

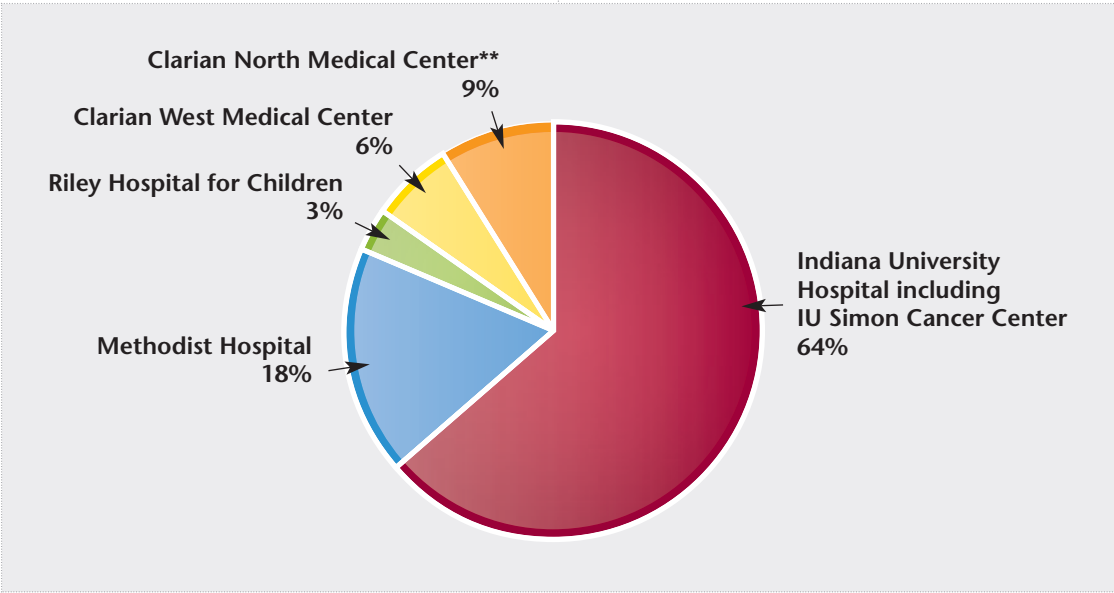
# 2008 Cancer Registry Statistics and Prostate Cancer Survival Analysis



*Indiana University Hospital/Indiana University Melvin and Bren Simon Cancer Center* ■  
*Methodist Hospital* ■  
*Riley Hospital for Children* ■  
*Clarian North Medical Center* ■  
*Clarian West Medical Center* ■  
*Midwest Proton Radiotherapy Institute* ■

# Clarian Health Facilities 2008 Cancer Registry Caseload Volumes

## Clarian Health Metroplex 2008\*



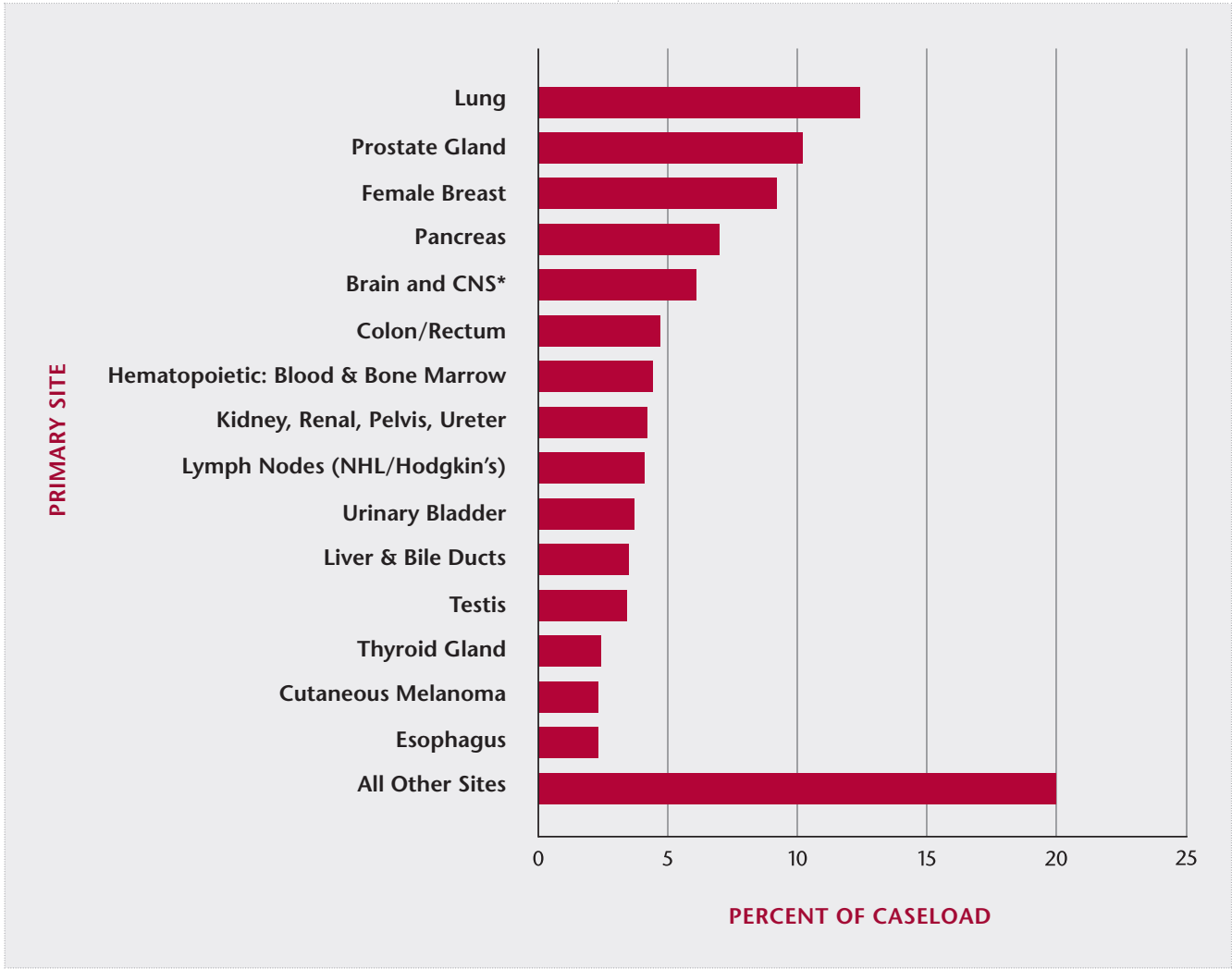
\* The figures in this chart represent combined totals with shared cases between facilities merged and counted only once.

\*\* Caseload as of 11/06/09 with 86% of cases entered in cancer registry

The Clarian Health Metroplex facilities, IU Hospital including IU Simon Cancer Center, Methodist Hospital, Riley Hospital for Children, Clarian West Medical Center and Clarian North Medical Center, together had a 2008 caseload volume of 7,322. The pie chart illustrates where patients were seen for their cancer care. Of note, approximately 4% to 5% of these individuals received care in more than one of the facilities. Of the overall volume, 69% of the patient caseload received their diagnosis and/or first course treatment (analytic case) at a Clarian Metroplex facility.

