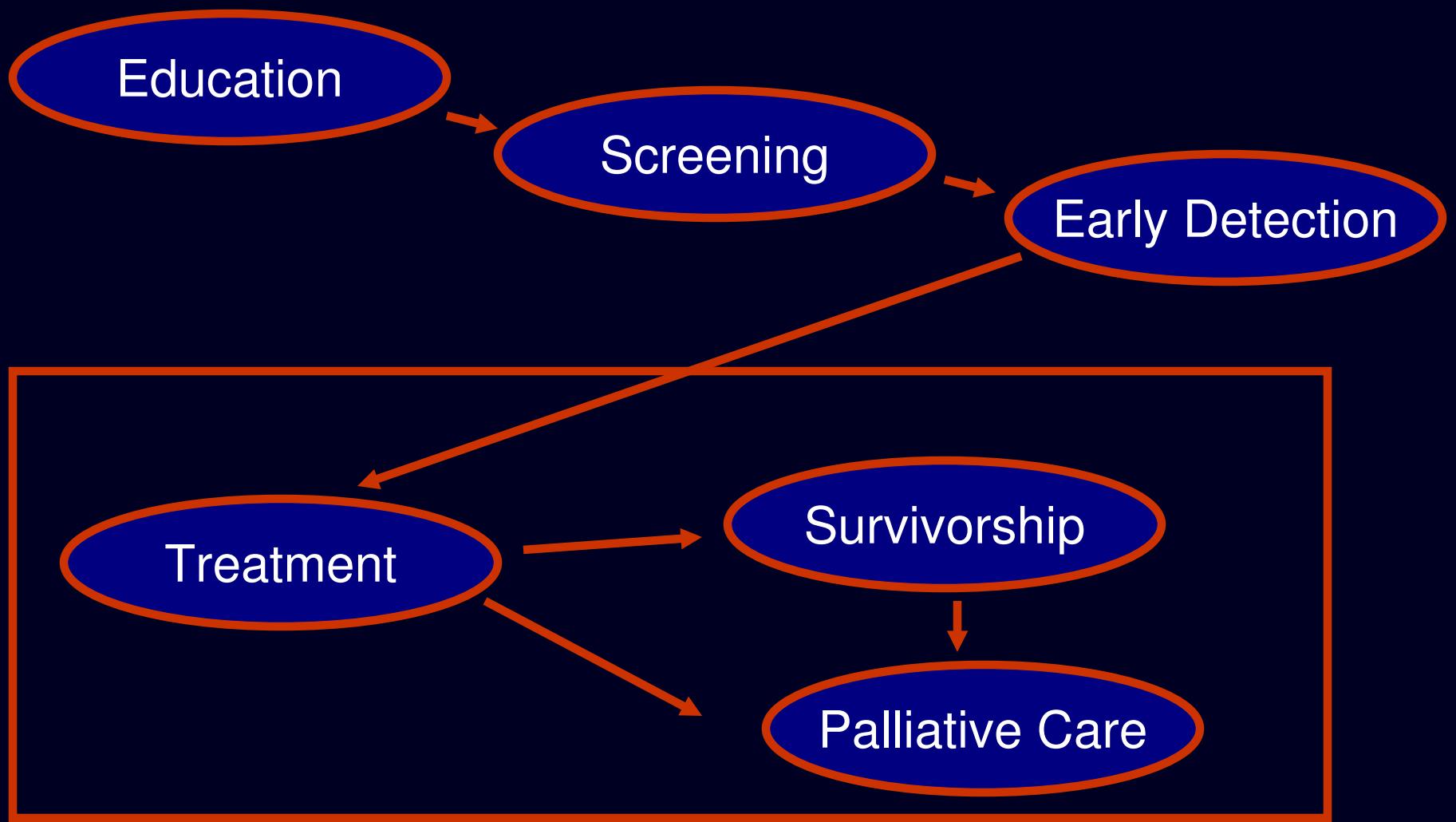


Trends in Oncology Care

Challenges and Obstacles

Lawrence N. Shulman, MD
Dana-Farber Cancer Institute
Brigham and Women's Hospital

“Navigation” Through The Continuum of Cancer Care



Some Thoughts:

