

**MISSISSIPPI STATE DEPARTMENT OF HEALTH
DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT
DECEMBER 2009**

**CON REVIEW: C-MME-0909-025
TOTALRAD RADIATION EQUIPMENT, LLC
ACQUISITION OF THERAPEUTIC EQUIPMENT
CAPITAL EXPENDITURE: \$6,645,675
LOCATION: SOUTHAVEN, DESOTO COUNTY, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

TotalRad Radiation Equipment is a Limited Liability Company composed of one (1) corporate officer. The Secretary of State's Office certified that TotalRad Radiation Equipment, LLC is in good standing with the State of Mississippi.

B. Project Description

TotalRad Radiation Equipment, LLC requests Certificate of Need (CON) authority to provide the equipment and building to The Conrad Pearson Clinic, P.C. that will provide therapeutic radiation services to patients with a prostate diagnosis at its clinic in Southaven, Mississippi.

The proposed project will provide the highest quality, most technologically advanced Linear Accelerator (Linac) system with the latest imaging coordination, planning software, physics, and technical support that will allow enhancements of external beam radiation therapy (EBRT).

Image Guided Radiation Therapy (IGRT) is an advanced technology designed to improve the precision and effectiveness of cancer treatment. IGRT gives doctors the ability to target and track tumors more accurately. Intensity Modulated Radiation Therapy (IMRT) is a logical extension of 3D-conformal radiation treatment. IMRT is unique in offering inverse treatment planning, allowing a set dose for the tumor/target volume, and restricts the dose amount to adjacent structures. RapidArc radiotherapy technology is a new approach to IGRT/IMRT that delivers more efficiently than traditional IMRT. The addition of RapidArc allows this to be done in the most efficient and comfortable manner that is presently available with linear accelerator systems. In all of these advanced methods of EBRT, the external radiation beam must pass through the body to reach the prostate. Therefore, these advanced radiation delivery technologies all enhance the ability to deliver higher radiation doses more accurately and are more specifically tailored to each patient's body habitus.

The applicant asserts that this focused approach allows for improved efficiency and higher quality treatment as compared with non-specialized facilities. Furthermore, it allows for external beam radiation therapy (EBRT) to be better coordinated with The Conrad Pearson Clinic's comprehensive prostate cancer program of surgery, cryotherapy, brachytherapy, and hormonal treatment which is often required by prostate cancer patients. This specialized and integrated prostate cancer radiation center will also have the opportunity to offer post treatment rehabilitation services which are unavailable at non-dedicated facilities.

The proposed income from the Prostate Health Center's linear accelerator shall cover its own costs and provide the extra resources needed to cover treatment of all urological/prostate cancer patients, regardless of their ability to pay.

For Certificate of Need purposes, TotalRad's Project is limited to the acquisition of a linear accelerator and the construction of a building, both of which will be leased to The Conrad Pearson Clinic, P.C. The men's prostate health center will be the state's only comprehensive facility for the treatment of all aspects of men's prostate cancer. The Center will consist of 7,500 square feet of newly constructed space and house the required technology.

II. TYPE OF REVIEW REQUIRED

Projects which propose the provision of radiation therapy services are reviewed in accordance with Section 41-7-191, subparagraphs (1)(d)(vi), and (f) Mississippi Code 1972 Annotated, as amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi State Department of Health.

In accordance with Section 41-7-197(2) of the Mississippi Code of 1972 Annotated, as amended, any affected person may request a public hearing on this project within 20 days of publication of the staff analysis. The opportunity to request a hearing expires January 7, 2010. In addition, this project is reviewed under the FY 2010 State Health Plan, which became effective on September 1, 2009, when the application was received.

III. CONFORMANCE WITH THE STATE HEALTH PLAN AND OTHER ADOPTED CRITERIA AND STANDARDS

A. State Health Plan (SHP)

The *FY 2010 State Health Plan* contains policy statements, criteria, and standards which an applicant is required to meet before receiving CON authority for the acquisition or otherwise control of therapeutic radiation equipment and/or the offering of therapeutic radiation services.