# Incidence of Cancer by Primary Site at Clarian Facilities

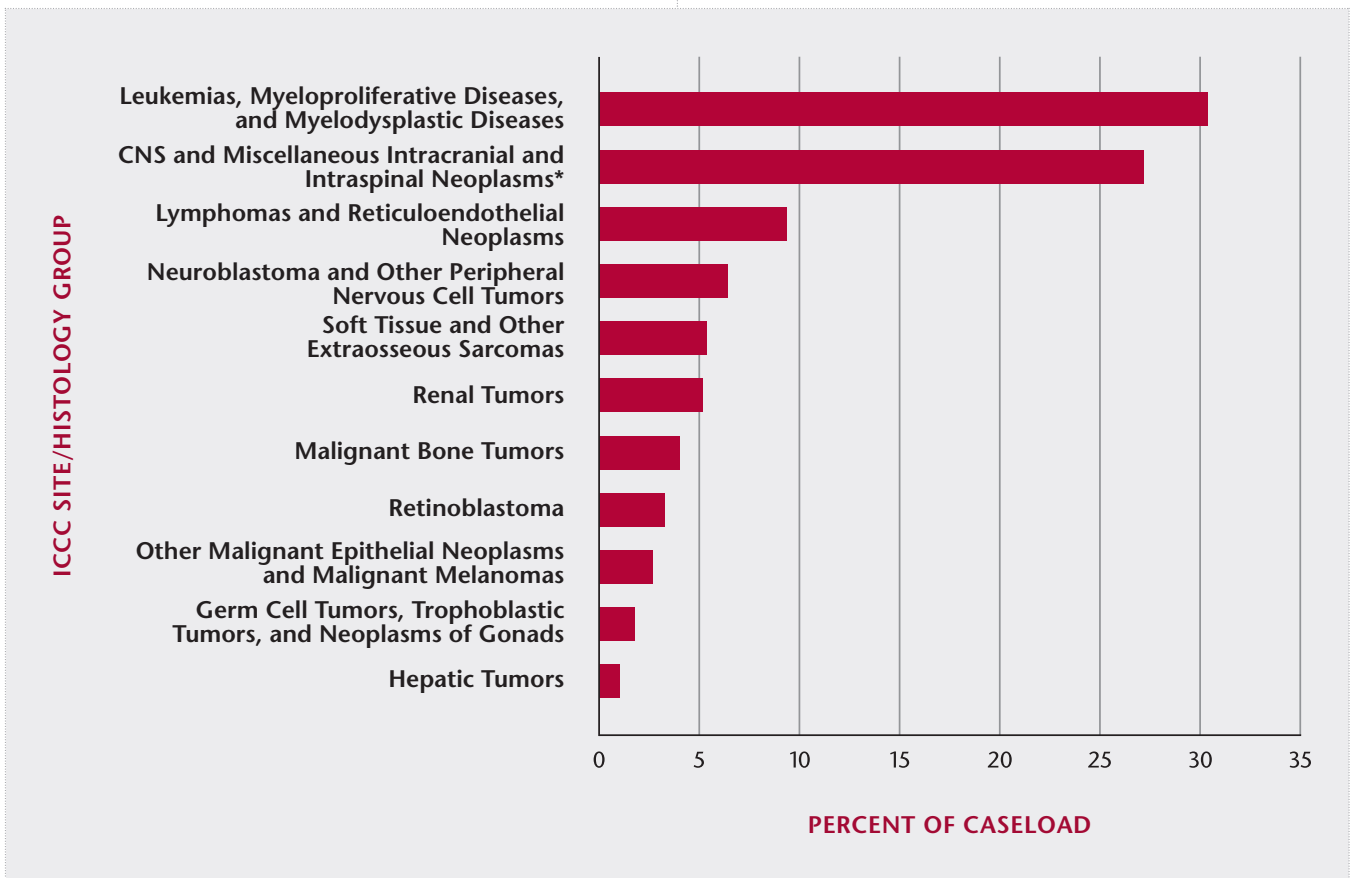
*Clarian IU/Methodist Combined  
2008 Adult Analytic Caseload\**



\* Includes malignant, benign and uncertain behavior neoplasms

# Incidence of Malignant Diagnoses

## Riley Hospital for Children 2008 Analytic Caseload

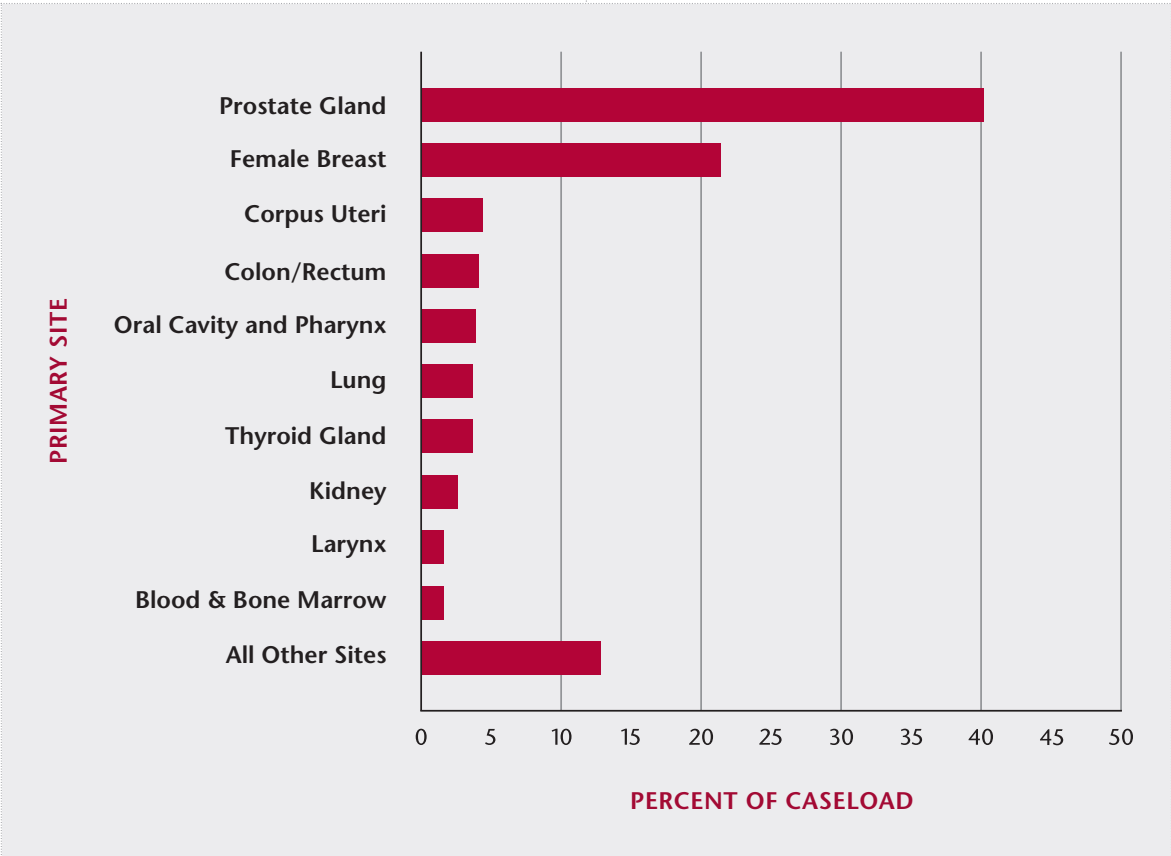


\* Includes malignant, benign and uncertain behavior neoplasms

Primary Site/Histology groups based on International Classification of Childhood Cancer (ICCC), Third Edition (ICCC-3), ICD-O-31; Per National Cancer Institute (NCI) Surveillance, Epidemiology and End Results (SEER) Documentation and Recodes Site [http://seer.cancer.gov/iccc3\\_ext.html](http://seer.cancer.gov/iccc3_ext.html)

