “alphabet” courses, such as ACLS, PALS, and similar educational offerings in the county, and that PMH has not taken an active role in providing educational opportunities to EMS providers that may currently be available to PMH staff.

Recommendations:

EMS System stakeholders, including PMH, LFEMS, and the individual agencies themselves, should continue to work collaboratively to ensure that opportunities for providers to obtain or maintain EMS certification remain available.

PMH should commit itself to become more actively involved in the training and continuing education of the EMS providers within the hospital’s catchment area. PMH should work collaboratively with the EMS agencies in Page County to provide courses that they may already be providing to hospital staff (CPR, ACLS, etc.) that are also applicable to EMS. Additionally, each agency should be utilizing Virginia OEMS EMSAT DVDs, as well as the Virginia TRAIN online training portal to augment their CE requirements.

Communications

Key Findings:

Like many other rural areas, Page struggles to achieve reliable radio and cellular coverage over 100% of the county, as it is located in a valley between two mountain ranges that are obstacles to effective communication.

It is also worth noting the fact that high numbers of agencies provide patient report information to the CAH, and that PMH is able to receive cardiac monitoring information from the field, though EMS agencies are currently not able to transmit such information.

Recommendations:

Page County governmental administration should continue to work collaboratively with internal and external entities and resources to upgrade communications abilities in Page County, utilizing the regional hospital preparedness system to apply for state and federal grant funds for communications augmentation. Additionally, PMH should work collaboratively with transport agencies to promote the use of transmission of 12 Lead EKG information from the field.

Fiscal Support

Key findings:

During the evaluation process, none of the agencies that participated stated that reimbursement for services provided were an issue, though the time of the evaluation was too soon to determine the rate of collection of fees for service. It is also a concern that not all of the EMS agencies within Page County are using the fee for service arrangement that was implemented by Page County.

Additionally, it is commendable that agencies in Page consistently apply for RSAF grant funds for vehicles and equipment, and that agencies are taking advantage of return to locality funds as an additional funding stream.

It was also reported by several agencies in Page County that they are outgrowing facilities that they are currently in, and would benefit from some type of funding stream for expansion or relocation projects.

Recommendations:

Eligible agencies in Page County should continue to apply for RSAF grant funding on a consistent basis, in order to obtain updated vehicles and equipment.

Additionally, Page County EMS should ensure that collection rates are as high as possible, as they proceed with the fee for service program. Increased focus should be placed toward ensuring that all EMS agencies in the county are utilizing one standardized program for revenue recovery.

Finally, Page County EMS agencies may qualify for federal funds earmarked for capital improvement projects. These funds may be helpful in making renovations to existing EMS agency space, or to construct new buildings.

Medical Direction

Key findings:

The agencies of Page County are fortunate to have Dr. Kuhlman serving as an OMD for many of the agencies in the county. His involvement on the regional Medical Direction committee is important in giving Page County a voice and an opinion as it pertains to system development, as well as protocol development.

It is also apparent that Dr. Kuhlman is making an effort to better connect with the EMS agencies in Page County, in terms of oversight, this is essential to making PI programs as successful as possible. It has been reported that Dr. Kramer seems to have little involvement with

the agency that he is the OMD for, and has little interaction on the county or regional level as well.

Recommendations:

The OMDs in Page should strive to set the pace in terms of involvement in the operations of the agencies that are functioning under their medical license. Dr. Kuhlman's role as an Emergency Department physician, as well as an OMD for Page County EMS agencies should be utilized to ensure that the relationship between the CAH and the EMS system is robust, and is functioning for the betterment of patient care and delivery in the county.

Dr. Kramer should strive to have increased involvement in the EMS system in Page, and in the Lord Fairfax region as well.

Quality Assurance**Key Findings:**

In reviewing PPCR records for the agencies of Page County, it was apparent that there seems to be a lack of proper completion of PPCR reports. The number of transports listed to have gone to PMH is remarkably lower than those of other counties that CAH facilities are located in, and interviews with agency representatives all stated that the majority of their patients are transported to PMH, which seems contradictory to the data. Response times are comparable to other agencies in counties that CAH facilities are located in.

