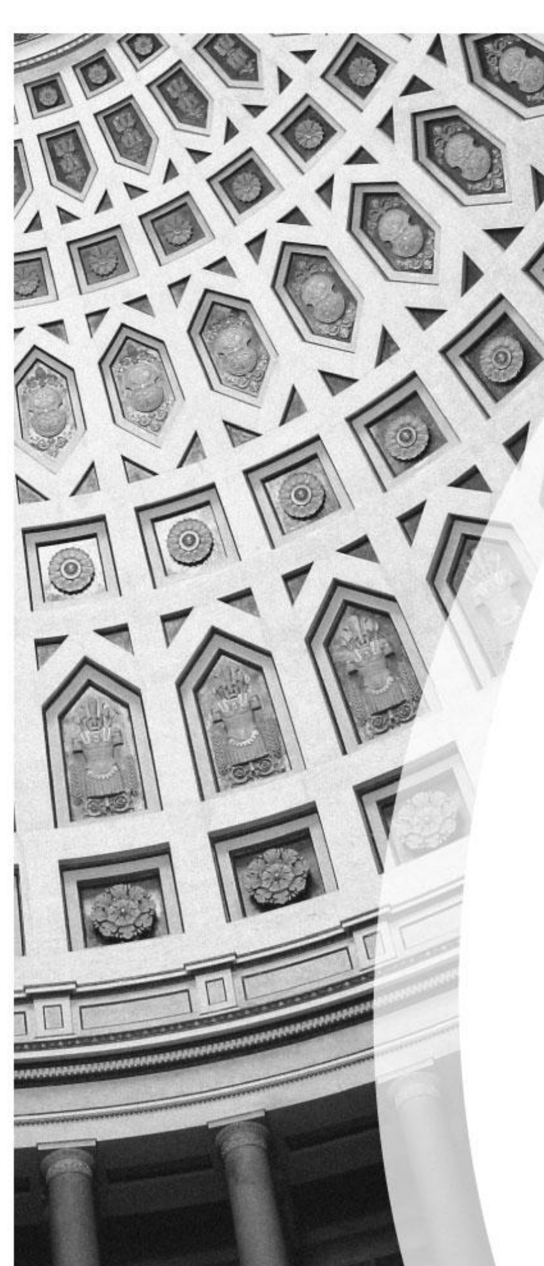

Healthcare Design Conference

Considerations for Comprehensive Cancer Center Design

November 12, 2011

Kurt Salmon – Private and confidential, not for distribution

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5 Trends in Cancer Care

- Rising costs forcing new care models
- Cancer as a chronic condition
- Collapse of community oncology practices
- Funding vulnerability facing research missions
- Blurring of organizational boundaries