# Incidence of Cancer by Primary Site at Clarian Facilities

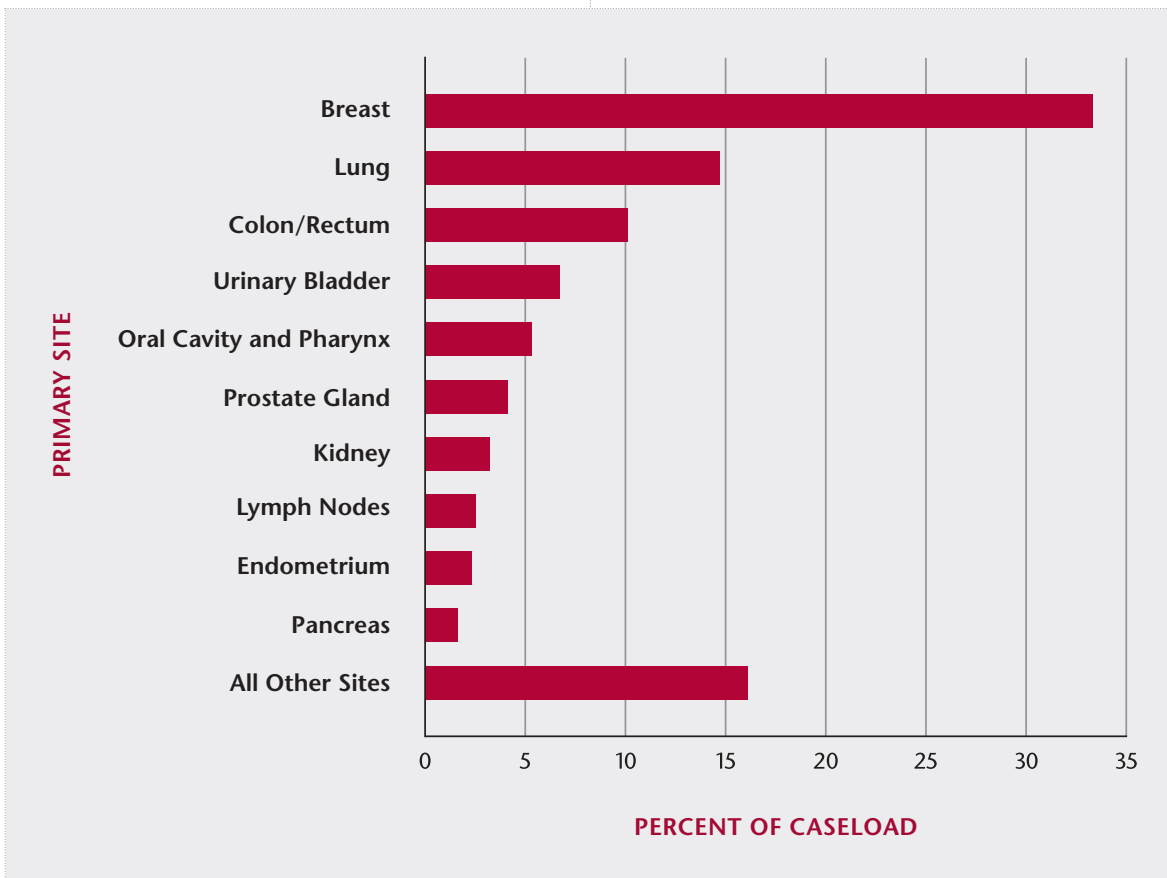
Clarian North Medical Center  
2008 Analytic Caseload\*



\* Includes adult and childhood cancers

# Incidence of Cancer by Primary Site at Clarian Facilities

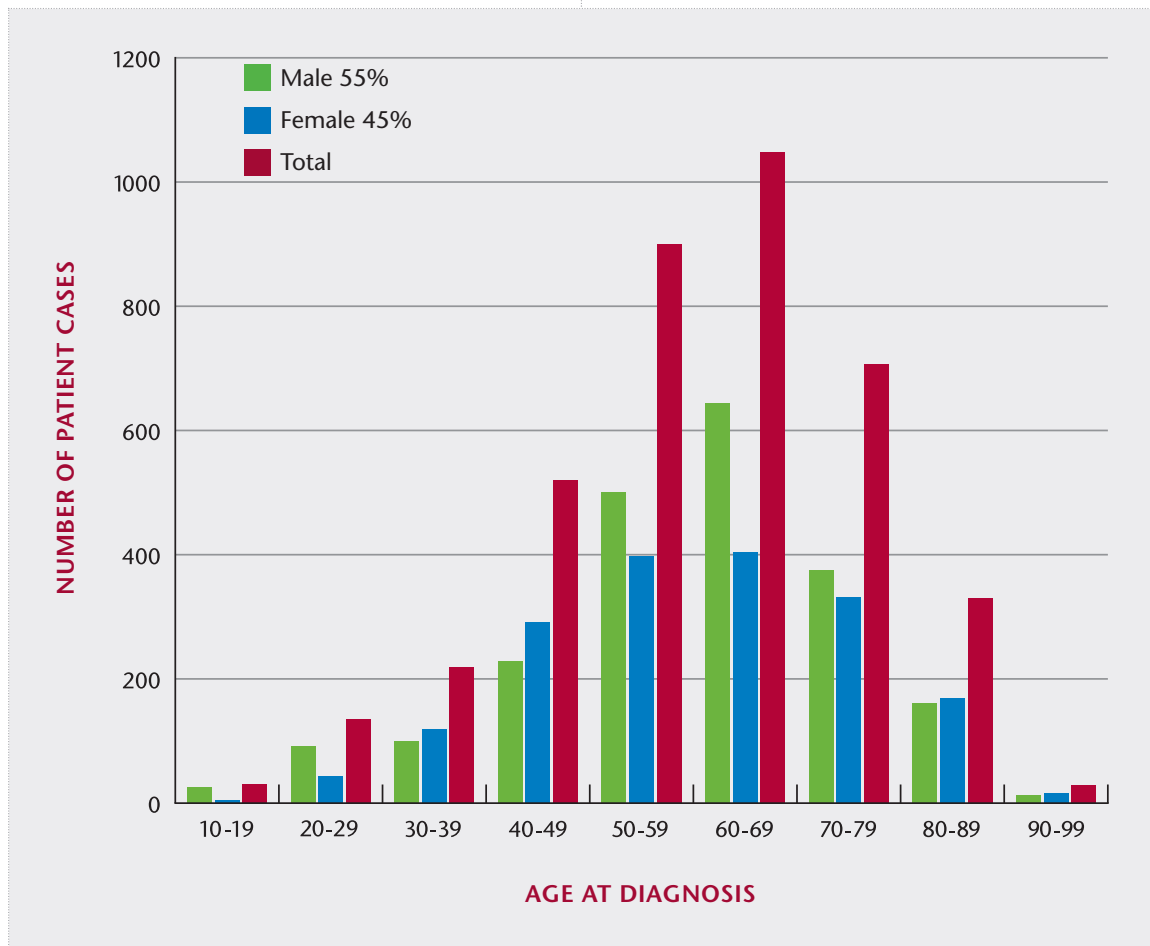
*Clarian West Medical Center  
2008 Analytic Caseload*