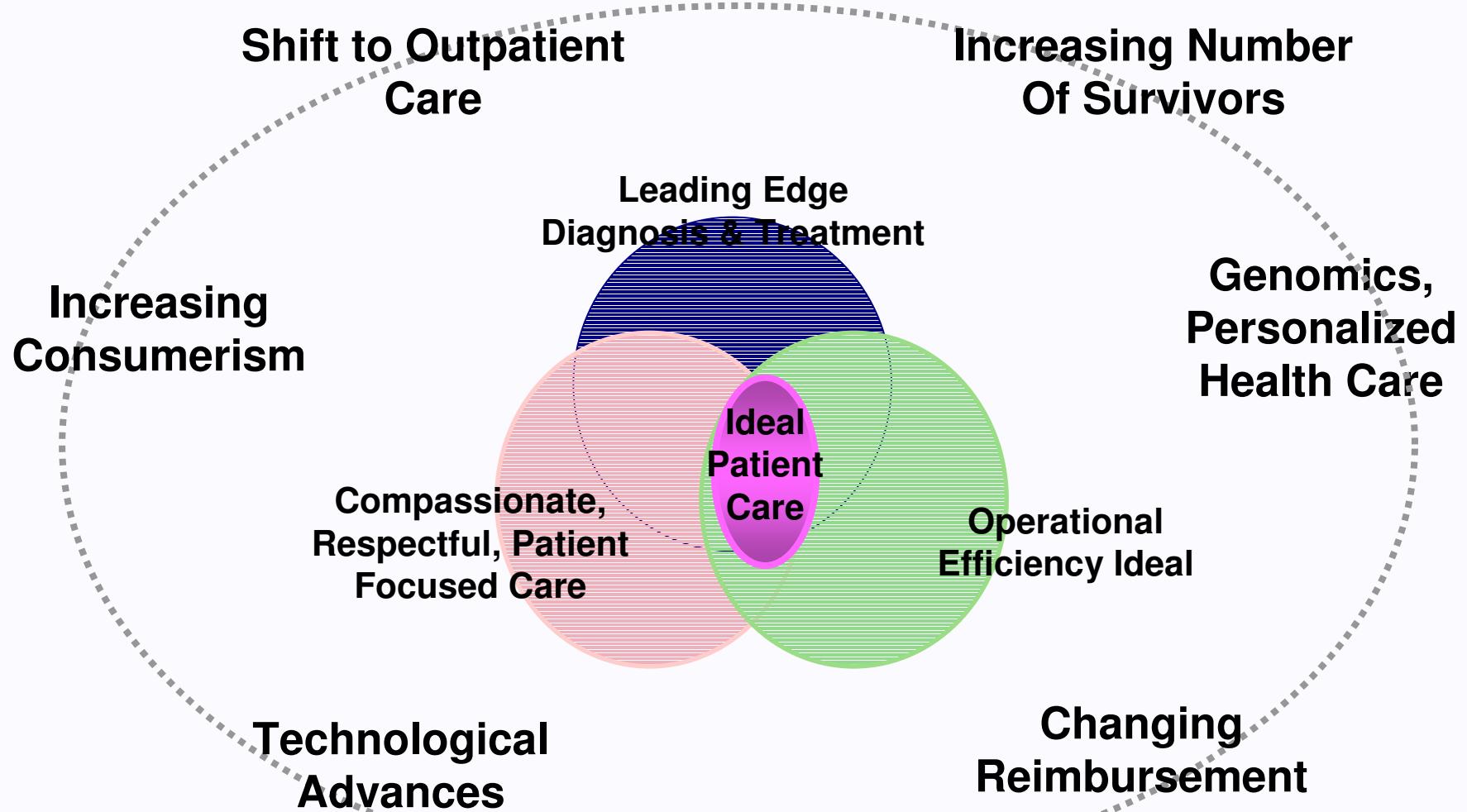
- The demand for cancer services is not just related to the number of cancer patients, but even more substantially impacted by the increasing complexity of cancer care
- Improved survivals (both long-term & short-term palliative) result in increased care demands greater than the absolute number of cancer patients would suggest
- The concept that oral, “targeted”, non-toxic therapies will turn cancer into an easily managed chronic disease is not supported by the data
- The increasing number of cancer survivors who need care have more treatment-related physical & emotional complications from treatment than we have appreciated, or are currently positioned to care appropriately for
- Not sure who will care for our country’s cancer patients & cancer survivors in the future

Some Thoughts:

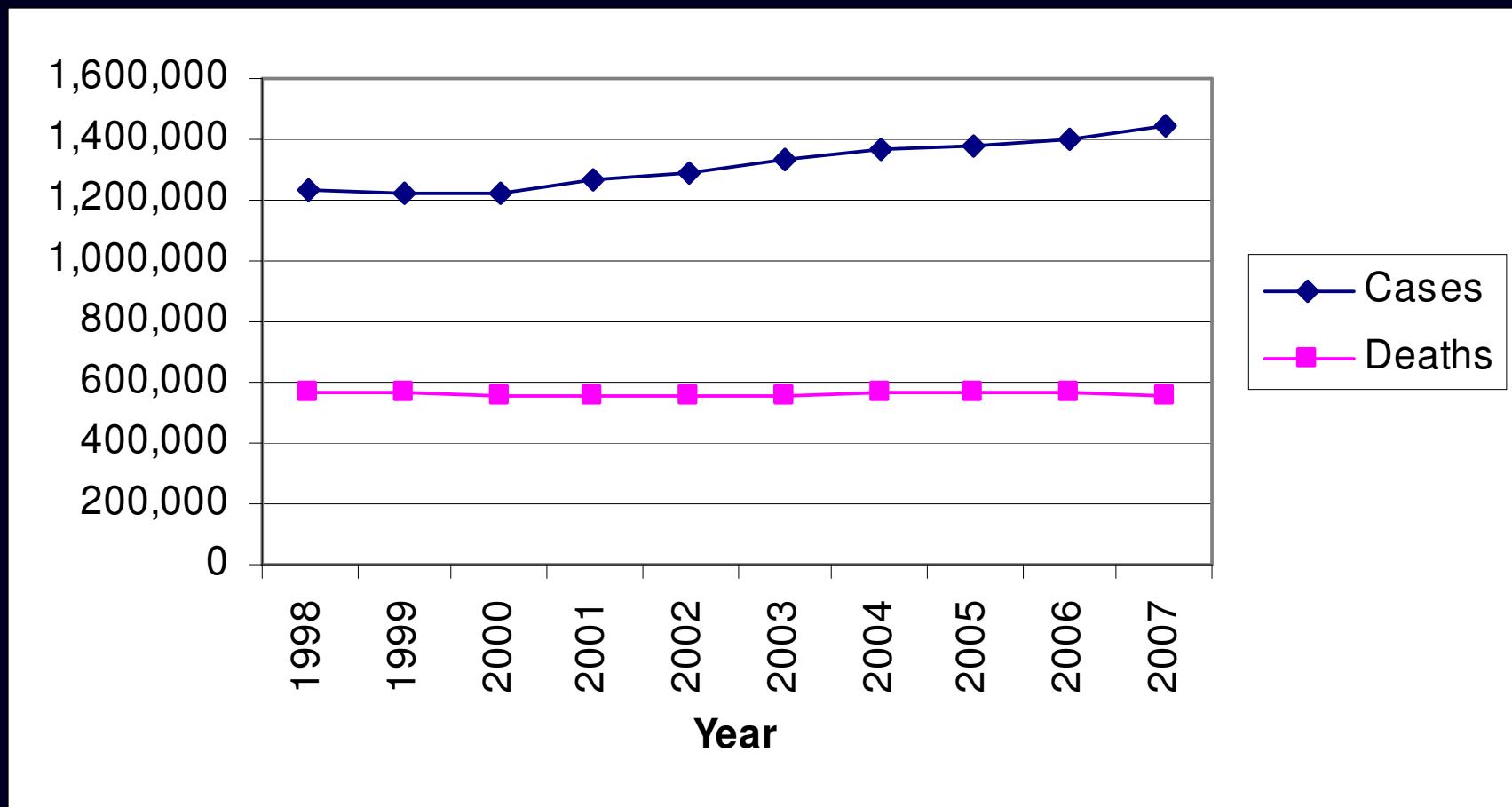
Unless you take into account the complexity and many competing demands of our health care system on oncologists, primary care physicians, space & resources...