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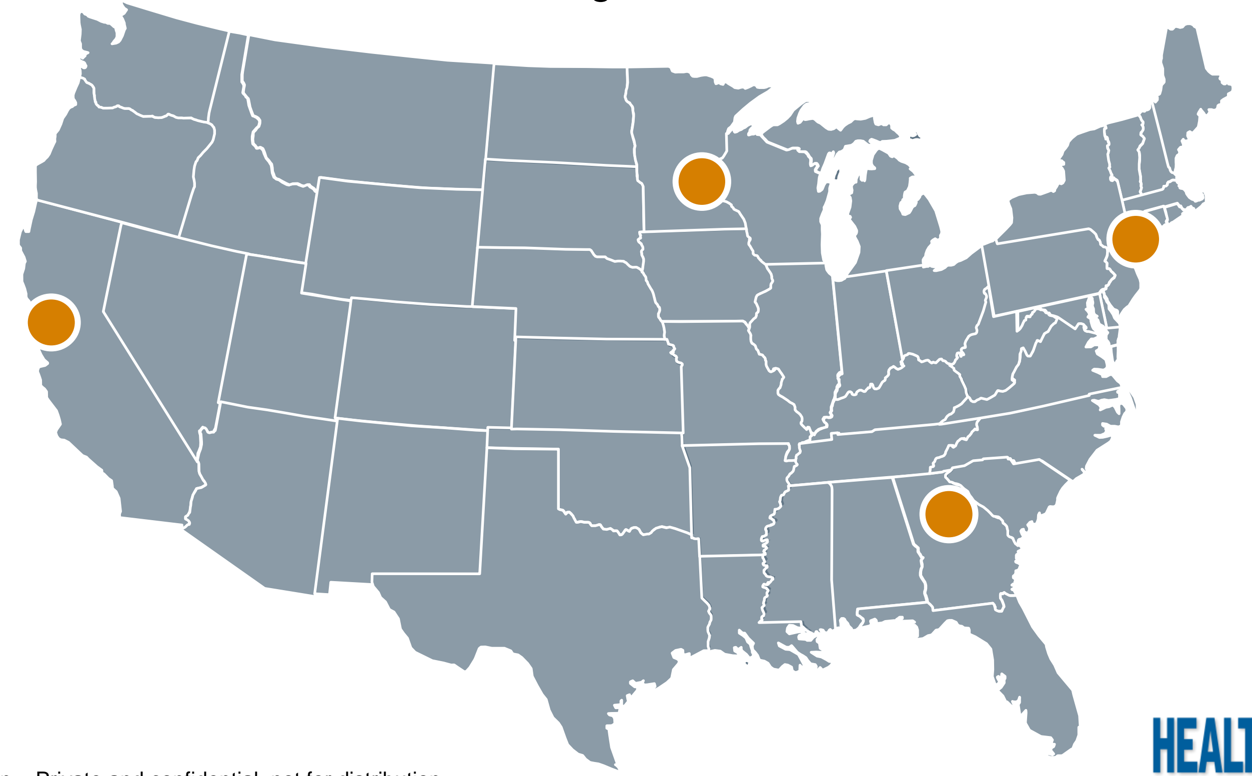
Introductions: Kurt Salmon Healthcare Group

Kurt Salmon – the *premier* advisor to America's hospitals and health systems

- Worked with virtually all of the US News Honor Roll Hospitals in the last 5 years
- Repeat clients represent 70+% of business at any given point
- 60+ professional staff in four offices throughout the U.S.



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Introductions: Facilitators

Farzan Bharucha, Partner

- Pharmacist with 10 years of healthcare consulting experience
- Specialist in academic medicine, including governance, funds flow and enterprise strategy
- National thought leader on issues related value-creation in healthcare

Thomas Dixon, Manager

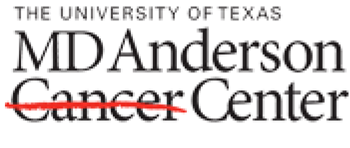
- 5+ years of strategy consulting experience
- Specialist in service line planning and capital prioritization
- Extensive experience in academic and community sectors

Introductions: Firm Cancer Planning Experience

Firm has significant cancer planning experience

- Experience spans settings – from exempt, comprehensive centers to community hospitals
- Cross functional experience – ranging from strategic planning to master planning

Selected Cancer Planning Engagements



Introduction: Today's Session

Five trends shaping the future of cancer care in the US

- Rising costs forcing new care models
- Cancer as a chronic condition
- Collapse of community oncology practices
- Funding vulnerability facing the research mission
- Blurring of organizational boundaries