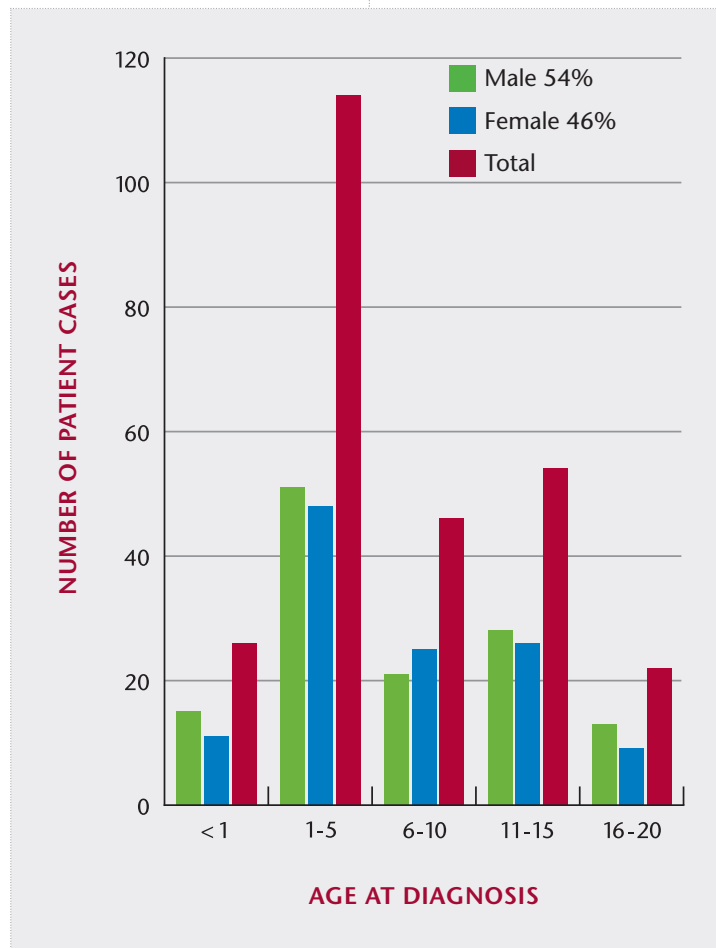
# Age at Diagnosis by Gender

*Clarian IU/Methodist Combined  
2008 Adult Analytic Caseload*



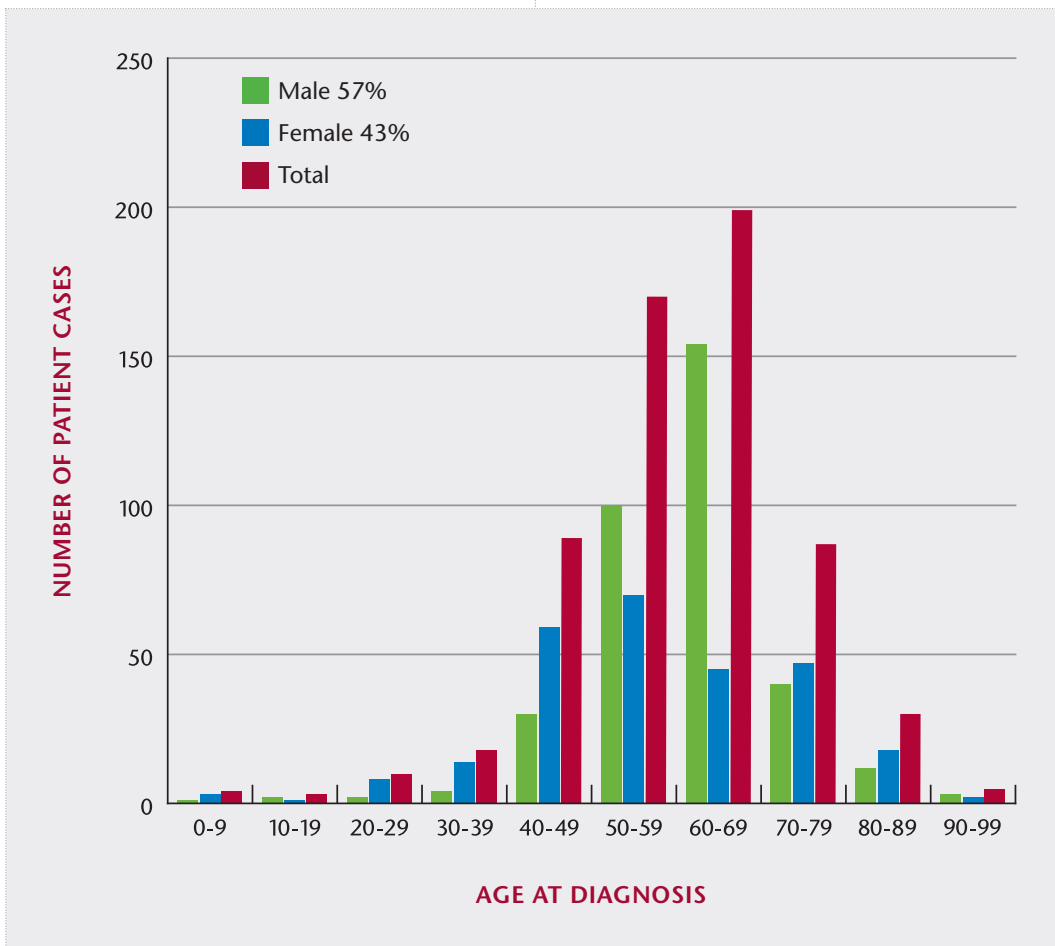
# Age at Diagnosis by Gender

Riley Hospital for Children  
2008 Analytic Caseload



# Age at Diagnosis by Gender

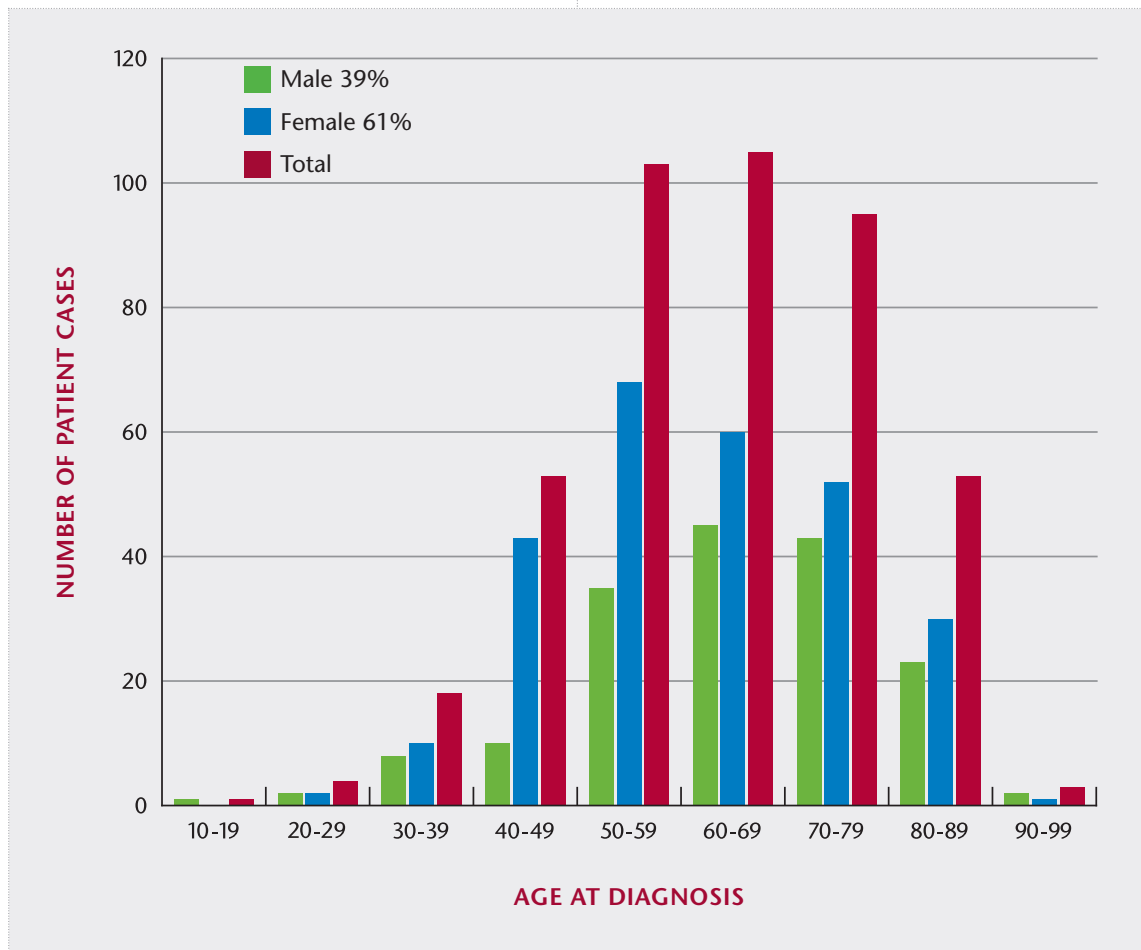
Clarian North Medical Center  
2008 Analytic Caseload\*



\* Includes adult and childhood cancers

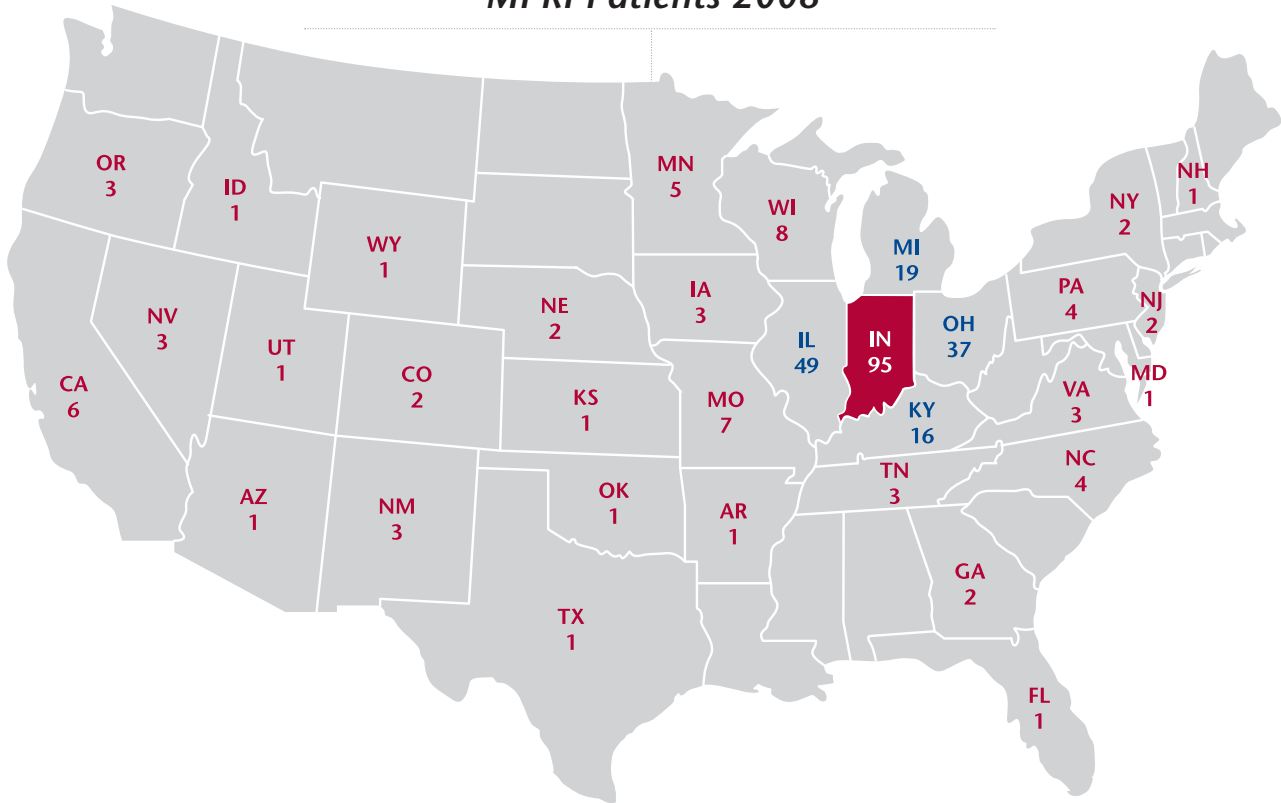