....plans for care of our country's cancer patients & cancer survivors will not be successful.

The Future of Cancer Care

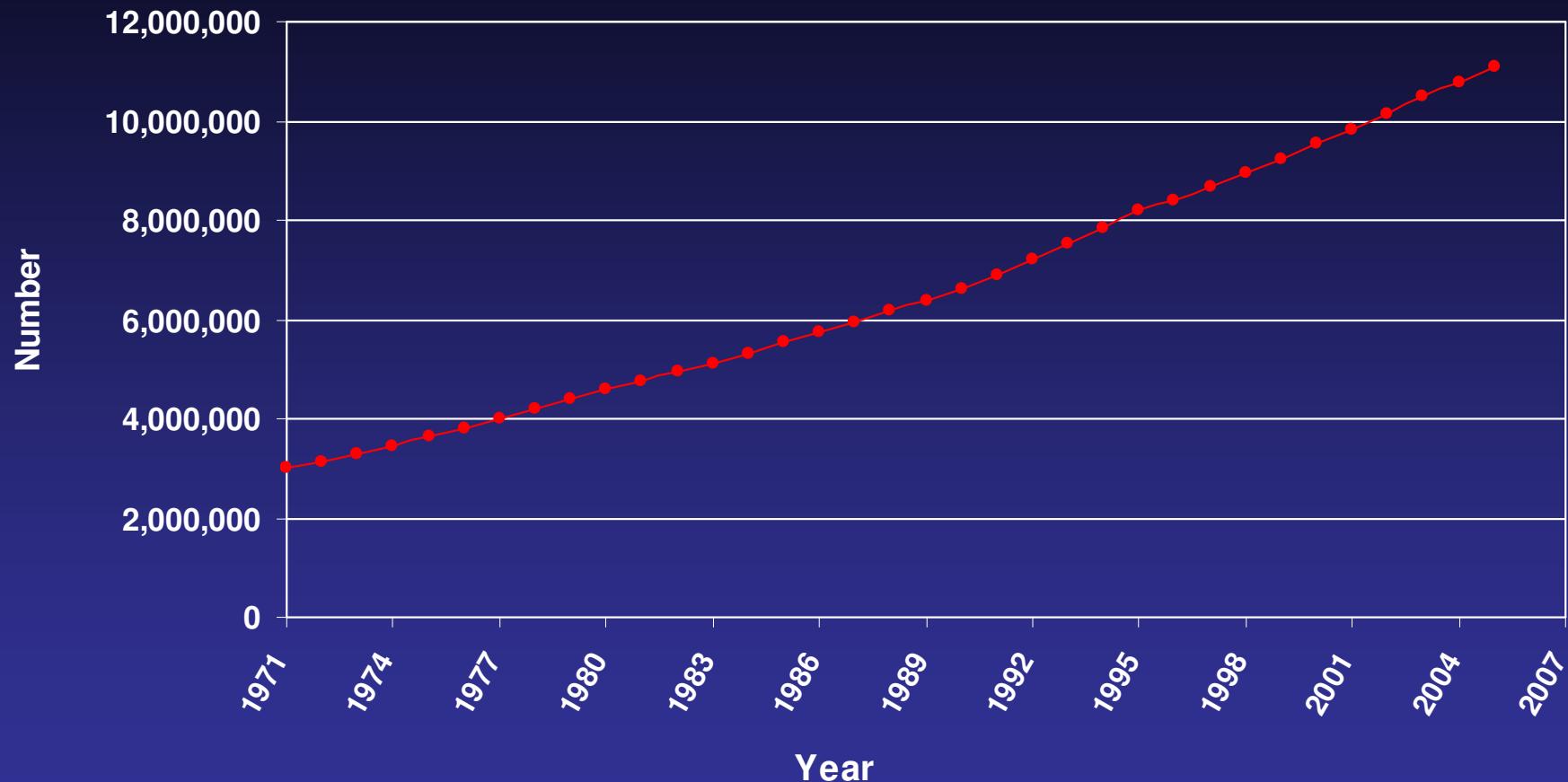


Number of Newly Diagnosed Cancer Patients and Cancer Deaths In the USA between 1998 and 2007