Additionally, all agencies have some type of call review/PI program in place, which is essential for productive quality assurance, but there are variations in how those programs are conducted, with little to no involvement from the OMD, and the CAH facility.

In terms of CAH interfacility transports, PMH seems to be relatively comparable to other CAH facilities and rural hospitals in terms of the number of transfers, and the reasons for those transports. It is obvious and acceptable that PMH not have the means to provide specialty service for every type of medical condition, otherwise they would have not received CAH designation. The fact that PMH has its own transport service helped in determining the percentage of transports from PMH to other facilities. It is also commendable that UVA is working collaboratively with PMH to establish an Automated Weather Observing System (AWOS) to help better inform flight crews of weather patterns in the area. This would provide an essential service to an area that currently has no such weather observation system in place.

Recommendations:

Page County agencies should continue to strive to provide PPCR information to OEMS in the proper format, on a consistent basis. They should also strive to fully and properly complete reports for the patients that are transported.

OMDs for the agencies should ensure that they actively participate in agency PI programs, in order to promote improvements to patient care delivery.

PMH should continue to maintain formal agreements between itself and facilities that patients are transferred to.

Mass Casualty Preparedness/System Partnerships

Key Findings:

While the agencies in Page County are familiar with the Regional MCI Plan, and are able to utilize if needed, it is concerning that there seems to be no involvement by any representative of Page in the development of the MCI Plan, nor is there any evidence of any planning, training, or preparedness exercises involving the CAH and the EMS agencies in Page County.

It seems that network agreements between the CAH and partner facilities, as well as mutual aid agreements between EMS agencies in Page County, and areas outside of Page, are in place, and being honored.

Recommendations:

Both representatives of the CAH, and the EMS stakeholders should strive to take a more active role in the development of Mass Casualty Incident plans, as well as routine training, and mock disaster exercises. Additionally, EMS agencies in Page should review, revise, and update mutual aid agreements on an annual basis.

Hospital Capabilities

Key Findings:

PMH certainly is in a transition phase, and the administration is optimistic that the merger with Valley Health System will help the facility to be more financially viable, and provide some enhancement to the established infrastructure of PMH. It will be interesting to examine the status of PMH in the first six to twelve months, to determine what types of changes occur during the transition, especially in terms of services that the CAH may be able to provide, the influence of Valley Medical Transport on the existing transport service at PMH, and any changes to the relationships between the CAH and the EMS stakeholders in Page County.

Recommendations:

PMH should strive to enhance their role in the patient care delivery model in Page County, and act as a resource to the providers and agencies in Page County, to help them to provide the best care possible to the residents of Page County.

OMHPHP should seek to revisit PMH again in 12 months, to re-evaluate the CAH itself, and the relationships between PMH and the EMS stakeholders in Page, to determine if improvements have been made.

Conclusion:

The Virginia OEMS believes that between continuing efforts to improve the EMS System in Page, the possibilities that the transition that Page Memorial Hospital is undergoing, and will be undergoing, and consideration of implementation of the recommendations that have been made in this report, that the EMS system in Page County will be better than ever as it moves into the future. The Virginia OEMS remains committed to provide whatever resources and materials are necessary to meet that goal.

Acknowledgements:

The Virginia Office of EMS greatly appreciates the assistance of the following individuals:

Virginia Department of Health, Office of Minority Health and Public Health Policy

Michael Royster, Director

Aileen Harris

Marilyn Jackson

Kenneth Studer

Virginia Department of Health, Office of Emergency Medical Services

Gary R. Brown, Director

P. Scott Winston, Assistant Director

Dennis Molnar, Business Manager

Amanda Davis

Jodi Kuhn

Warren Short

Study Participants:

Page Memorial Hospital:

N. Travis Clark, Chief Executive Officer

Page County EMS Agencies:

Wesley R. Shifflett – Page County EMS

Joseph Weaver – Luray VRS

Joshua Gray – Stanley VRS

Appendices:

Appendix 1 – Responses to survey questions by study participants

EMS Agency Survey Questions – Page County Fire & EMS – Wes Shifflett
Answers provided appear in ***Bold Italics***.