# Age at Diagnosis by Gender

Clarian West Medical Center  
2008 Analytic Caseload



# Midwest Proton Radiotherapy Institute (MPRI)

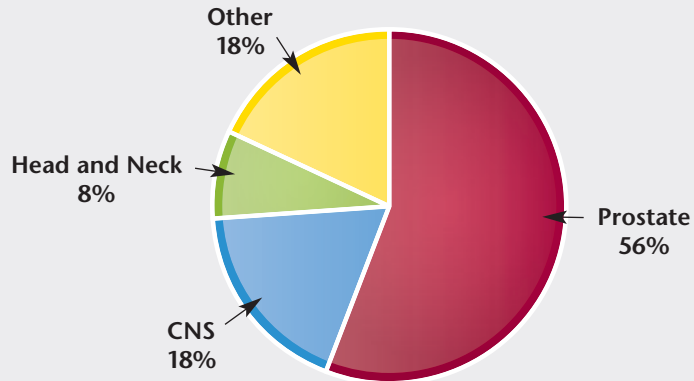
MPRI Patients 2008



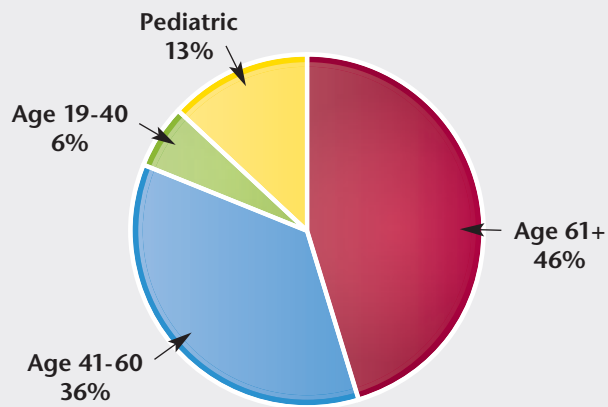
MPRI treated 289 individuals in 2008, including those who began in 2007 and those who finished treatment in 2009. Patients were from 33 states, and included one international patient. The greatest number of patients continue to be from Indiana and the surrounding states.