SHP Criterion 1 – Need

The CON criteria and standards for the acquisition or otherwise control of radiation therapy equipment and services outlined in the *FY 2010 Mississippi State Health Plan* state that an entity desiring to offer radiation therapy services must document a need for radiation equipment by complying with one of the following Need Criterion 1a – 1c:

- a. the need methodology as presented in this section of the *Plan*;
- b. demonstrating that all existing machines in the service area in question have averaged 8,000 procedures per year or all machines have treated an average of 320 patients per year for the two most recent consecutive years; or
- c. demonstrating that the applicant's existing therapeutic equipment has exceeded the expected level of patient service, i.e. 320 patients per year/unit, or 8,000 treatments per year/unit for the most recent 24-month period.

Policy Statement 2 (Equipment to Population Ratio) states that the need for therapeutic radiation units (as defined) is determined to be one unit per 149,538 population. The MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to the Mississippi State Department of Health, such as valid patient origin studies. The applicant submitted a zip code listing of prostate cancer patients to verify that 450 patients from Tennessee and 29 patients from Arkansas were treated at Conrad Pearson's Clinic in 2008. However, no population projections were provided for the Tennessee and Arkansas zip codes.

The Conrad Pearson Clinic, P.C., the service provider for this project, is located in DeSoto County, General Hospital Service Area (GHSA) 1, which is made up of the following counties: DeSoto, Marshall, Tate, Tunica, and Panola. The population of GHSA 1 has been determined to be 260,626, which generates a need for 1.74 therapeutic radiation units as determined by the methodology stated in the Plan. See Attachment 2.

The Plan calculations demonstrate the need for 0.74 additional Linear Accelerator units in GHSA 1. The applicant avows that the precedent in Mississippi is that need is triggered once the Service Area has a demand for greater than +.5 units which is the current case. The applicant further submits that health care planning states universally "round up" need when demand increases to greater than, 50% of stated demand. The applicant proposes to serve mostly out-of-state residents. The application contains three affidavits from physicians indicating that they will refer 587 patients to the facility.

With regard to Need Criterion 1b, Policy Statement 3 (Limitation of New Services) states that when the therapeutic radiation unit-to-population ratio reaches one to 149,538 in a given hospital service area, no new therapeutic radiation services may be approved unless the utilization of all

the existing machines in the given hospital service area averaged 8,000 treatments or 320 patients per year for the two most recent consecutive years as reported on the “Renewal of Hospital License and Annual Hospital Report.”

There is currently one therapeutic radiation unit located in GHSA 1 wherein the applicant is located. Baptist Memorial Hospital-DeSoto performed a total of 6,227 procedures in 2007 and 7,413 procedures in 2008. Therefore, the applicant is not in compliance with Need Criterion 1b.

The applicant suggests that this criterion 1b is not applicable since the Plan requires that the applicant comply with only one item of Need (1a – 1c). Policy statements in the Plan, however, outline the Department's policies for approval of additional radiation therapy equipment. Policy Statement Number 3, specifically states that “No new therapeutic radiation services may be approved unless the utilization of all the existing machines in a given hospital service area averaged 8,000 treatments ...” Although the applicant is required to show compliance with only one item of need, the Plan does not waive the requirement of Policy Statement Number 3. A new radiation therapy service may be approved if: (1) the need methodology clearly indicates a need for one (1) or more units in the service area, or (2) the formula shows a need for less than one (1) unit in the service area where existing providers are performing in excess of 8,000 treatments. Staff concurs with the applicant that it is a precedent that the Department rounds up when a .5 or greater need is shown; however, the requisite to rounding up in the case of radiation therapy services remains that all existing units in the service area must be performing an average of 8,000 treatments per year. Unfortunately, this is not the case in GHSA 1.

Furthermore, according to the 2010 State Health Plan, utilization for megavoltage therapeutic radiation services in the state as a whole declined from 169,440 treatments or 5,690 treatments per unit in 2007, to 158,377 or 5,109 treatments per unit in 2008. In addition, utilization in the state was 5,690/100,000 population in 2007 and 5,320/100,000 population in 2008. The highest utilization in the state was in GHSA 4, where utilization fell from 37,884 in 2007 to 21,110 in 2008.