1. Does your county utilize centralized dispatch? **Yes**
 - a. What agency dispatches your calls?
Dickenson County Sheriff's Office – Dispatchers use EMD, and are cross trained.
2. If you are an EMS transport agency, which Emergency Department(s) does your agency transport patients to? ***Stanley VRS and Luray VRS primarily transport to PMH, Shenandoah RS is in the southern portion of the county, and is closer to Rockingham Memorial Hospital in Harrisonburg, VA.***
 - a. How many patients have you transported within the last 12 months?
Approximately 3700 transports per year.
 - b. How many patients were ALS vs. BLS?
25% ALS
3. Has your agency provided patient reports to the Emergency Department within the past twelve months? **Yes**
 - a. If yes, how often?
 - i. 0-25% of the time
 - ii. 26-50% of the time
 - iii. 51-75% of the time
 - iv. 76-100% of the time
 - b. What form of communication do you use?
 - i. Radio - ***Primary***
 - ii. Cell phone - ***Secondary***
 - iii. Other?
 - c. Do you face any challenges communicating with the Emergency Department?
Yes
 - i. If yes, what are these challenges?
Cell phone coverage dead areas are a significant issue.
4. Does your agency have a fee-for-service arrangement for patient transports? ***A county wide program is set to begin in November of 2008 – through Diversified Ambulance Billing***
 - a. If yes, what has the collection rate been over the past 12 months?
To be determined.
5. Do you have telemetry or other telemedicine equipment on your vehicle? **No**
6. What hospitals do you transport patients to?
Primarily PMH, secondarily Warren Memorial Hospital in Front Royal.
7. Have you been told by the critical access hospital within the past 12 months that you must redirect your patient transport because the hospital is at capacity? ***Not due to capacity, but staff being overwhelmed at the time.***
 - a. If so, how many occurrences?
Less than 5 times.
 - b. How was this communicated to your agency?
PMH and EMS agencies are working on a policy to address this.

8. Within the past 12 months, has the critical access hospital called your agency to transport patients to a supporting hospital or facility outside the county? **Yes, but all requests were declined in order to maintain the ability to answer 911 calls in the county**
9. Does your agency participate in any quality assurance/performance improvement programs with the critical access hospital? **Yes – PMH has a nurse liaison who works through issues with the EMS agencies in the county. The nurse liaison is also a Paramedic, and serves on the regional PI/TPI committees.**
10. What is the total number of personnel in your agency? **80 members**
 - a. What is the average age (**unknown**); race (**Caucasian**); gender (**unknown**) of these personnel?
 - b. How many are volunteer personnel? **90%**
 - c. How many are career personnel? **10%**
11. What is the number of hours of dedicated coverage (ie. station and/or vehicle are staffed) your agency provides each day? **24/7 – mostly in house**
 - a. What are the total hours of on-call coverage provided each day? **24/7**
 - b. What percent of each day does your county have EMS coverage? **100%**
12. Does your agency participate in any recruitment or retention initiatives? **No**
13. What is the average response time for your agency in the past twelve months? **Approximately 11 minutes.**
14. Is your agency utilizing strategic placement of units based on call volume and/or location? **No.**
15. Is ALS or BLS training or continuing education available in your area? **Yes, primarily provided by Page County EMS**
 - a. If yes, has the critical access hospital in your area provided any training or continuing education to your agency's providers? **PMH has had little involvement in training or CE for EMS providers.**
16. Does your agency have formal cooperative agreements with other EMS agencies? **Yes**
 - a. If yes, are they honored? **Yes, all agencies work closely with surrounding jurisdictions.**

Challenges:

- **Triage polices need to be consistent (Transports to PMH, and to other facilities)**
- **Improving relationships between EMS and PMH.**

EMS Agency Survey Questions – Luray Volunteer Rescue Squad – Joe Weaver
 Answers provided appear in ***Bold Italics***.