- Indiana 32.3%
- Contiguous States 41.2%
- East Coast 6.5%
- West Coast 4.1%
- Other 15.6%
- International 0.3%

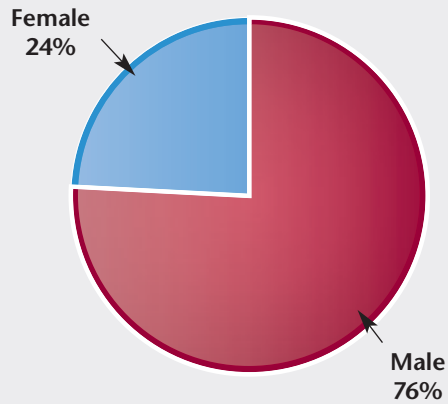
### MPRI Case Mix by Primary Diagnosis 2008



### MPRI Case Mix by Age 2008



### MPRI Case Mix By Gender 2008



In the male population, 73.5% were prostate cases; 7.6% were pediatric cases; 18.9% were all other treatment sites. In the female population, 28% were pediatric cases.

# Clarian Health IU/Methodist Prostate Cancer Outcomes

## *Prostate Cancer Experience & Five-Year Survival Analysis*

In 2008, prostate cancer represented the second most commonly diagnosed and treated primary cancer site at Clarian downtown facilities. Men from the metropolitan area, the state and even outside Indiana sought their prostate cancer care from a team of multi-disciplinary physicians affiliated with Indiana University Melvin and Bren Simon Cancer Center and Methodist Hospital.



### **Men Diagnosed and Treated for Prostate Cancer at Clarian IU/Methodist in 2008**

- 45.6% live in Marion and surrounding counties
- 42.1% live in the remaining counties of Indiana
- 12.3% live out-of-state and travel to Indiana for care

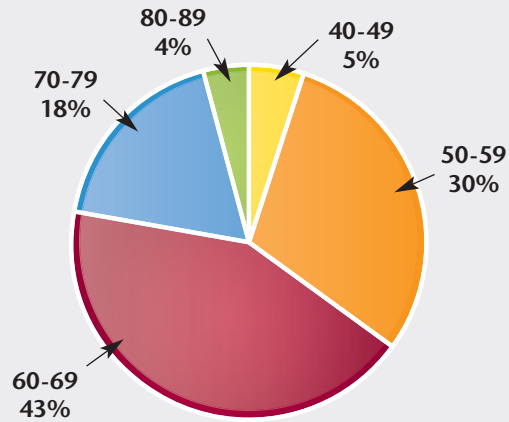
Men coming to Clarian Health for their care have access to state-of-the-art technology for treatment. At our facilities, surgery, radiation therapy, hormones and surveillance are the most common modalities utilized for treatment. Clarian facilities represent a unique radiation environment where conventional radiation, radioactive seed implantation (“brachytherapy”) and proton therapy are all available to patients with prostate cancer.

Stephen Beck, MD, urologist at IU Simon Cancer Center, served as a physician reviewer on prostate data analysis for the Clarian Cancer Committee. According to Dr. Beck, “Of 2,879 patients, 2,197 (76.3%) were treated with surgical removal of the prostate, 388 patients (13.4%) underwent some form of radiation and only 120 patients (4.2%) were placed on active surveillance. With greater understanding of the natural history of prostate cancer, we foresee that more men may be safely placed on surveillance with little risk of prostate cancer death while avoiding the complications of treatment.”

Concern for the diagnosis of prostate cancer is often first identified when a man has an abnormal Digital Rectal Exam (DRE) and/or an elevated Prostate Specific Antigen (PSA) blood test. With abnormal results of these tests, a physician will further evaluate the preliminary findings and may order additional tests, such as imaging or biopsy of the prostate gland. If a diagnosis of prostate cancer is confirmed, the physicians take many factors into consideration to determine the next steps in the patient’s care.

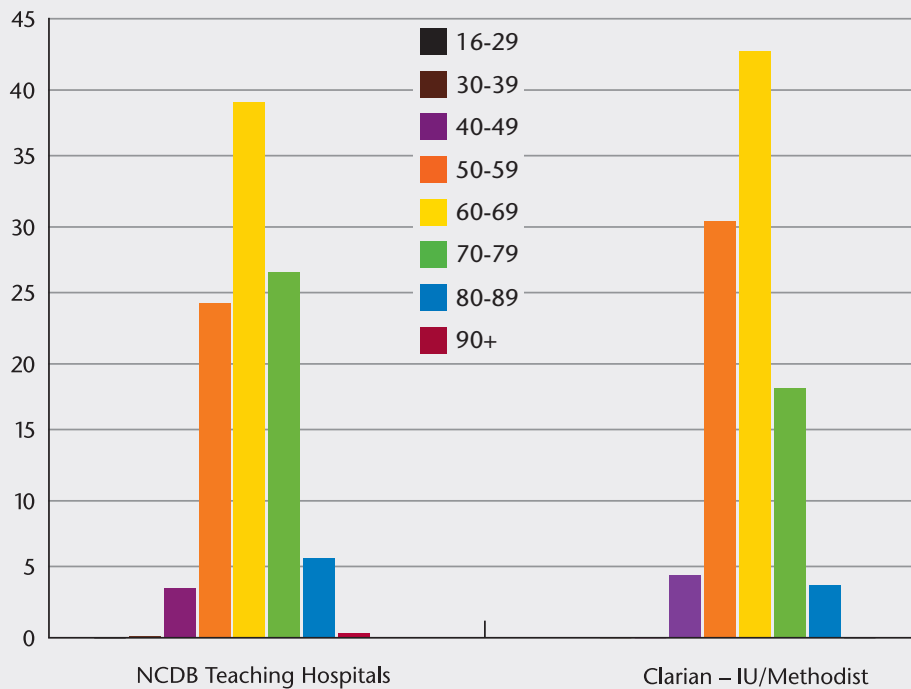
At Clarian, most men presented at the time of their diagnosis with local disease during their 60’s. Of all men presenting with this disease at our facility, nearly three-quarters of the men were in their 50’s and 60’s. While this disease tends to occur in the later decades of life, men with a family history of prostate cancer need to discuss screening options with their primary care physicians or urologists at a younger age.

