

**PETITION TO THE STATE HEALTH COORDINATING COUNCIL (SHCC)
REGARDING FIXED MAGNETIC RESONANCE IMAGING (MRI) EQUIPMENT
ADJUSTED NEED DETERMINATION
FOR THE 2014 STATE MEDICAL FACILITIES PLAN**

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Petitioner Contact

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STATEMENT OF REQUESTED ADJUSTMENT

On behalf of Person Memorial Hospital, Chad J. Brown, CEO, requests the following special need adjustment to the *2014 State Medical Facilities Plan (SMFP)*.

Chapter 9, Table 9R, should be changed as follows:

Table 9R: Fixed MRI Scanner Need Determination
(Scheduled for Certificate of Need Review Commencing in 2014)

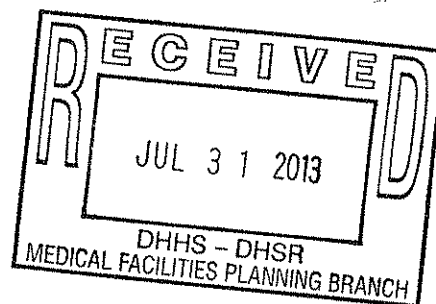
It is determined that the service areas listed in the table below need additional fixed MRI scanners as specified.

Service Areas	Fixed MRI Scanners Need Determination*	Certificate of Need Application Due Date**	Certificate of Need Beginning Review Date
Person County	1***	TBD	TBD

* *Need determination shown in this document may be increased or decreased during the year pursuant to Policy GEN-2 (see Chapter 4).*

** *Application due dates are absolute deadlines. The filing deadline is 5:30 p.m. on the application due date. The filing deadline is absolute (see Chapter 3).*

*** *The projected need for Person County was revised as the result of an Adjusted Need Determination Petition.*



REASONS FOR THE PROPOSED ADJUSTMENT

Overview

Person Memorial Hospital (Person) asks that the *Proposed 2014 State Medical Facilities Plan (SMFP)* be adjusted to include a special need for one fixed unit of MRI equipment in the Person County service area. This would modify Chapter 9 of the *2014 SMFP*, specifically addressing the Person County service area.

According to the *Proposed 2014 SMFP*, Person is currently served by five different mobile contracts that provide approximately half-time service to the hospital. There is no MRI service on Tuesday, Thursday, Friday or Sunday. On those days, the hospital and its physicians must direct patients out of the county to other permanent MRI locations. The net result is that 75 percent of county resident MRI scans occur outside the county.

Table 1 - Mobile Units Serving Person Memorial

Service Provider / Owner	Fixed Equivalent	Total MRI Scans	Adjusted Total	Area Average Procedures	Threshold	MRI Need
Alliance Healthcare Services Mobile MRI, G-7038-04	0.24	404	467			
Alliance Healthcare Services Mobile MRI, grandfathered	0.17	297	336			
Alliance Healthcare Services Mobile MRI, grandfathered	0.02	38	44			
Alliance Healthcare Services Mobile MRI, grandfathered	0.01	19	21			
Alliance Healthcare Services Mobile MRI, grandfathered	0.09	161	182			
Total	0.53		1050	1,050	1,716	

Source: *Proposed 2014 SMFP, Table 9P, modified MRI Need.*

Data in the DHSR Medical Facilities Database and the 2013 Hospital Licensure Renewal applications show that County residents received enough MRI scans to justify two full time MRI scanners. They used 3,655 scans. The threshold for a second scanner is 3,778 weighted scans. At Person's weighting factor or 1.2 (1,050/916), residents used 4,386 weighted scans in the 2012 reporting period (3,655 * 1.2 = 4,386). Most of the outmigration was to hospitals. Only 10 percent went to freestanding facilities.

Table 2 - Destination for Person County Resident MRI's - 2012

Sum of # Cases	Destination Total Patients
Alamance Regional Medical Center	4
Annie Penn Hospital	3
Chapel Hill Diagnostic Imaging	7
CMC - University Hospital	1
Diagnostic Radiology and Imaging	4
Duke University Hospital	1145
Durham Diagnostic Imaging	244
Durham Regional Hospital	353
Granville Medical Center	32
Greenville MRI	2
Maria Parham Hospital	2
Moses Cone Health System	5
NC Diagnostic Imaging-Cary	2
North Carolina Baptist Hospitals	7
Person Memorial Hospital	919
Pitt County Memorial Hospital	1
Presbyterian Hospital	1
Raleigh MRI Center	5
Raleigh Neurology Associates	4
Raleigh Radiology Cedarhurst	7
Rex Hospital	6
Triad Imaging	3
Triangle Orthopedic Associates	706
UNC Hospitals	188
WakeMed	4
Grand Total	3,655

Source: 2013 Hospital LRA and DHSR Medical Facilities Database

A full time, owned MRI would substantially improve access for Person residents. For Person Memorial, the expected increase in volume that has consistently occurred when hospitals move from part time mobile to fixed, would bring costs of offering the service at Person Memorial in line with expected payments. We do not expect increases in MRI payment rates. This makes operating savings all the more critical for our rural safety net hospital. We must have ways to pay for our uncompensated emergency room services.