Data derived from the NCI and ACS websites

Estimated Number of Cancer Survivors in the United States From 1971 to 2005

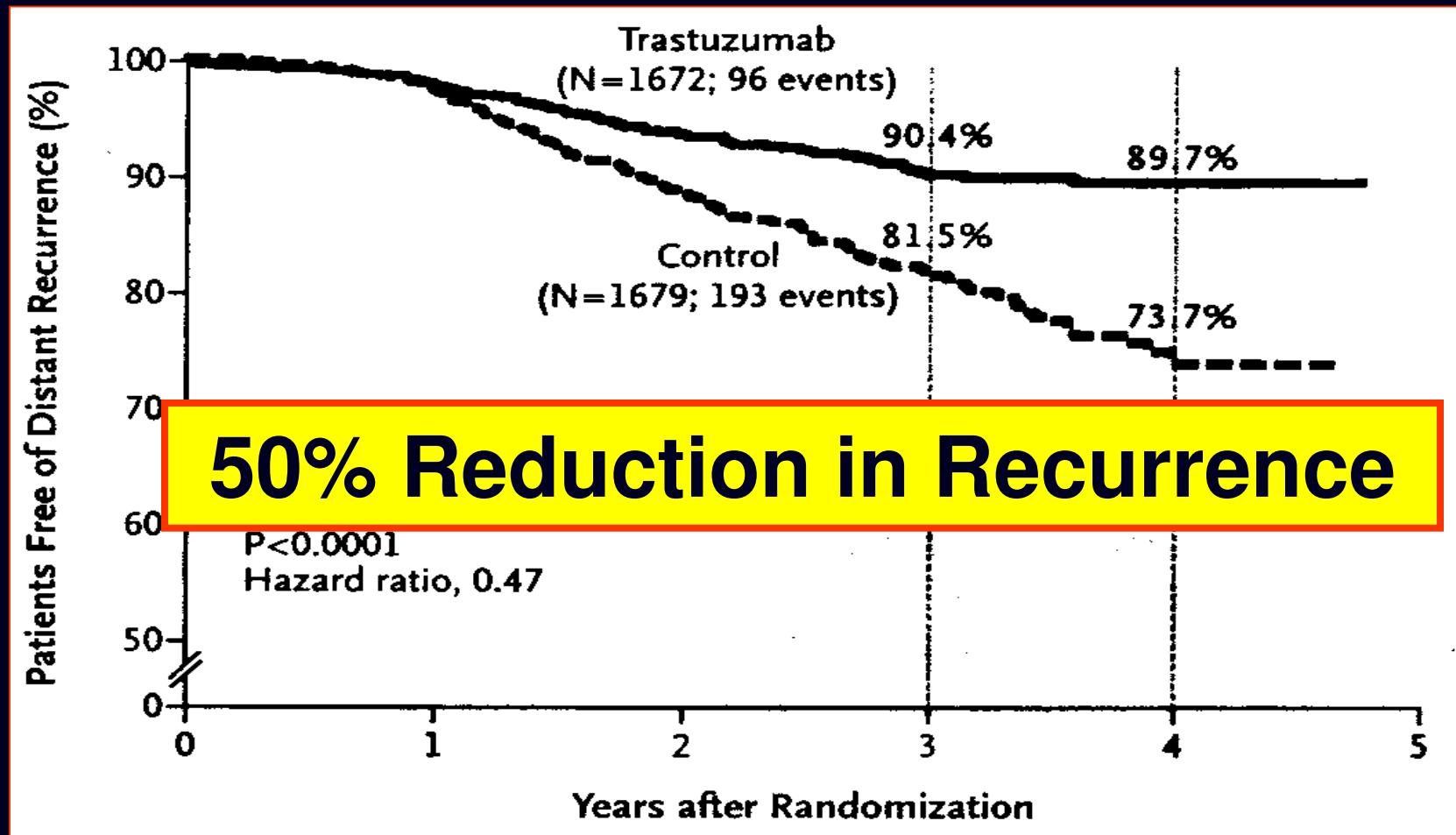


Data source: Ries LAG, Melbert D, Krapcho M, Stinchcomb DG, Howlader N, Horner MJ, Mariotto A, Miller BA, Feuer EJ, Altekruse SF, Lewis DR, Clegg L, Eisner MP, Reichman M, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2005, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2005/, based on November 2007 SEER data submission, posted to the SEER web site, 2008.