1. Does your county utilize centralized dispatch? **Yes**
 - a. What agency dispatches your calls?
Page County 911
2. If you are an EMS transport agency, which Emergency Department(s) does your agency transport patients to? **Primarily transport to PMH, secondarily to Warren Memorial Hospital in Front Royal, Rockingham Memorial in Harrisonburg, and Shenandoah Memorial in Woodstock.**
 - a. How many patients have you transported within the last 12 months?
Approximately 1400 transports per year.
 - b. How many patients were ALS vs. BLS?
30% ALS
3. Has your agency provided patient reports to the Emergency Department within the past twelve months? **Yes**
 - a. If yes, how often?
 - i. 0-25% of the time
 - ii. 26-50% of the time
 - iii. 51-75% of the time
 - iv. 76-100% of the time
 - b. What form of communication do you use?
 - v. Radio
 - vi. Cell phone – **Primary (~95%)**
 - vii. Other?
 - c. Do you face any challenges communicating with the Emergency Department?
Yes
 - viii. If yes, what are these challenges?
Sometimes difficult of they are at capacity, and some personality conflicts between PMH staff and EMS.
4. Does your agency have a fee-for-service arrangement for patient transports? **A county wide program is set to begin in November of 2008 – through Diversified Ambulance Billing**
 - a. If yes, what has the collection rate been over the past 12 months?
To be determined.
5. Do you have telemetry or other telemedicine equipment on your vehicle? **No, but beginning a pilot project with Valley Medical Transport in 2009.**
6. What hospitals do you transport patients to?
Primarily transport to PMH, secondarily to Warren Memorial Hospital in Front Royal, Rockingham Memorial in Harrisonburg, and Shenandoah Memorial in Woodstock.
7. Have you been told by the critical access hospital within the past 12 months that you must redirect your patient transport because the hospital is at capacity? **Not due to capacity, but secondary to patient condition. (OB, Cardiac)**

8. Within the past 12 months, has the critical access hospital called your agency to transport patients to a supporting hospital or facility outside the county? **No**
9. Does your agency participate in any quality assurance/performance improvement programs with the critical access hospital? **Yes – Luray VRS participates in the regional PI program, involving the nurse liaison from PMH.**
10. What is the total number of personnel in your agency? **47 members, 20 are “active”**
 - a. What is the average age (**35**); race (**Caucasian**); gender (**unknown**) of these personnel?
 - b. How many are volunteer personnel? **90%**
 - c. How many are career personnel? **10% - County supplemental staffing.**
11. What is the number of hours of dedicated coverage (ie. station and/or vehicle are staffed) your agency provides each day? **24/7 – mostly in house**
 - a. What are the total hours of on-call coverage provided each day? **24/7**
 - b. What percent of each day does your county have EMS coverage? **100%**
12. Does your agency participate in any recruitment or retention initiatives? **Yes – junior members of the squad recruit other high school age individuals, and the squad does regular newspaper advertisements.**
13. What is the average response time for your agency in the past twelve months? **Approximately 11 minutes.**
14. Is your agency utilizing strategic placement of units based on call volume and/or location? **No.**
15. Is ALS or BLS training or continuing education available in your area? **Yes, primarily provided by Page County EMS. Agency has in-house CPR and EVOC instructors.**
 - a. If yes, has the critical access hospital in your area provided any training or continuing education to your agency’s providers? **PMH has had little involvement in training or CE for EMS providers.**
16. Does your agency have formal cooperative agreements with other EMS agencies? **Yes**
 - a. If yes, are they honored? **Yes, all agencies work closely with surrounding jurisdictions.**

Challenges:

- **Finding members to maintain volunteer staffing.**
- **Agency has outgrown existing space, and needs to relocate or expand.**
- **“We’re just as important as ‘The big Boys’”**
- **60% of the county is covered by the Luray VRS.**

EMS Agency Survey Questions – Stanley Volunteer Rescue Squad – Josh Gray
Answers provided appear in ***Bold Italics***.