DLP Person Memorial, LLC is a 110-bed facility with 50 acute and 60 nursing home beds. Last year, we provided more than 20,000 emergency room visits; 25 percent were private pay or virtually no pay; and 33 percent were Medicaid.

STATEMENT OF ADVERSE EFFECTS ON THE POPULATION IF THE ADJUSTMENT IS NOT MADE

If the proposed adjustment is not made, Person Memorial will face the untenable dilemma paying too much for more MRI days or continuing with half time service. The half time service revenue will cover little more than the vendor cost. Recall that we are not paid anything for an inpatient scan. People who need MRI on the days that the mobile unit is not available will have two choices: wait or go out of town. The impact is actually deeper for inpatients. When an MRI diagnostic scan is required by the patient's care plan on a day the mobile unit is not at the hospital, a patient may be hospitalized for one or more extra days.

Both waiting and going out of town have negative implications for outpatients—one in delayed treatment planning and the other in added expense, to both the patient and the system. The added cost of travel and transfer of necessary medical information to a distant provider is not insignificant.

Briefly, our cost analysis for last year shows:

	Total cost per scan for mobile vendor and supplies:	\$414.00
(a)	Total scans	941
	Total Outpatient scans	707
	Average reimbursement per Outpatient scan –	\$561.00
	Annual MRI Expense	\$389,574
	Annual OP Reimbursement	\$396,627
	MRI Contribution to Overhead	\$7,053
(b)	Contribution per scan	\$7.50

*Note: a. Our fiscal year is slightly different from state data year
b. Based on total scans*

The contribution to overhead does not cover the cost of running the service.

STATEMENT OF ALTERNATIVES CONSIDERED AND FOUND NOT FEASIBLE

Overview

This request that the 2014 SMFP show a special need to permit the hospital to acquire a full time fixed MRI scanner is the result of considerable thought, and the best among other alternatives:

- Status Quo: continued limited mobile access;
- Additional mobile services at the same high cost per unit of service;
- Wait for the SMFP to show need;
- Joint venture; and
- Purchase of a fixed MRI for location at Person Memorial;

Status Quo

This alternative continues access limited to half time; and it means that providers will continue to refer 75 percent of patients out of county. Outmigration will increase the cost associated with care coordination and add travel costs for Personians. Person County is 73.4 percent rural.¹ This added cost in time and money will cause many to delay or defer treatment. Moreover, high costs to offer MRI will continue to put pressure on the hospital's operating margin.

Additional Mobile

As noted, doubling the cost by expanding the coverage, will increase access, but at very high cost. It would reduce some of the outmigration, but there is no guarantee that the increased utilization would be sufficient to offset the very high cost of this alternative. An addition of 0.13 mobile days in 2012 was associated with an increase of almost 300 procedures. However, the arrangement is barely breakeven, netting only \$7.50 per scan above direct cost. Moreover, the mobile vendors want us to contract for a full day. We are at risk and pay the full day of service, regardless of use.

Wait for Plan to Show Need

At current rate of growth and with the current methodology, it could take three to five years for the SMFP to show need. This is a futile option.

Joint Venture and Partnership

A partnership with any other entity would not bring a full time MRI to Person County without a need in the Plan, because the service area and location established for existing MRI CON's limits the location to the place specified in the CON application. Any other mobile MRI unit would bring the same higher costs associated with the current mobile arrangement.

¹ Person County Futures Project – Strategic Plan 2010-2015.

Acquire a Full Time MRI

A review of the costs of a new, refurbished MRI indicates that the hospital could pay for a full time scanner at less than the current cost of the part time scanner. The mobile contract has a 180-day no cause cancellation. This analysis assumed no increase in total procedures.

Acquire 1.5 tesla	\$1,500,000
Installation cost	\$50,000
Annual Depreciation	\$221,428.87
FTE cost based on cross-trained staff	\$56,000.00
Other cost	\$ 13,174.00
Depreciation	<u>\$221,428.87</u>
Total Annual Cost	\$290,602.87
Cost per MRI at 941 scans	\$308.82
Annual MRI Revenue	\$ 396,627.00
Contribution to Overhead	\$98,971
Contribution per scan	\$105.18

Note: Contribution conservatively based on no increase in scans (941)

All of this is conservative and assumes no increase in number of scans. You can see that this would not represent a major revenue windfall for the hospital. It is, however, a very prudent move.