### Age at Diagnosis



**Figure 1** – Ages of men diagnosed with prostate cancer at Clarian IU/Methodist, analytic cases years, 2003 – 2008

### Comparison of Age at Diagnosis



**Figure 2** – Reveals that compared to the National Cancer Database (NCDB) – Teaching Hospitals category (257 hospitals), Clarian IU/Methodist see a greater number of men in the age range of 50-69

# Clarian Health IU/Methodist Prostate Cancer Outcomes

## Extent of Disease at Diagnosis

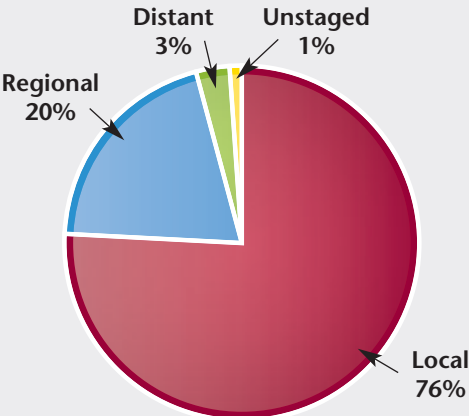


Figure 3A – Extent of Disease at Diagnosis – Clarian Data

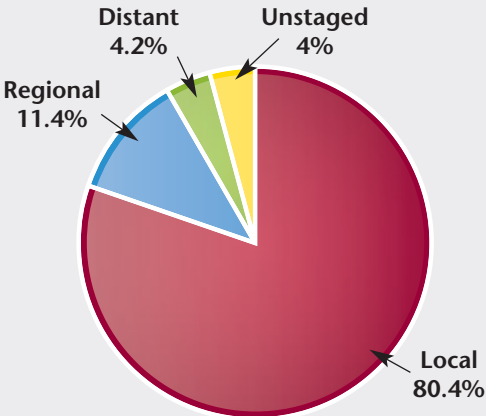


Figure 3B – Extent of Disease at Diagnosis – National Data

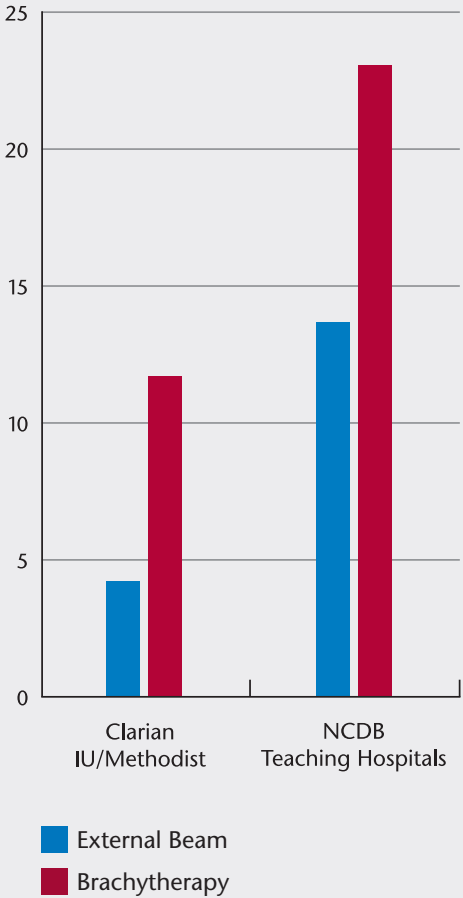
Figures 3A and 3B – These two charts document the distribution of extent of disease at diagnosis at Clarian and nationwide.

Once a diagnosis of prostate cancer is confirmed, the disease is evaluated and grouped by stage or extent of disease. Extent of disease classifies whether the cancer is contained to the prostate or if it has spread. Local disease at diagnosis means the cancer is confined to the prostate gland. Regional disease refers to cancer that has spread outside the prostate gland. When the cancer has spread outside the prostate gland to other locations in the body, the disease is classified as distant.