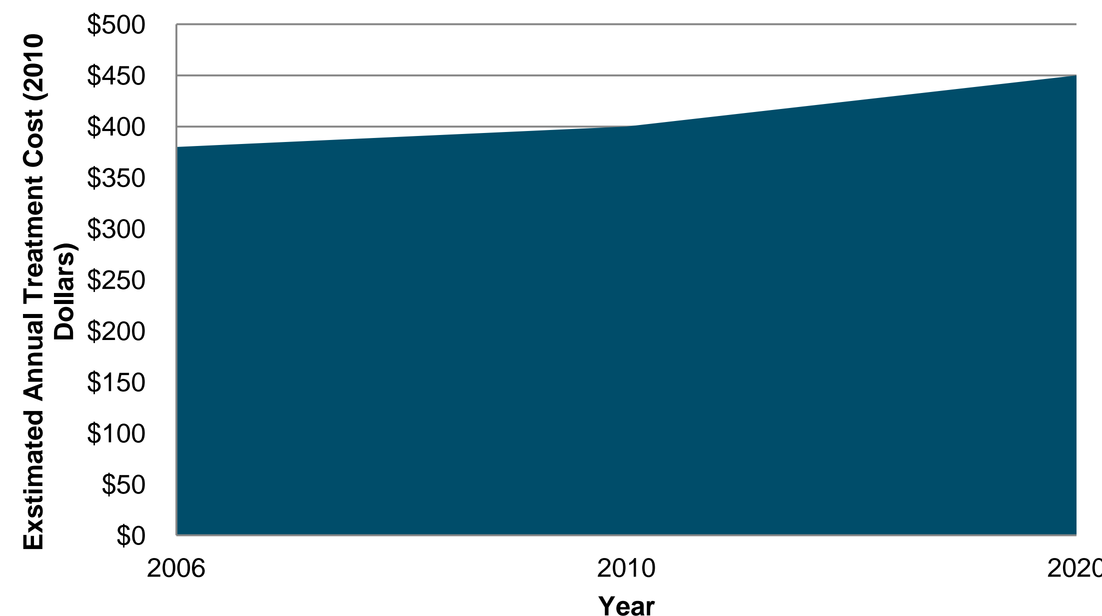
Considerations for Comprehensive Cancer Center Design

Rising Costs Forcing New Care Models

Rising Costs & New Care Models: Context

Costs of cancer care are exploding, driven by:

- Population aging
- Deteriorating public health (e.g., obesity)
- New drugs introduced often additive to existing regimens
- Real price increases for new therapies
- Increased life expectancy of those diagnosed with cancer