The applicant submits that the proposed project is needed to serve the DeSoto County and the out-of-state patients from Conrad Pearson's Germantown Tennessee Clinic that will come to Southaven for their treatment.

SHP Criterion 2 – Access to Diagnostic Services

The Conrad Pearson Clinic, P.C., Southaven affirms that diagnostic X-Ray, CT scan, and ultrasound services will be readily available in the clinic adjacent to the proposed facility.

SHP Criterion 3 – Staffing of Services

The applicant asserts that it will have, at a minimum, the following full-time dedicated staff: one board-certified radiation oncologist-in-chief, one dosimetrist, one certified radiation therapy technologist certified by the American Registry of Radiation Technologists, and one registered nurse. Also, the service will have, at a minimum, access to a radiation physicist certified or eligible for certification by the American Board of Radiology.

SHP Criterion 4 – Access to Brachytherapy Staff, Treatment Aides, Social Workers, Dietitians, and Physical Therapies

The applicant affirms that access will be available as needed to brachytherapy staff, treatment aides, social workers, dietitians, and physical therapists.

SHP Criterion 5 – Medical Staff’s Residence Within 60 Minutes of the Facility

The applicant states that all physicians, including the radiation oncologist-in-chief, who are responsible for therapeutic radiation services will reside within 60 minutes normal driving time of the facility.

SHP Criterion 6– Access to a Capable Simulator

The applicant affirms that a modern simulator will be available on site capable of producing high quality diagnostic radiographs. The applicant asserts that the facility will adhere to the remaining conditions associated with this criterion.

SHP Criterion 7 – Access to a Computerized Treatment Planning System

The applicant asserts that it will have access to a computerized treatment planning system with the capability of simulation of multiple external beams, display isodose distributions in more than one plane, and will perform dose calculations for brachytherapy implants.

SHP Criterion 8 – Staffing of a Board Certified/Board Eligible Radiation Oncologist

The applicant affirms that all treatments will be under the control of a board certified or board eligible radiation oncologist.

SHP Criterion 9 – Site, Plan and Equipment Approval by the Division of Radiological Health

The applicant affirms the proposed site plans and proposed equipment have been submitted to the Mississippi State Department of Health Division of Radiological Health. The Clinic shall not commence provision

of service prior to receipt of their approval from the Division of Radiological Health.

SHP Criterion 10 – Quality Assurance Programs

Within 12 months of initiation of the proposed project, the applicant states that TotalRad will establish a quality assurance program for the therapeutic radiation program and service. Also, the applicant asserts that the facility will comply with the minimum guidelines and standards set forth by the American College of Radiology (ACR).

SHP Criterion 11 – Compliance with Criterion 10a and b

The applicant affirms and understands that failure to comply with criterion #10 (a) and (b) may result in revocation of the CON (after due process) and subsequent termination of authority to provide therapeutic radiation services.

B. General Review (GR) Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual*, revised September 1, 2009, addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria.

GR Criterion 1 – State Health Plan

The 2010 State Health Plan indicates that the need for therapeutic radiation units (as defined) is determined to be one unit per 149,538 population. It further states that when the therapeutic radiation unit-to-population ratio reaches one to 149,538 in a given general hospital service area, no new therapeutic radiation services may be approved unless the utilization of all the existing machines in a given hospital service area averaged 8,000 treatments or 320 patients per year for the two most recent consecutive years as reported on the “Renewal of Hospital License and Annual Hospital Report.” TotalRad proposes to provide therapeutic radiation equipment in GHSA 1, wherein there is one existing unit. The methodology contained in the Plan indicates a need for 1.74 units in the service area. However, the existing unit has performed less than the required 8,000 treatments or 320 patients per year for the two most recent consecutive years. Although the applicant points out that it has been the precedent of the Department to round up when the need is greater than .5, the position of the Department remains that before another unit can be approved, all existing units in the service area must be performing 8,000 treatments or more. Therefore, the proposal is not in substantial compliance with the 2010 State Health Plan.