EVIDENCE OF NON-DUPLICATION OF SERVICES

Approval of this request would not cause duplication of existing services.

- No fixed MRI equipment is available within Person County
- Drive to closest fixed MRI is about 40 to 45 minutes one way from Roxboro to Duke/Durham Regional/Maria Parham/Granville
- Presently, 75 percent of patients are out-migrating for MRI services, and they are using enough MRI scans to justify two units of MRI equipment in the county an equivalent of 4,386 weighted scans compared to 3,775 required for two scanners.

**EVIDENCE OF CONSISTENCY WITH NORTH CAROLINA MEDICAL FACILITIES PLAN
 BASIC GOVERNING PRINCIPLES**

Safety and Quality

In a planning context, this request meets the standards of safety and quality. It assures consistent presence of an MRI scanner every day of the week at a 50-bed hospital which averages 55 emergency room patients a day. It permits the hospital to locate the scanner inside the hospital, and patients will no longer be exposed to the elements each time they seek this service. The hospital will use its own award winning quality staff who are familiar with all of the hospital information systems and hand-offs in data will have less risk of translation and communication related mistakes.

Access and Value

With a full time service inside the county, patients will likely pay less. As illustrated here Person Memorial Charges are below market. Even the 5 percent cross the board charge increase planned for August 2013 will keep us below market. In this Blue Cross database, only one procedure was consistent across all providers. However, it is reflective of the relative charge differences among these facilities on the North Carolina Hospital Association DRG comparison data base which is posted on the NCHA website.

Table 3 - Comparison of MRI Charges 30 mile radius of Roxboro 2013

Provider	Lower Limb, w/Joint	
	Range	Average
Person Memorial Hospital	940-1038	989
Durham Regional Medical Center	1315-1453	1384
Granville Medical Center	999-1105	1052
Halifax Regional Medical Center	1196-1462	1329
Duke University Medical Center	1232-1362	1297
Danville Diagnostic	489-598	544
Maria Parham Regional Medical Center	2129-2353	2241

Data from CMS outpatient claims show the same thing.

Table 4 - Imaging Charge per Case

Product Line	Person	Duke	Durham	Halifax	Nat'l Avg
CT	1,718	2,151	2,341	2,124	2,326
MRI	1,823	2,921	2,622	2,345	2,890
Mammography	164	214	127	114	197
Ultrasound	388	608	642	467	621

CMS FY '11 (Oct-Sept) Medicare Outpatient Claims only

We reviewed several databases to determine the mix of outpatient and inpatient scans for Person County residents by destination. Though none provided the data by destination, we did find that 89 to 91 percent of total Person County MRI scans are performed on outpatients.. At these rates, 3,253 to 3,326 scans would be outpatient. Because only 10 percent of the outmigration went to freestanding diagnostic centers (274 scans), we can assume that approximately 80 percent of the outmigration was to hospitals for outpatient scans.

For this rural safety net hospital, this would be a major improvement. An investment of approximately \$1.5 million would improve use, would lock in price escalation, and would begin to pay for itself. Person is a safety net hospital that currently operates with no or negative margin. Since the change in ownership, DLP has improved the situation, but not reversed loses completely. The acquisition committed to capital improvements to the hospital. This would be a major step in the total value equation we are pursuing. In the past 18 months, we can claim a number of successes:

Physician Recruitment:

- Primary Care Physicians (2)
- General Surgeon (1)
- GI Physician Group (2)
- Pain Specialist (1)
- Hospitalists (4)
- Anesthesia (1)

Major Equipment Upgrades

- Imaging Department Upgrade 1.5M (CT, PACS, Digital Mammography)
- Expansion of area Medical Office Building space to house above recruited physicians 2.8M

Quality Safety

- Part of CMS Hospital Engagement Network (HEN).
- “A” Rating on recent Leapfrog Group Survey
- Part of Duke Quality / Patient Safety Program. IP Core Measure Outcomes consistently high
- Recipient of LifePoint Hospitals, Inc. annual “President’s Patient Safety Award” recognizing our outcomes in Quality / Patient Safety and Improvement results in promoting positive employee culture.

CONCLUSION

We need to keep the doors of our safety net hospital open with a positive margin and our physicians need community standard of care tools. A change in the *2014 State Medical Facilities Plan* to show a special need for one fixed unit of MRI equipment would help us reach this goal.