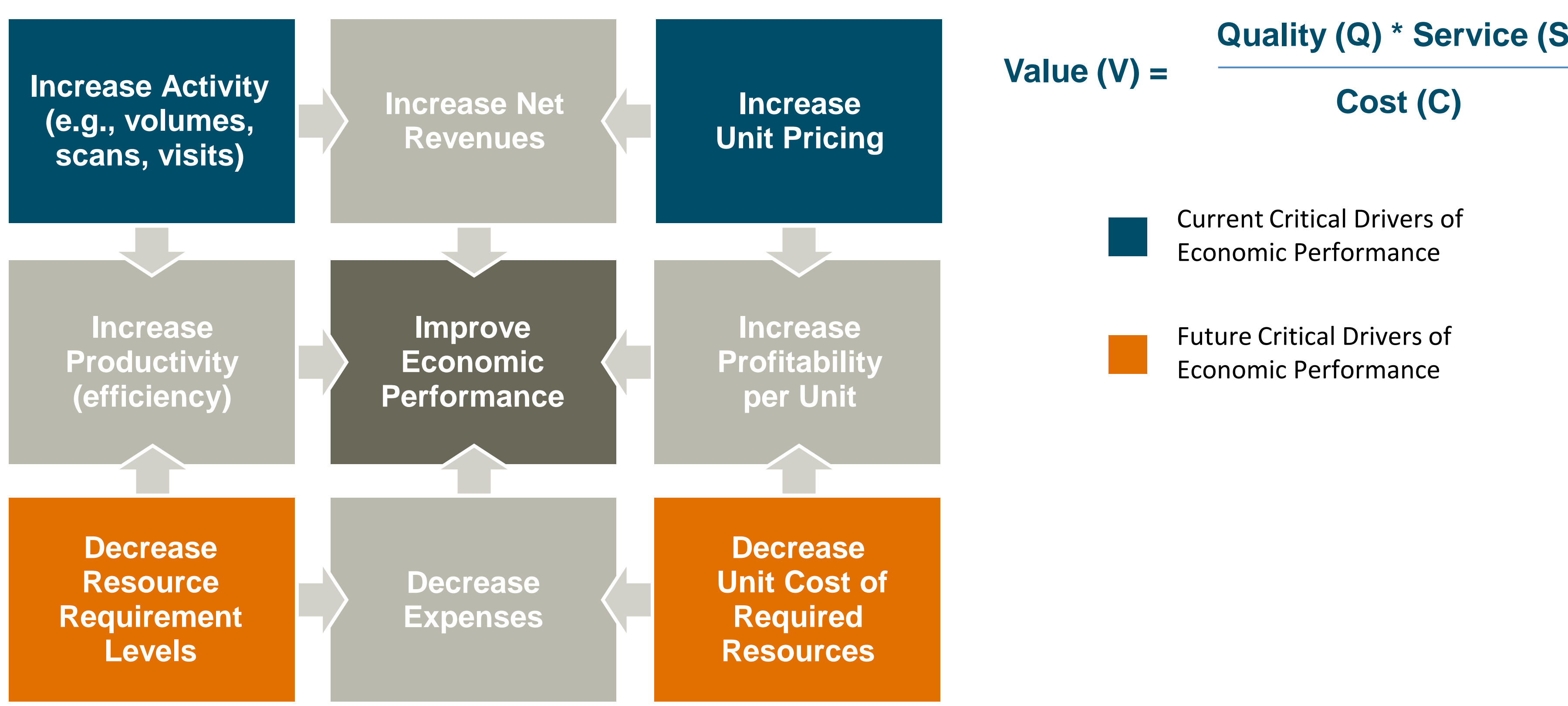


Source: National Institutes of Health, U.S. Bureau of Labor Statistics, U.S. Census Bureau and Kurt Salmon analysis

Rising Costs and New Care Models: Context

Consequently, payors are attempting to now reward value, not just volume

- Cancer care is no longer exempt from new models and reform



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Rising Costs & New Care Models: Context

In fact, new payment modes and cost containment strategies abound

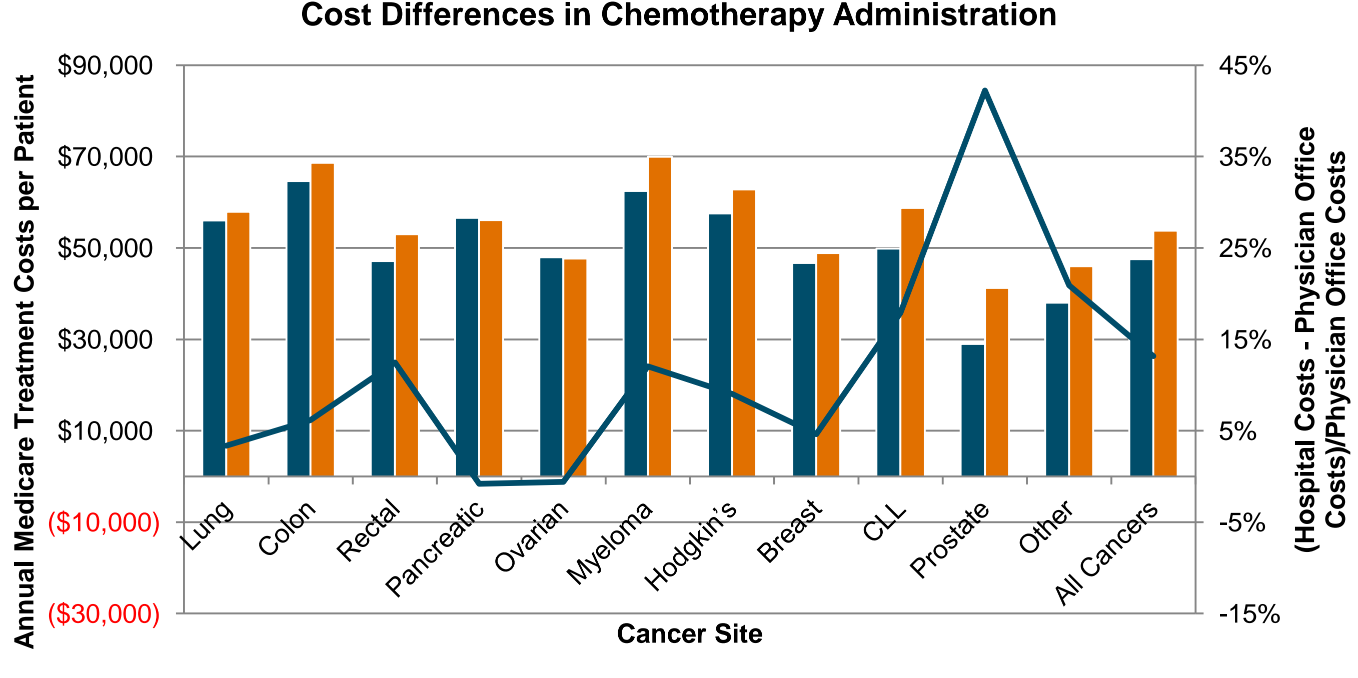
	Compendia Usage	Known ASP Usage	Other Notable Pilots
CMS	✓	Implemented	• Ongoing ACO, Medical Home demonstrations • Recent 3rd party calls for episode-based payments for cancer
UnitedHealthcare	✓	Piloting	• Bundled payment pilot with 5 community oncology groups
WellPoint	✓	Implemented	• Several multi-player medical home pilots • Survivorship planning program in partnership with UCLA and Genetech
Humana	✓		• ACO pilot with Norton Healthcare
Aetna	✓		• Evidence-based pathways partnership w/ P4 in 4 states