GR Criterion 2 – Long Range Plan

TotalRad’s mission is to bring new technologies and services to the

urology community to improve patient care and improve the urologists' practice. The range of treatment options for prostate cancer has been relatively static for many years. Recently, however, IGRT/IMRT does not involve the trauma of surgery and requires less recuperation. In addition, IGRT/IMRT has demonstrated a lower incidence of intrusive side effects, including damage to adjacent tissue, sexual dysfunction, and other known issues associated with prostatectomy and brachytherapy. For these reasons, IGRT/IMRT appears to be emerging as a favored treatment option for prostate cancer.

The goal of this project is to improve the quality and continuity of care to prostate cancer patients in the Mid-South, and is therefore consistent with TotalRad's long range goals of improving patient outcomes for the urology community and the healthcare system.

GR Criterion 3 – Availability of Alternatives

The applicant asserts that provision of radiation therapy at a facility dedicated to prostate cancer in Southaven benefits the health care system of North Mississippi, as it provides an additional access point. Furthermore, it reduces the distance patients must travel for necessary treatment.

The applicant states the proposed project will provide radiation therapy at a Center of Excellence dedicated to the treatment of prostate cancer does not exist in Mississippi today. Therefore, modernization of an existing facility was not an available option. The applicant further states that the provision of care in this manner should be very cost effective.

The applicant affirms that the development of a Prostate Cancer Center of Excellence in Southaven is the most efficient solution for the treatment of prostate cancer in North Mississippi.

GR Criterion 4 – Economic Viability

The applicant provided a three-year operating statement and projected that net patient revenue over a three-year period will be \$3,893,708, \$4,408,143, and \$4,540,387. In addition, the statement illustrates that net income will be \$2,477,765, \$3,037,634, and \$3,219,226. Based on the proposed operating statement, the net income will increase during the second and third year of operation (See Attachment 1).

The Conrad Pearson Clinic, P.C. projects that the facility will perform 9,162 treatments in the first year, 10,372 in the second year, and 10,683 in the third year. The Conrad Pearson Clinic, P.C. further states the proposed charge per procedure is \$1,160 for the first year, \$1,113 for the second year, and \$1,069 for the third year. The applicant affirms the proposed charges for the service and their profitability are comparable to similar services in the state.

The Conrad Pearson Clinic will pay TotalRad Equipment Leasing a “per use fee” for the use of the radiation therapy vault and technology. Projected usage is 9,162 units in year 1, 10,683 units in year 2, and 10,683 units in year 3 (representing a 3% annual increase in utilization based upon annual increase in prostate cancer diagnoses nationally). The applicant affirms projected levels of utilization are reasonably consistent with those experienced by similar facilities dedicated to the treatment of prostate cancer. The applicant states the projected utilization is consistent with the need level of the general service area.

The applicant’s projections appear to be overstated, given that there is only one unit in GHSA 1 which performed below 8,000 treatments for the past two years. In addition, utilization of radiation therapy machines in the state as a whole only performed an average of 5,109 treatments for the past fiscal year. The applicant’s projections are not consistent with utilization of radiation therapy units in the state or the service area. TotalRad projections, however, are based on 38 treatments per patient rather than the 25 treatments per patients stated in the 2010 State Health Plan. The applicant projects that each prostate cancer patient will receive 38 treatments per year.

The Vice President and Controller of Healthtronics, a related company, submitted a letter attesting to the financial viability of this project.

GR Criterion 5 – Need for Project

As previously stated, there is currently no facility in General Hospital Service Area I dedicated to the treatment of prostate cancer. The applicant states that essentially all of the projected 265 patients will come from Tennessee clinics. The applicant believes that the proposed facility should have a minimal effect on the existing facilities.

The applicant submits that both health care quality and delivery will be enhanced by reducing the need for prostate cancer patients in Mississippi to drive long distances five (5) times per week for eight (8) weeks to receive radiation therapy treatment.

TotalRad believes that health care quality assurance will be improved by offering the service facility dedicated to the treatment of prostate cancer in a cost effective manner.

Prostate cancer is diagnosed in men of all racial and ethnic groups in spite of economic status or age. The applicant states that all men regardless of race, creed, sex, or ability to pay will have access to the services provided at the prostate health center.