Benefit of Trastuzumab with Chemotherapy for Women with HER2 Breast Cancer

- When combined with cytotoxic chemotherapy, substantially extends survival for women with HER2 positive metastatic breast cancer
 - *Often weekly treatments for longer periods of time*
- When combined with cytotoxic chemotherapy, substantially improves survival for women with primary HER2 positive breast cancer – reducing recurrence rates by 50% – maybe 8,000 saved lives per year

Adjuvant AC-T With and Without Trastuzumab: Combined Analysis of NASBP B-31 and N9831



Perez, NEJM, 2005

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 - *27 vs 8 infusion room treatments during first year of therapy*
- *Long-term effects of trastuzumab unknown, but concerning – only careful follow up of these patients and research in survivorship care will elucidate this issue*

Colorectal Cancer: Chemotherapy 1996

- FDA approved chemotherapy option for metastatic colorectal cancer

5-FU

Median survival with therapy 10-12 months

Current options for patients with metastatic colorectal cancer – 2008

- 5-FU

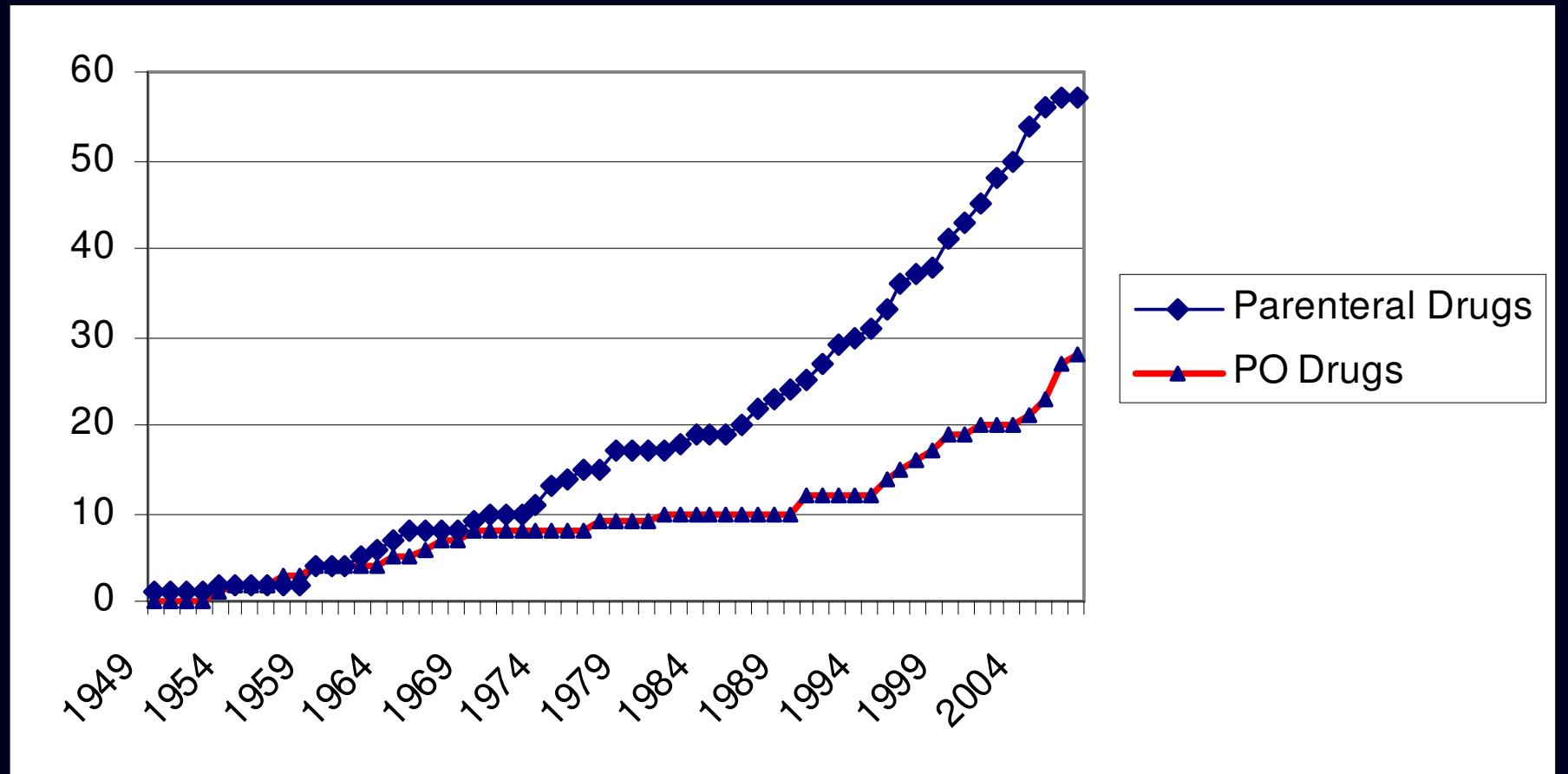
Survival increases from 10-12 mo to 20+ months

- Irinotecan
- Oxaliplatin

Each individual patient coming for twice the length of time for many more treatment visits

- Panitumumab

Cumulative Number of FDA Approved Oncology Drugs by Year and Route of Administration