Source: National Comprehensive Cancer Network, *Managed Care Mag*, drugchannels.net, *Indianapolis Business Journal*, healthcarepayernews.com, *Health Affairs,* insurers' websites and Kurt Salmon analysis

Rising Costs & New Care Models: CCC Positioning

Comprehensive cancer centers are expensive environments for routine care

- E.g., OP chemotherapy costs Medicare 13% more in hospitals than in physician offices
- GME reimbursement and exemptions can make AMCs even more expensive than community hospitals



Source: Milliman and Kurt Salmon analysis

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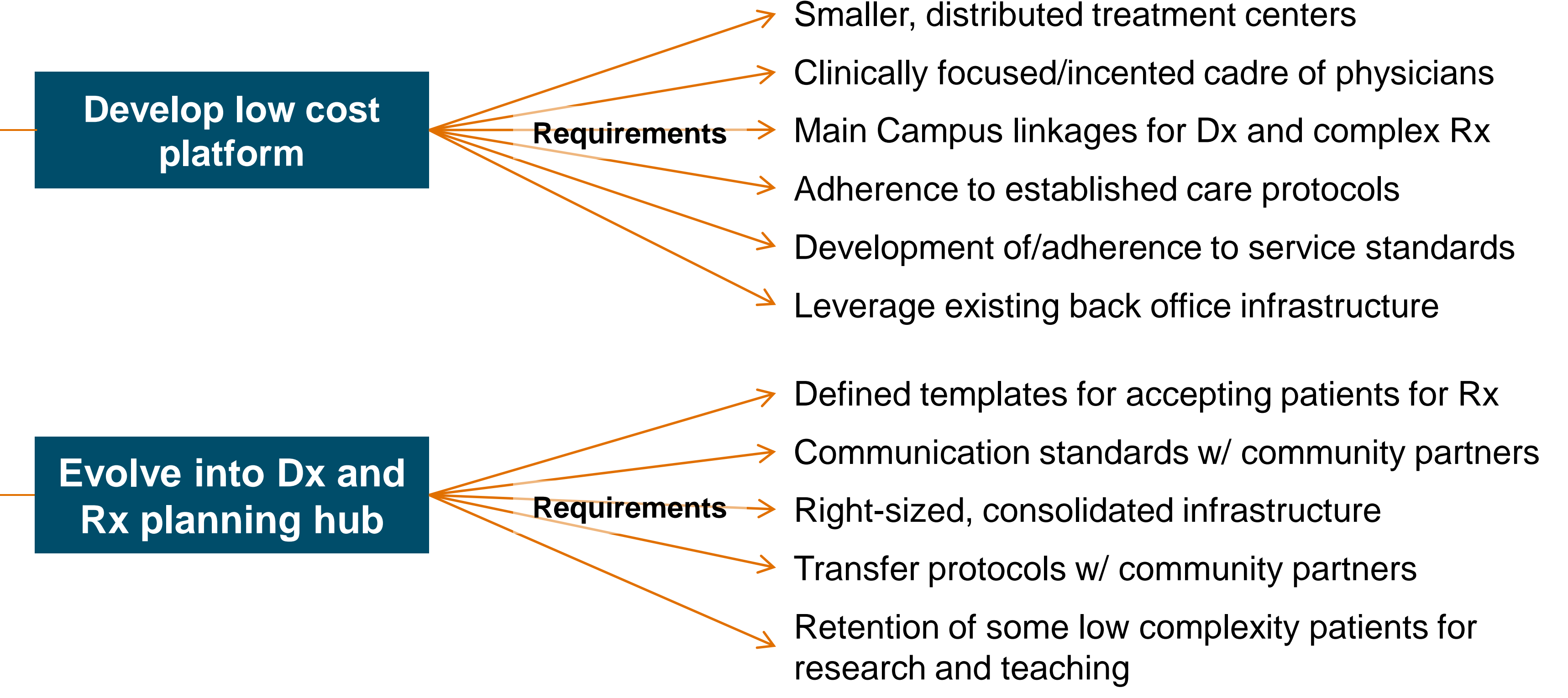
Rising Costs & New Care Models: Implications