The American Cancer Society identifies 1,990 prostate cancer cases in Mississippi for 2008. Applying these cases to the need methodology contained in the Plan generates a need for .2 linear accelerators dedicated to treat prostate cancer patients. (See Attachment 2)

The current and projected utilization of like facilities or services within the proposed service area must be considered in determining the need for additional facilities or services. Although there are currently no facilities in the state dedicated to treat prostate cancer patients as proposed by this project, the need methodology stated in the Plan suggests that there is not a current need for such a unit. Furthermore, the utilization of the radiation therapy unit in GHSA 1 was 6,227 treatments in 2007 and 7,413 in 2008, less than the required 8,000 treatments per unit as stated in Policy Statement Number 3 of the 2010 State Health Plan. Further, utilization of all radiation therapy units in the state declined from 5,466 treatments per unit in 2007 to 5,109 treatments per unit in 2008.

The Department must also consider the probable effect of the proposed facility or service on existing facilities providing similar services to those proposed. As stated above, the utilization of the only existing facility in GHSA 1 has been less than the required 8,000 treatments per unit for the past two years. Although the applicant points out that it is the precedent of the Department to round up when the need is greater than .5, SHP Policy Statement Number 3 states that "...no new therapeutic radiation services may be approved unless the utilization of all the existing machines in a given hospital service area averaged 8,000 treatments or 320 patients per year for the two most recent consecutive years as reported on the 'Renewal of Hospital License and Annual Hospital Report.'" Since Policy Statement Number 3 has not been met, staff is concerned that a new radiation therapy service in the area is an unnecessary duplication of a health service.

Policy Statement Number 3 suggests that a population above 149,538 may generate the need for an additional linear accelerator. The applicant asserts that when the out-of-state population is considered, actual need becomes very apparent. Information submitted indicates that Conrad Pearson, the proposed service provider, treated 450 prostate patients from Memphis and only 79 Mississippi patients in 2008. The applicant believes that approval of the proposed project will have minimal effect on any existing linear accelerator, since the existing devices' utilization is based on the presently served population, while the applicant's proposed utilization is based on the actual patients (mostly an out-of-state population) cared for by the Clinic.

The application received eleven letters of support for the project from physicians. In addition, Baptist Memorial-DeSoto submitted a letter in opposition to the project.

GR Criterion 6 – Access to the Facility or Service

The applicant affirms that services will be available to patients Monday through Friday from 7:00 AM to 5:00 PM. The proposed facility is an outpatient facility; therefore, it will have no admissions policy. The applicant asserts that the location of the Southaven facility will reduce

travel time for Mississippi residents using public transportation to reach the facility.

The applicant states that the proposed facility has no existing obligations under any federal regulation requiring the provision of uncompensated care or access by minority and handicapped persons.

The applicant affirms that The Conrad Pearson Clinic, P.C. will treat all residents of the Health Planning Service Area, including Medicaid recipients, indigent patients, racial and ethnic minorities and the elderly who have been diagnosed at the Southaven Facility.

GR Criterion 7 – Information Requirement

TotalRad Radiation Equipment, LLC affirms that they will record and maintain, at a minimum, the information requested and make it available to the Mississippi State Department of Health within fifteen (15) business days of request.

GR Criterion 8 – Relationship to Existing Health care System

As reported in the *2010 Mississippi State Health Plan*, currently only one (1) linear accelerator provider exists in General Hospital Service Area 1. The applicant suggests that a vast majority of prostate cancer patients in the proposed service area typically travel outside of the state to receive treatment, mainly because there is no facility specifically dedicated to serve prostate cancer patients located in Mississippi. The proposed project will offer a unique service of radiation therapy for prostate cancer in a dedicated facility.

The applicant proposes that the project will serve the medically underserved minority populations residing in North Mississippi. The applicant does not anticipate that the proposed project will have an adverse impact on any provider in the service area.

Given that there is only one unit in the GHSA 1 that does not currently perform the required capacity of 8,000 treatments per unit, and given that the need in the area for a unit dedicated to prostate cancer is projected to be less than one-half a unit, staff contends that the approval of an additional unit in GHSA 1 will have an adverse impact on the existing unit in the service area.