Does not include re-approvals for new indications

Does not include ancillary or support medications

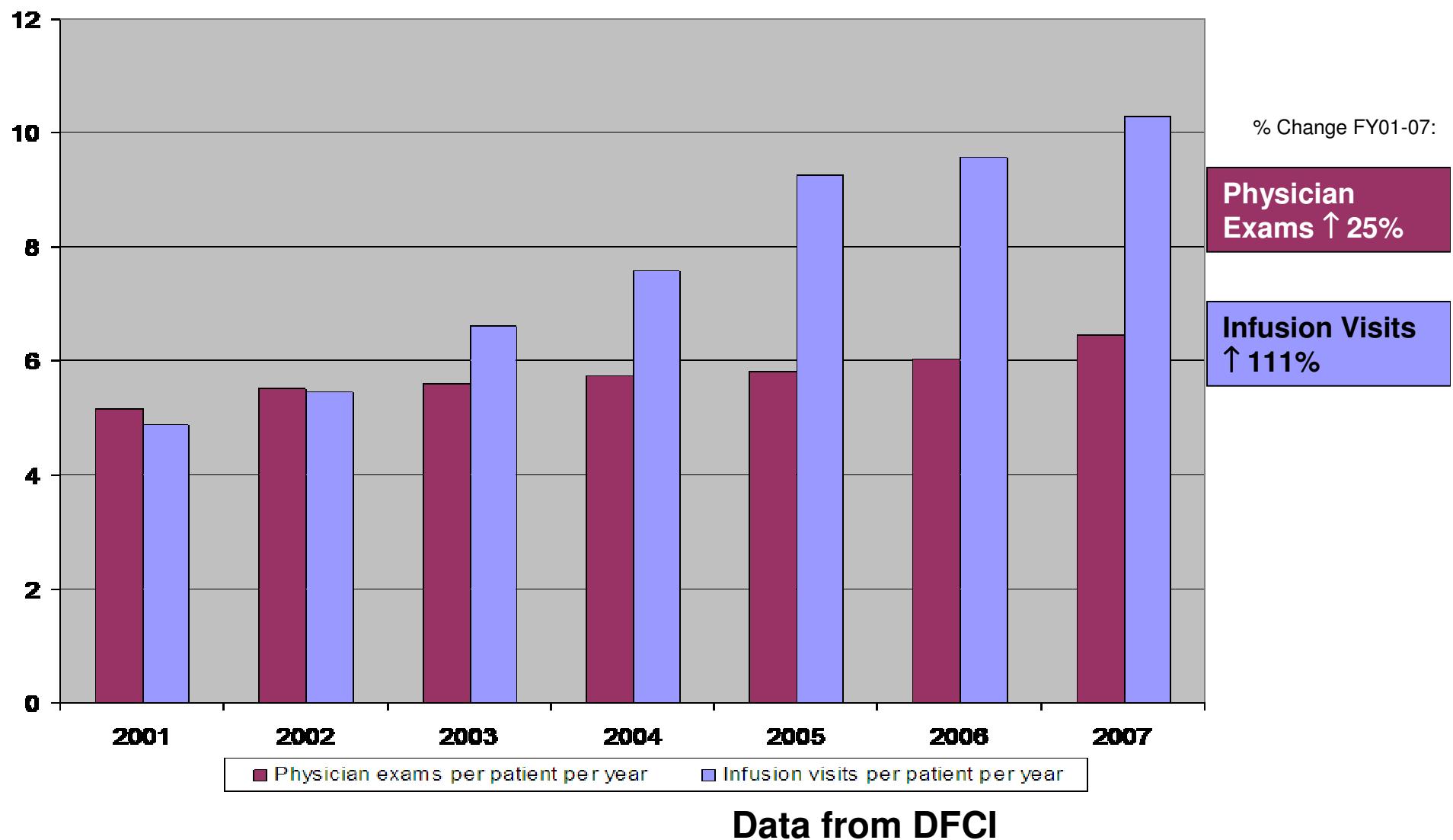
Does not reflect volume of usage for types of drugs

(Derived From FDA data)

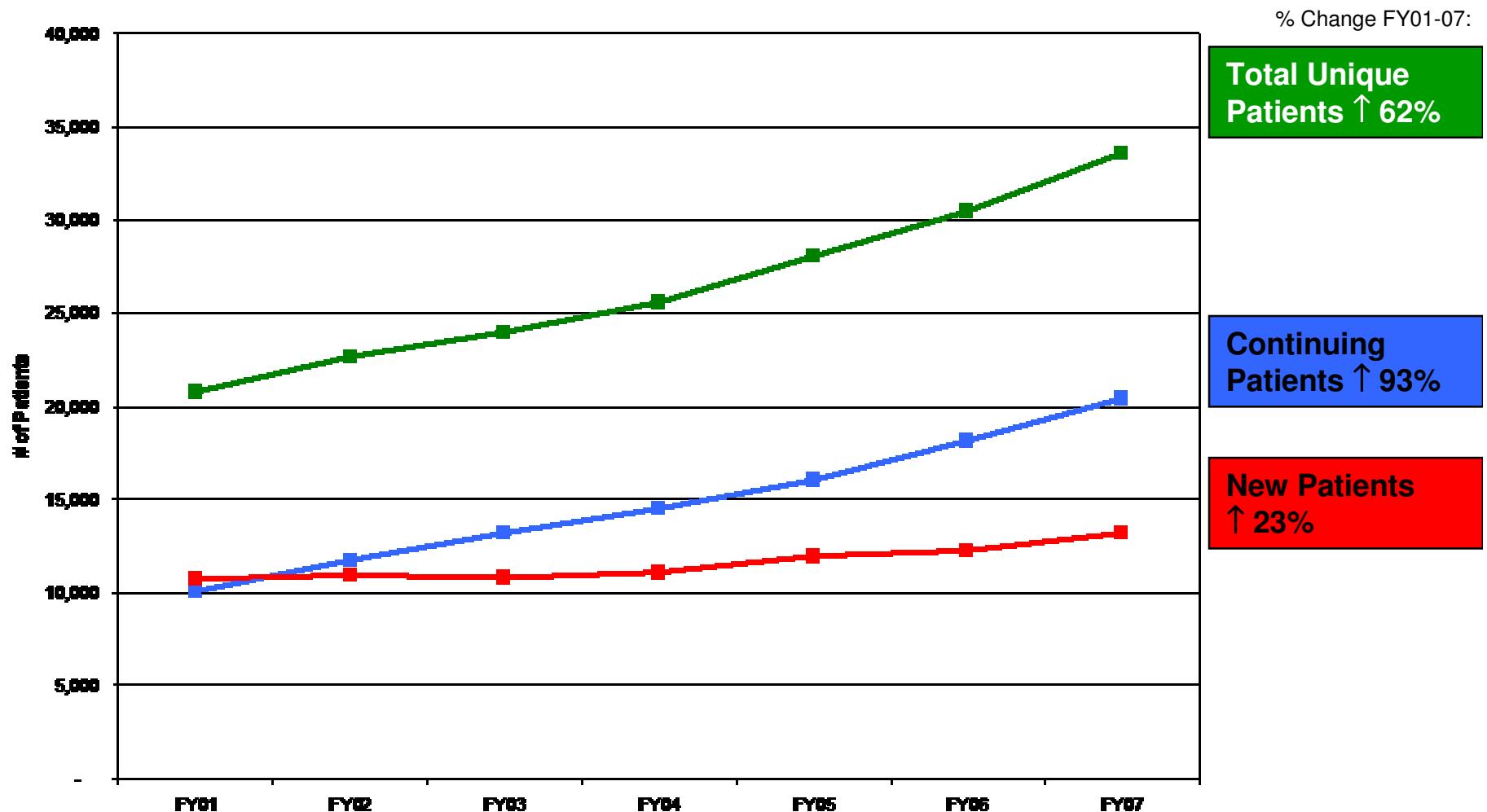
The burden of cancer care & cancer survivorship care on the health care is increasing more rapidly than merely the number of patient numbers would suggest.