Comprehensive centers will likely have to participate in cost reduction/new models

- Bi-modal response possible from advanced, comprehensive centers



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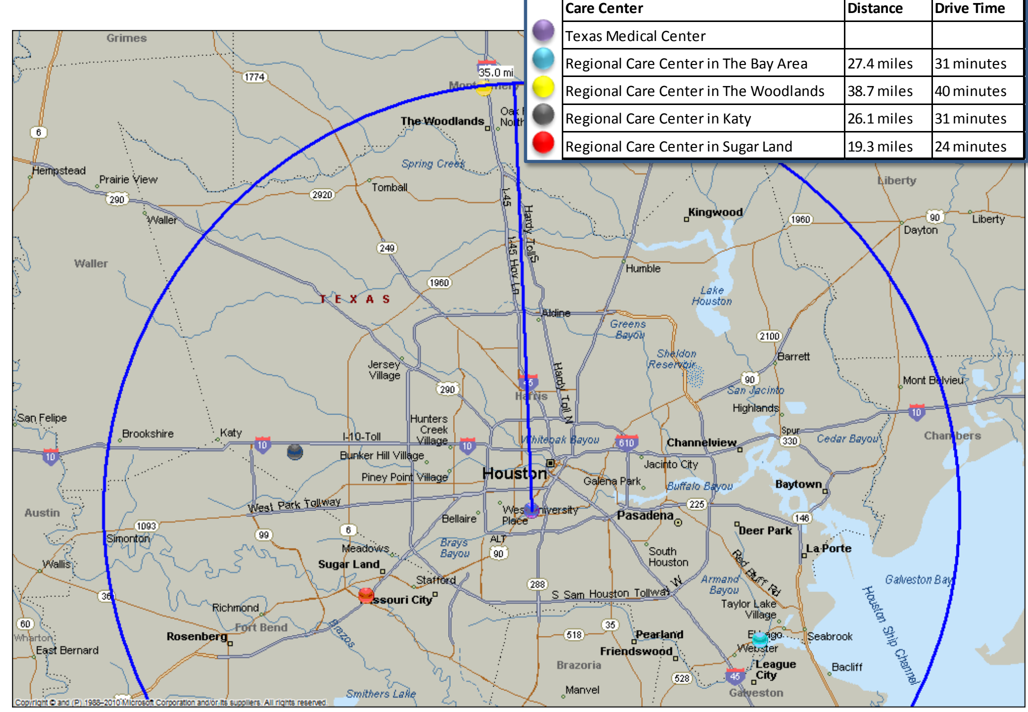
Rising Costs & New Care Models: Implications

Case Study: MD Anderson Regional Treatment Centers

- Services include
  - Medical & surgical oncology
  - Radiation oncology
  - Lab
  - Pharmacy
- Linkages to Main Campus for clinical trials & complex treatment