# Clarian Health IU/Methodist Prostate Cancer Outcomes

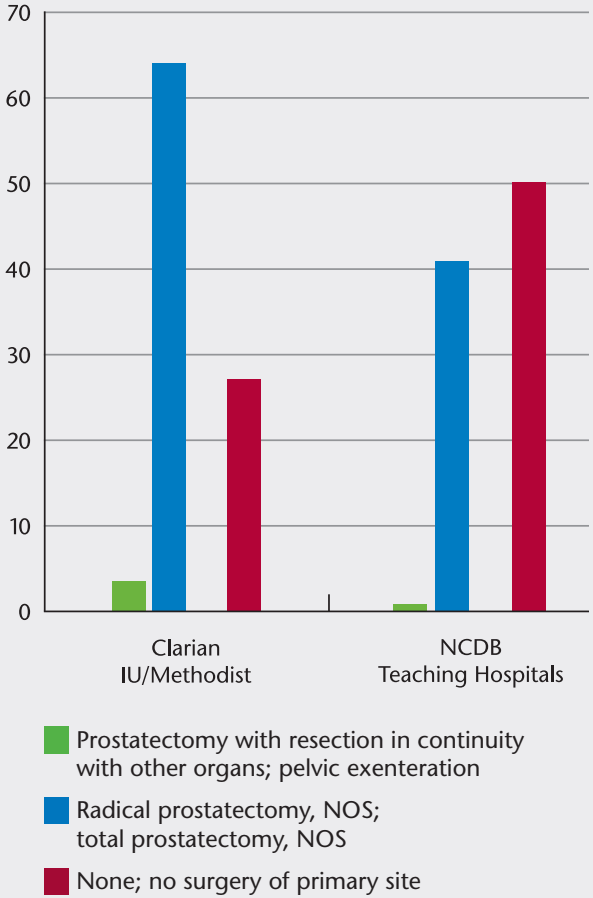
## Treatment at Clarian IU/Methodist

**Radiation Therapy Treatment  
2000 – 2006**



**Figure 4** – Compares the frequency of radiation therapy treatments at Clarian with other NCDB teaching hospitals

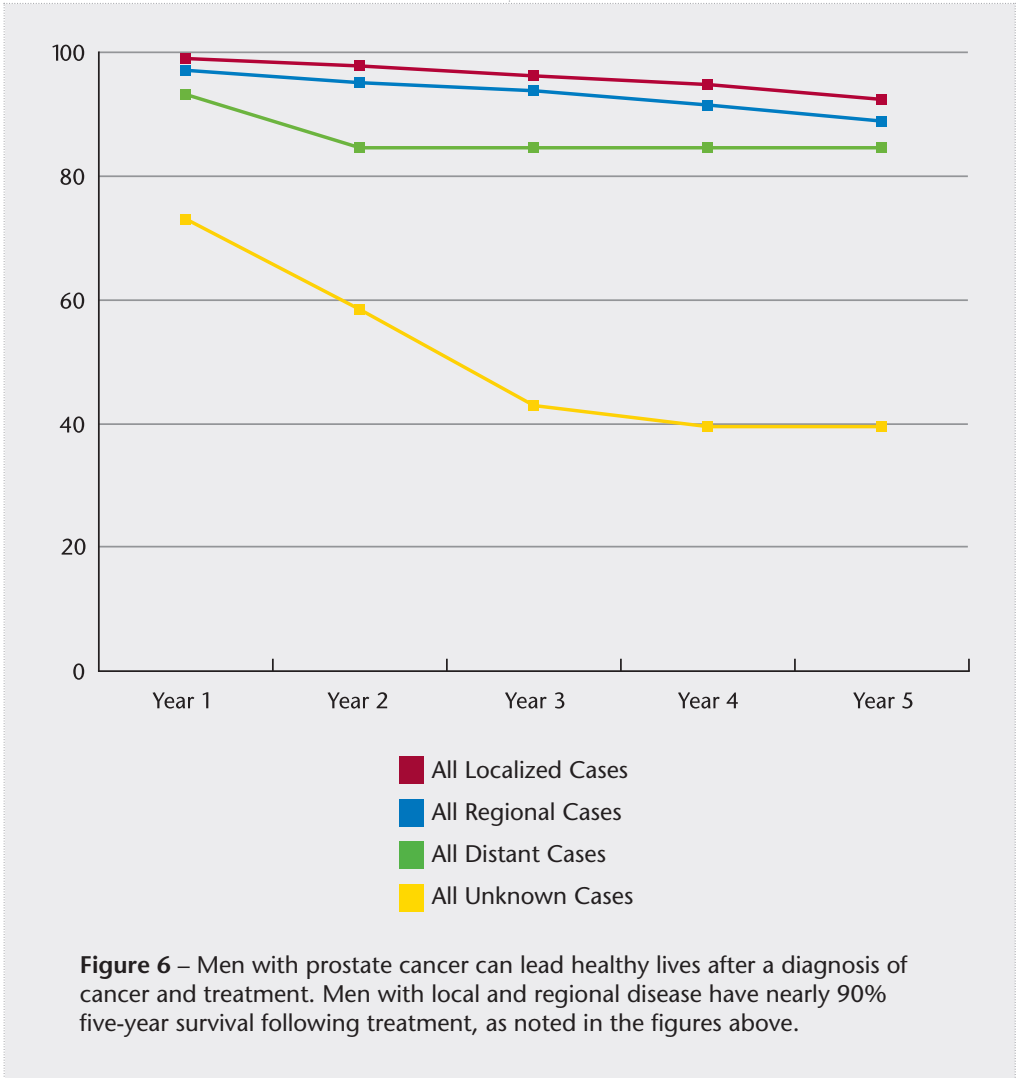
**Surgery for Prostate Cancer  
2000 – 2006**



**Figure 5** – Compares the frequency of surgery for prostate cancer at Clarian with other NCDB teaching hospitals

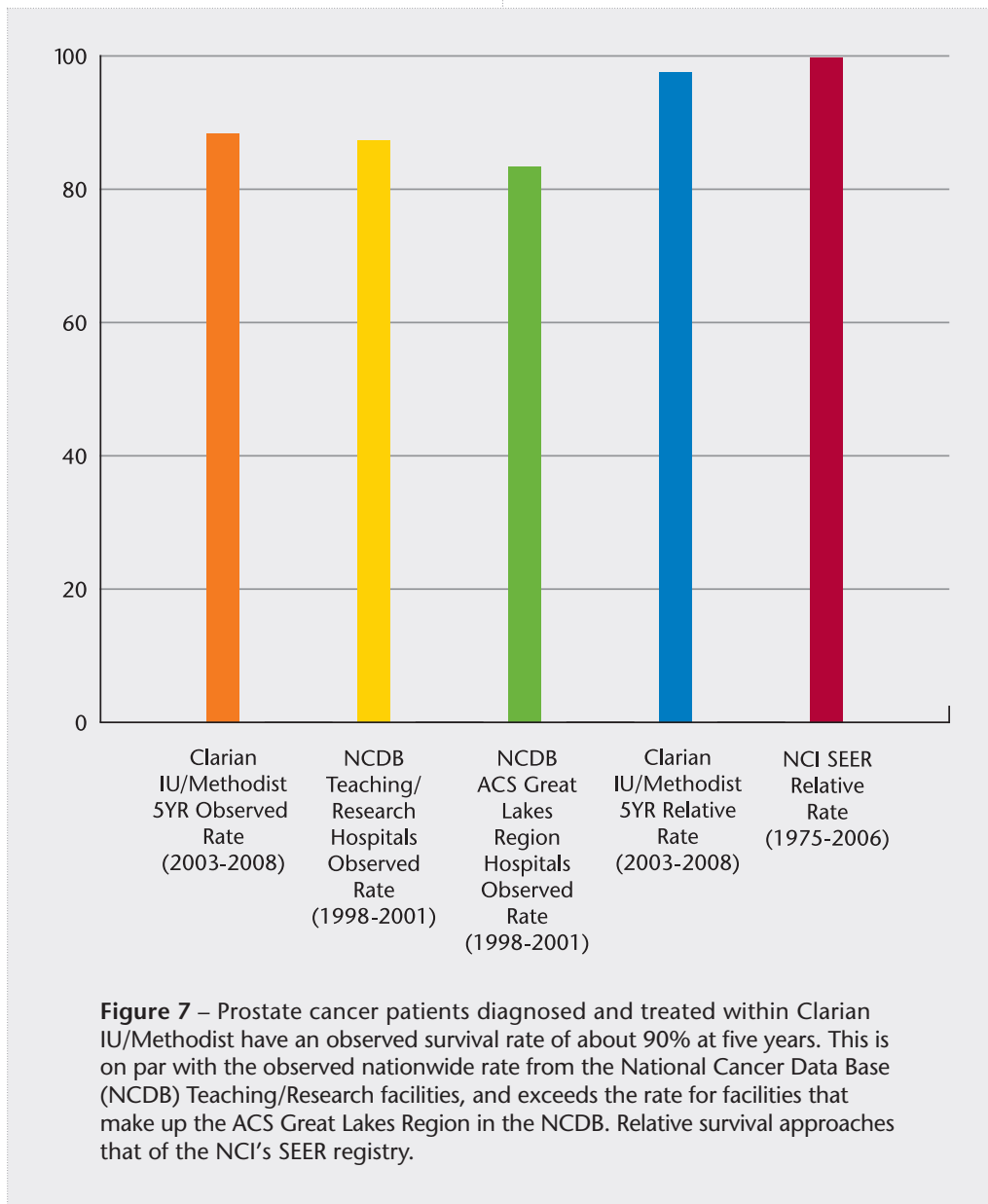
# Clarian Health IU/Methodist Prostate Cancer Outcomes

## Five-Year Relative Survival Analysis By Extent of Disease



# Clarian Health IU/Methodist Prostate Cancer Outcomes

## Comparative Summary of Survival Data



# Glossary

**Analytic Case:** Patient diagnosed and/or received all or part of first-course therapy at Clarian IU/Methodist/Riley. This includes cases diagnosed but not treated.

**Non-Analytic Case:** Patient diagnosed elsewhere, and received all first-course therapy elsewhere prior to admission (inpatient or outpatient) to Clarian IU/Methodist/Riley for treatment of persistent or recurrent disease. Includes cases diagnosed at autopsy.

**Survival, Observed:** An estimate of the probability of surviving all causes of death for a specified time interval calculated from the cohort of cancer cases. Observed survival does not consider cause of death, it simply looks at who is alive and who is not. Sometimes referred to as overall survival.

**Survival, Relative:** A measure of net survival that is calculated by comparing observed (overall) survival with expected survival from a comparable set of people who do not have cancer to measure the excess mortality that is associated with a cancer diagnosis.

**First-Course Treatment:** First course of treatment includes all methods of treatment recorded in the treatment plan and administered to the patient before disease progression or recurrence. This includes “no therapy” as a treatment option if the patient, the family or guardian refuses treatment, or if the patient dies before treatment starts, or if the physician recommends no treatment. (FORDS 2009)