Physician and Infusion Room Visits per Patient, Per Year

During First Year of Therapy, 2001-2007

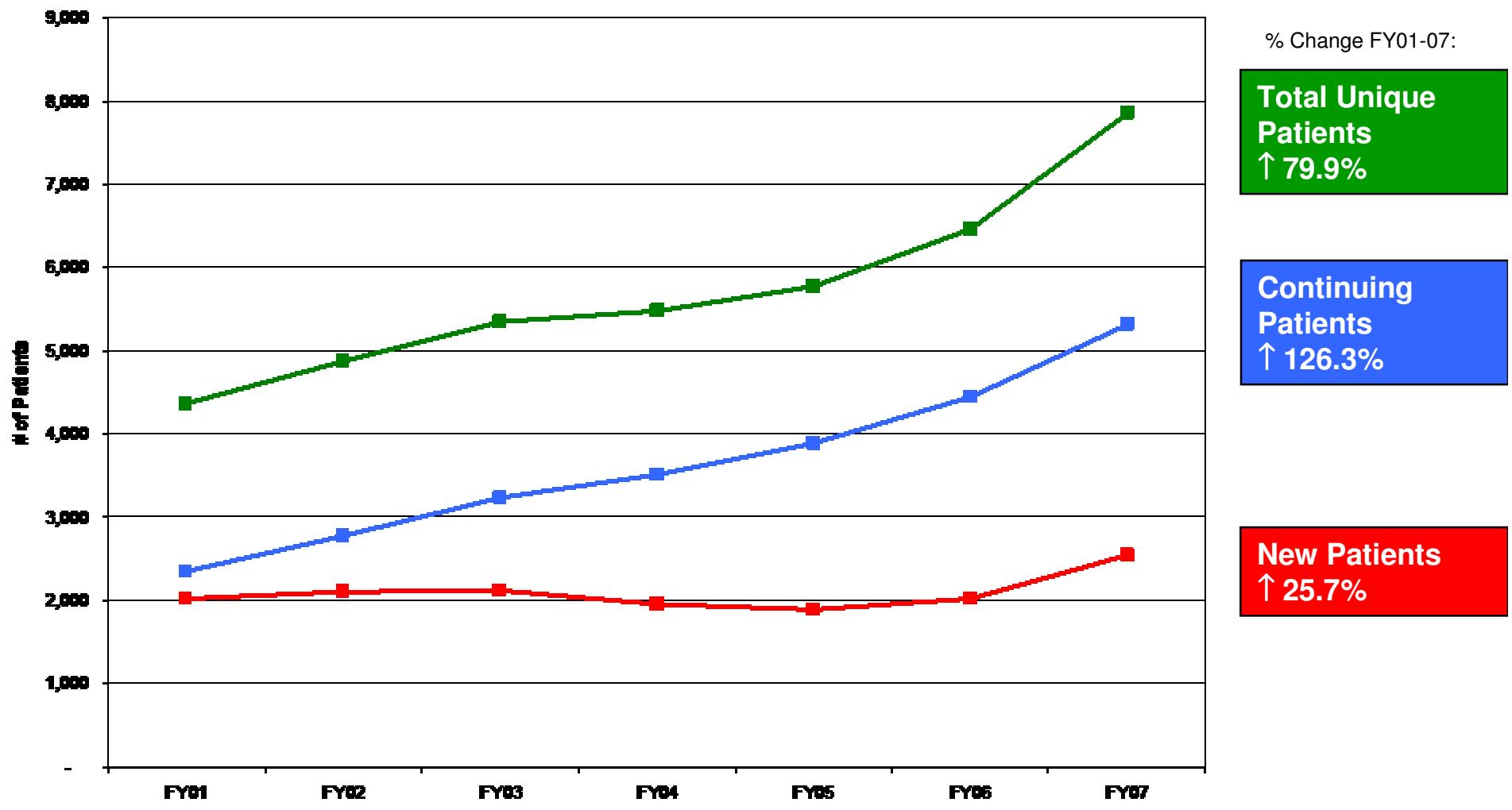


Changes in numbers of Patients seen FY 2001-2007



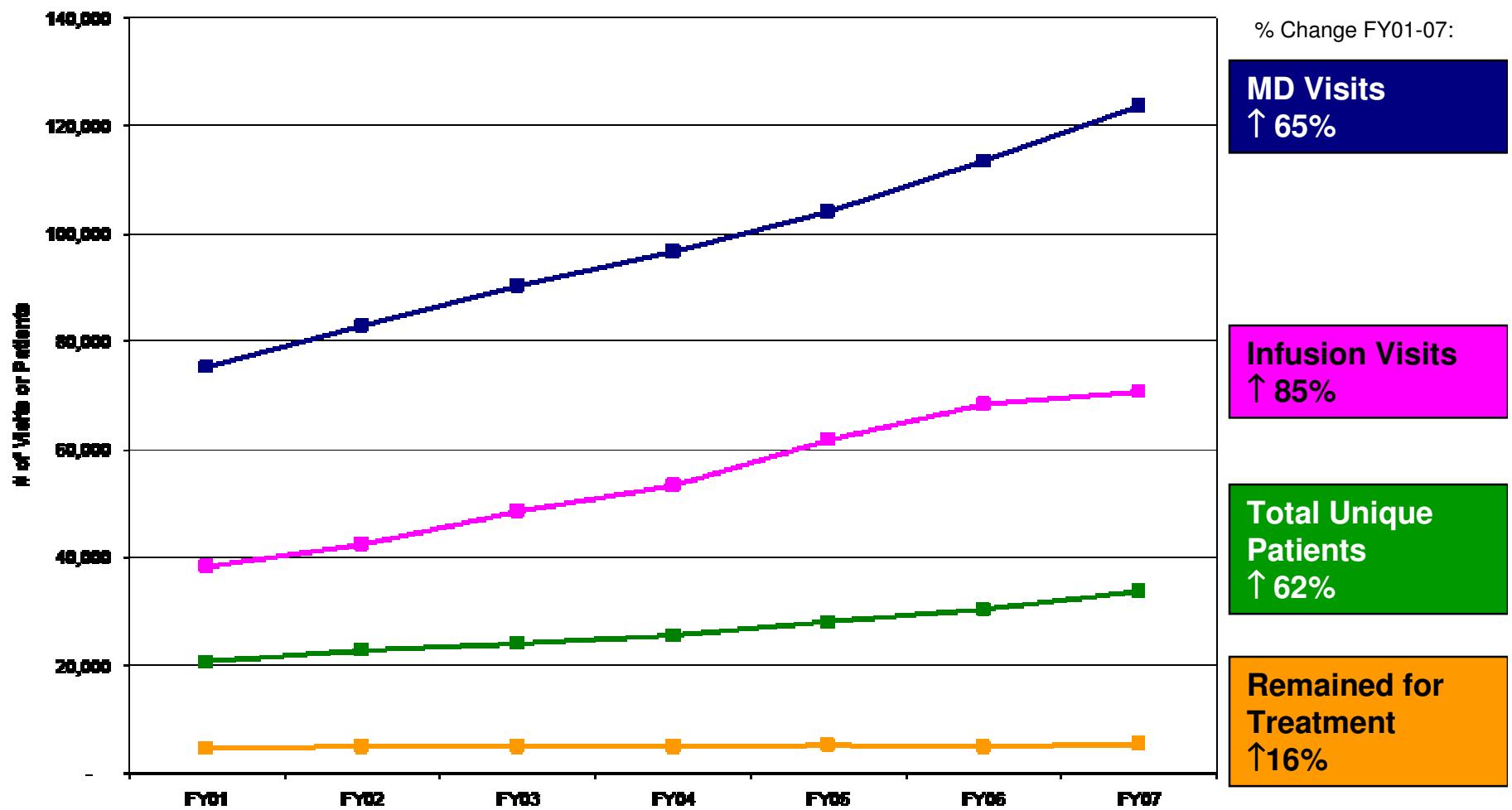
Data from Dana-Farber Cancer Institute

Breast Oncology Statistics: FY01-FY07



Data from Dana-Farber Cancer Institute

MD and infusion visits are growing at a faster rate than unique patients and new patients remaining for treatment



Data from Dana-Farber Cancer Institute

Some Issues for Cancer Care and Survivorship Care

Any model of cancer care & survivorship care that does not take into account:

- Increasing complexity cancer care
- Increasing complexity of survivorship care when done well
- Oncology workforce issues
- PCP workforce issues
- Financial considerations
- Space issues
- Need to provide care in academic & community settings

Will likely not succeed in meeting the needs of these patients

Some Issues for Cancer Survivorship Care

- **Oncologists will struggle with competing needs of patients undergoing active treatment & relatively well-appearing cancer survivors**
- **Growing shortage of PCPs who will be faced with caring for an aging population of patients with acute needs, who will compete with relatively well-appearing cancer survivors - making it increasingly difficult to care for cancer survivors**

The Boston Globe

MONDAY, SEPTEMBER 22, 2008

Across Mass., wait to see doctors grows

Access to care,
insurance law

Legislature has approved an unprecedented set of financial incentives for primary physicians and other

AVERAGE WAIT FOR APPOINTMENT

“You can take a look at the whole state and you are not going to find a primary care physician anytime soon.”

State Senator Therese Murray

PATRIOTS UNBEATEN NO LONGER