1. Does your county utilize centralized dispatch? **Yes**
 - a. What agency dispatches your calls?
Page County 911
2. If you are an EMS transport agency, which Emergency Department(s) does your agency transport patients to? **Primarily transport to PMH, and to Rockingham Memorial in Harrisonburg.**
 - a. How many patients have you transported within the last 12 months?
Approximately 960 transports per year.
 - b. How many patients were ALS vs. BLS?
30% ALS
3. Has your agency provided patient reports to the Emergency Department within the past twelve months? **Yes**
 - a. If yes, how often?
 - ix. 0-25% of the time
 - x. 26-50% of the time
 - xi. 51-75% of the time
 - xii. 76-100% of the time
 - b. What form of communication do you use?
 - xiii. Radio
 - xiv. Cell phone – **Primary (~99%)**
 - xv. Other?
 - c. Do you face any challenges communicating with the Emergency Department? **No – usually consistent with cell phone use.**
4. Does your agency have a fee-for-service arrangement for patient transports? **A county wide program is set to begin in November of 2008 – through Diversified Ambulance Billing**
 - a. If yes, what has the collection rate been over the past 12 months?
To be determined.
5. Do you have telemetry or other telemedicine equipment on your vehicle? **No**
6. What hospitals do you transport patients to?
Primarily transport to PMH, and to Rockingham Memorial in Harrisonburg.
7. Have you been told by the critical access hospital within the past 12 months that you must redirect your patient transport because the hospital is at capacity? **Not due to capacity, but secondary to patient condition. (OB, Cardiac). This is usually communicated via phone or radio. Less than 3 occurrences per year.**
8. Within the past 12 months, has the critical access hospital called your agency to transport patients to a supporting hospital or facility outside the county? **No, but they may ask to have a patient transported home from the ED.**
9. Does your agency participate in any quality assurance/performance improvement programs with the critical access hospital? **No.**

10. What is the total number of personnel in your agency? **29**
 - a. What is the average age (**35**); race (**Caucasian**); gender (**60% male**) of these personnel?
 - b. How many are volunteer personnel? **29**
 - c. How many are career personnel? **5 - County supplemental staffing.**

11. What is the number of hours of dedicated coverage (ie. station and/or vehicle are staffed) your agency provides each day? **12a-4p filled pretty consistently, 4p-12a is about 50/50%.**
 - a. What are the total hours of on-call coverage provided each day? **24/7**
 - b. What percent of each day does your county have EMS coverage? **100%**

12. Does your agency participate in any recruitment or retention initiatives? **No**

13. What is the average response time for your agency in the past twelve months? **Approximately 11 minutes.**

14. Is your agency utilizing strategic placement of units based on call volume and/or location? **No.**

15. Is ALS or BLS training or continuing education available in your area? **Yes, primarily provided by Page County EMS. Agency has in-house training officer. Significant use of OEMS EMSAT videos.**
 - a. If yes, has the critical access hospital in your area provided any training or continuing education to your agency's providers? **PMH has had little involvement in training or CE for EMS providers.**

16. Does your agency have formal cooperative agreements with other EMS agencies? **Yes**
 - a. If yes, are they honored? **Yes, all agencies work closely with surrounding jurisdictions.**

Challenges:

- **Finding members to maintain volunteer staffing and cover shifts.**
- **Recruitment & retention of ALS providers.**