GR Criterion 9 – Availability of Resources

TotalRad Radiation Equipment, LLC affirms that all personnel will be provided by The Conrad Pearson Clinic, P.C. The Conrad Pearson Clinic, P.C., indicates that currently twelve (12) physicians are on staff. The applicant shall work with local colleges and universities that have training facilities to recruit the necessary personnel required to staff the facility.

GR Criterion 10– Relationship to Ancillary or Support Services

The applicant affirms that all necessary support and ancillary services for the proposed radiation therapy services are available.

GR Criterion 11– Health Professional Training Programs

The applicant states that there are no health professional training programs associated with the proposed project.

GR Criterion 12– Access by Health Professional Schools

As previously mentioned, the applicant stated that there are no health professional training programs or schools in the service area associated with the proposed project.

GR Criterion 13– Service to Population Out-of-State Service Area

The applicant proposes to serve mostly out-of-state residents. Conrad Pearson affirms that 265 patients from its Tennessee Clinics would seek treatment at the Southaven facility.

As previously stated, a zip code listing of prostate cancer patients was submitted verifying patients from Tennessee, and Arkansas were treated at Conrad Pearson's Clinic in 2008.

GR Criterion 16– Quality of Care

The applicant asserts that the proposed project will improve the quality of care by improving access to radiation therapy services for prostate cancer patients in a dedicated facility. The applicant, states that it will apply for accreditation following commencement of operation.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

	Item	Cost	Percentage of Total
a.	Land Cost	\$ 0	0%
b.	Site preparation and/or improvement	\$ 203,750	3.07%
c.	Other (specify)	\$ 0	0%
d.	Construction Cost – New	\$2,037,500	30.67%
e.	Construction Cost – Renovation	\$ 0	0%
f.	Capital Improvements	\$ 0	0%
g.	Fees (Architectural, consulting, etc.)	\$ 138,550	2.08%
h.	Contingency Reserve	\$ 101,875	1.53%
i.	Capitalized Interest	\$ 0	0%
j.	Total Fixed Equipment Cost	\$3,450,000	51.91%
k.	Total Non-Fixed Equipment Cost	\$ 714,000	10.74%
l.	Legal and accounting fees	\$ 0	0%
m.	Other (Personal Financing)	\$ 0	0%
	Total Proposed Capital Expenditure	\$6,645,675	100%

B. Method of Financing

The applicant intends to finance the proposed project from accumulated cash reserves of Healthtronics, a related company.

C. Effect on Operating Cost

The applicants' three-year projections of revenues and expenses for the first three years of operation are attached as Attachment 1.

D. Cost to Medicaid/Medicare

The applicant projects the following:

Patient Mix by Payor	Utilization Percentage	First Year Revenue
Medicaid	0%	\$ 0
Medicare	0%	\$ 0
Other	100%	\$3,893,708
Total	100%	\$3,893,708

V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES

The Division of Medicaid was provided a copy of this application for comment. No comments have been received.

VI. CONCLUSION AND RECOMMENDATION

This project is not in substantial compliance with the criteria and standards for the acquisition or otherwise control of therapeutic radiation equipment, and/or the offering of therapeutic radiation services as contained in the 2010 State Health Plan; the *Mississippi Certificate of Need Review Manual, Revised September 1, 2009*; and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

Specifically, the application does not comply with Policy Statement Number 3 of the 2010 State Health Plan; need for the project; and the economic viability of the project is questionable. The project appears to be an unnecessary duplication of a health service.

The applicant bases the need for the project on the methodology in the Plan which projects the number of units required by a given population. The methodology, when applied to GHSA 1, wherein the applicant's facility is proposed to be located, yields a need for 1.74 units. The service area currently has one unit, leaving an unmet need of .74 units. The applicant accurately states that it has been the precedent of the state to round up when need is projected to be .5 or above. However, with radiation therapy services, Policy Statement Number 3 must first be met.