CAH Facility Survey Questions – Page Memorial Hospital

N. Travis Clark – Chief Executive Officer

Answers appear in ***Bold Italics***

1. What changes have occurred in your Emergency Department due to your hospital's conversion to a CAH? ***There haven't been any significant operational changes in the Emergency Department as a result of designation, though PMH does have 24/7 physician coverage, which didn't exist before designation.***
 - a. What specific changes in your policies and procedures? ***None.***
 - b. If yes, how have these changes affected the CAH's relationship with EMS agencies? ***PMH's relationship with EMS agencies in the county has not been affected by CAH designation.***
2. How do you evaluate your role as a CAH? ***PMH has an in-house Quality Improvement (QI) program, with a nurse who serves as the QI officer for the facility.***
 - a. What Quality Assurance/Performance Improvement procedures do you perform? ***PMH has an oversight committee that meets on a quarterly basis to review performance measures. Our QI plan has been reviewed and approved by Valley Health, as the deadline for the merger of PMH into that health system draws near.***
3. Volume of patients arriving in ED. ***Approximately 10,500 patients/year.***
 - a. Numbers arriving via specific EMS agency ***The ED doesn't track patients by specific agency.***
 - b. ALS versus BLS - ***Unknown***
 - c. Types of calls - ***Unknown***
 - d. Patient Disposition – ***Unknown***
4. How many beds do you have in your Emergency Department? ***7 ED Beds, including 1 Trauma suite, as well as 2 quick care rooms. The quick care rooms treat patients with minor injuries or illnesses.***
5. In the past 12 months has your facility been unable to admit patients from the ED due to lack of available beds? ***Yes, very infrequently.***
 - a. If yes, were those patients transferred another hospital? ***Yes, primarily Rockingham Memorial Hospital in Harrisonburg, and secondarily Winchester Medical Center or University of Virginia Medical Center (UVA).***

6. Number and qualifications of staff in your facility's ED (i.e. doctors, nurses, technicians, etc.) **4 full time physicians, 12 per diem/contract physicians, 12 nurses who work a 2 nurse, plus supervisor model, and several supplemental staff (unit clerks, x-ray/lab techs, etc.)**
 - a. Do you employ EMS personnel in your ED? **Yes, several that work for the transport service that is affiliated with the hospital. These EMS personnel perform vital signs up to IV starts, depending on certification level.**
7. What supporting hospital do you have a Network Agreement with? **UVA in Charlottesville.**
 - a. What is your relationship with the supporting hospital? **We have some staff that work shifts at both facilities, and UVA assists PMH in recruitment and retention of physicians and nurses.**
 - b. What is the distance in miles and time to this hospital? **61 miles – 1:15 via ground, 15 minutes via air.**
8. What other facilities do you transfer patients to? **Rockingham Memorial Hospital in Harrisonburg (33 miles away), and Winchester Medical Center in Winchester (50 miles away). No formal agreements with those facilities at present.**
9. How are patients transported to supporting and other hospitals? **In house patient transport service transfers majority of patients. When that service is not staffed, other services, such as Valley Medical Transport, are used.**
 - a. Do you have a hospital patient transport services? **Yes**
 - b. Do you compensate for transfers? **No, we don't pay 3rd services for transfers.**
10. Patient Demographics for Patient Transfers
 - a. Number – **Approximately 600/year.**
 - b. Types- **Mainly cardiac, orthopedic, and stroke patients.**
 - c. Equipment used- **Patient transport units are well equipped, special equipment isn't usually necessary.**
 - d. Ground versus air transport – **Approximately 100 air transfers/year.**
 - i. Does your hospital have a helipad to accommodate air transport? **Yes, and we are working with UVA to house an Automated Weather Observation Station at PMH.**
11. Number of patients transported inside the catchment area, but outside the county your facility is located in.
99% of patients reside in Page County. PMH does see some tourist traffic, due to the Luray Caverns in Page County.

Additional information:

Uninsured patients place an increased burden on Critical Access Hospitals, especially in terms of subsidizing and/or paying for transfers.

The patient transport service has limited staffing, which can create challenges for ground transfers.

PMH is about to merge with a larger healthcare system, and what changes that may bring are not entirely evident.