SHP Policy Statement Number 3 states that: "When the therapeutic radiation unit-to-population ratio reaches one to 149,538 in a given general hospital service area, no new therapeutic radiation services may be approved unless the utilization of all the existing machines in a given hospital service area averaged 8,000 treatments or 320 patients per year for the two most recent consecutive years as reported on the Renewal of Hospital License and Annual Hospital Report." Neither the existing unit in GHSA 1 nor units in the state as a whole have performed at the average 8,000-treatment level for the past two years. Furthermore, the utilization of therapeutic radiation therapy units has declined in the past two years. Thus, the approval of this project appears to be an unnecessary duplication of health services.

Furthermore, the applicant projects that the unit will perform an excess of 9,000 treatments the first year of operation. Given that the only unit in the service area performed less than 8,000 treatments for the past two years, and the average treatments for the state is only 5,109 per unit, it appears that the applicant's projections are overstated, thus, economic viability is questionable.

Consequently, the Division of Health Planning and Resource Development recommends disapproval of this application submitted by TotalRad Radiation Equipment, LLC for the acquisition of therapeutic radiation equipment.

Attachment 1

**TotalRad Radiation Equipment, LLC
 Acquisition of Therapeutic Radiation Equipment
 Three-Year Projected Operating Statement**

	Year 1	Year 2	Year 3
Patient Revenue			
Inpatient Revenue			
Outpatient Revenue	3,893,708	4,408,143	4,540,387
Total Patient Revenue	\$ 3,893,708	\$ 4,408,143	\$ 4,540,387
Deductions from Revenue			
Contractual Adjustments			
Total Revenue Deductions	\$ -	\$ -	\$ -
Other Operating Revenue			
Net Revenue	\$ 3,893,708	\$ 4,408,143	\$ 4,540,387
Operating Expenses			
Salaries & Wages			
Benefits			
Services	\$ 348,400	\$ 358,652	\$ 369,312
Commodities/Supplies			
Interest	429,293	373,607	313,599
Depreciation	638,250	638,250	638,250
Other			
Total Operating Expenses	\$ 1,415,943	\$ 1,370,509	\$ 1,321,161
Income (Loss) from Operations	\$ 2,477,765	\$ 3,037,634	\$ 3,219,226
Outpatient Units	9,162	10,683	10,683
Total Patient Units	9,162	10,683	10,683
Occupancy Rate			
Outpatient Units			
Charge per Unit	\$ 425	\$ 413	\$ 425
Cost per inpatient day			
Cost per Unit	\$ 155	\$ 128	\$ 124

Attachment 2

**TotalRad Radiation Equipment, LLC
 Acquisition of Therapeutic Radiation Equipment
 Application of the Therapeutic Radiation Equipment Need Determination**

I. Application of the Therapeutic Radiation Equipment Need Determination is as follows:

1. 260,626 (Population) X $\frac{4.76 \text{ (Incidence Rate)}}{1,000}$ = 1,241 (New Cases Annually)
2. 1,241 (New Cases) X 45% = 558 (New Patients Annually)
3. 558 (New Patients) X 25 (Treatments per Patient) = 13,950 (Treatments Annually)
4. $\frac{13,950 \text{ (Estimated \# of Treatments)}}{8,000 \text{ (Treatments per Unit)}}$ = 1.74 (Projected # of Units Needed)

5. Determination of unmet need:

$$1.74 \text{ (Projected \# of Units Needed)} - 1.00 \text{ (Number of Existing Units in GHSA 1)} = .74^*$$

II. Application of the Therapeutic Radiation Equipment Need Determination for Prostate Cancer is as follows:*

The American Cancer Society estimates that Mississippi had 1,990 new cases of prostate cancer in 2008. Therefore, based on a population of 2,975,551, the prostate cancer rate of Mississippi is .60 cases per 1,000 population.

1. 260,626 (population) X $\frac{.60 \text{ (incidence Rate)}}{1,000}$ = 158 (New Cases)
2. 156 (New Cases) X 45% = 70 (New Patients Annually)
3. 70 (New Patients) X 25 (Trtmts/Pat. = 1,759 Trtmts Ann.
4. $\frac{1,759 \text{ (Est. \# of Treatments)}}{8,000}$ = .22 (Projected # of Units Needed)

5. Determination of unmet need:

Based on the above formula the unmet need in DeSoto County for a unit dedicated to prostate cancer is less than .5 units.

*Staff's Calculation