Care Center	Distance	Drive Time
Texas Medical Center		
Regional Care Center in The Bay Area	27.4 miles	31 minutes
Regional Care Center in The Woodlands	38.7 miles	40 minutes
Regional Care Center in Katy	26.1 miles	31 minutes
Regional Care Center in Sugar Land	19.3 miles	24 minutes

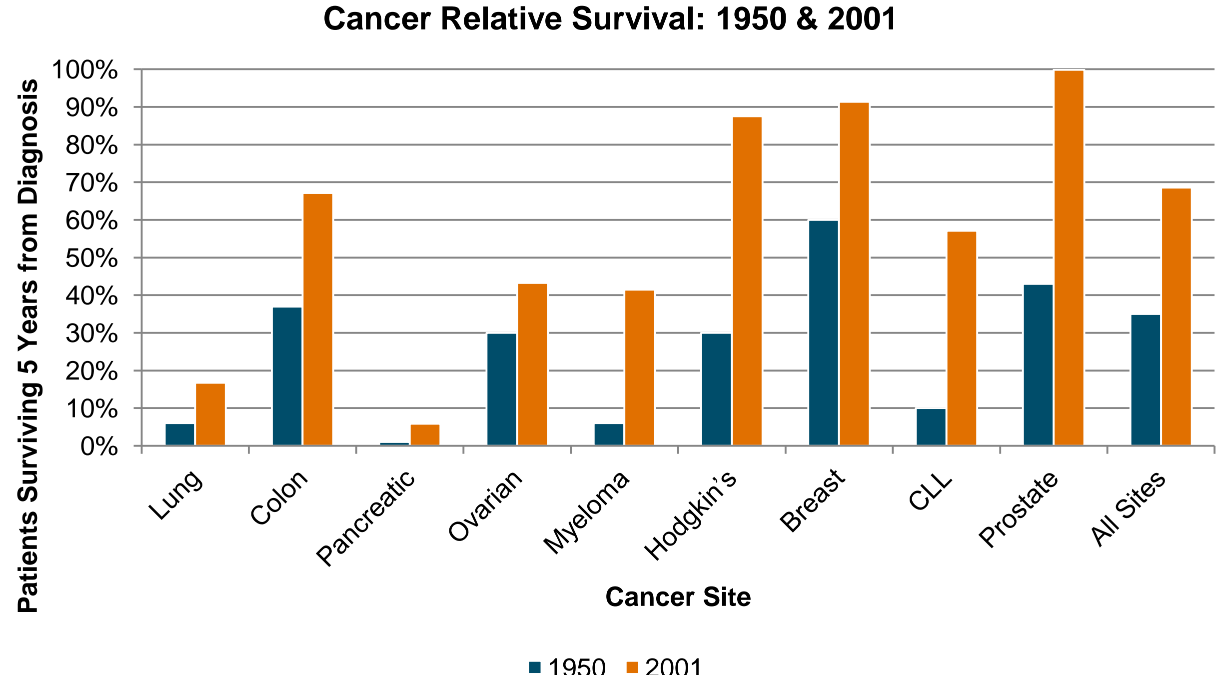
Considerations for Comprehensive Cancer Center Design

Cancer as a Chronic Condition

Chronic Cancer: Context

Survivorship of cancer is ballooning, driven by

- Earlier diagnosis/screening protocols
- Improved prognosis for patients with localized and regionalized tumors



Source: SEER Data, German Cancer Research Center and Kurt Salmon analysis

Chronic Cancer: Treatment Paradigm

In parallel, the cancer treatment paradigm is shifting, which will likely

- Further prolong survivorship
- Require increased (amount and frequency) resource (time, infrastructure) intensity in treatment

From → **To**

Evolution of Cancer Treatment

From	To
Searching for a cure	Creating a liveable, chronic disease
Uniform approaches to treatment	Tailored treatment pathways
Kill all cells in an area	Target rapidly reproducing cells
Radiation and cytotoxic chemotherapy	Addition of gene & cytostatic chemotherapy
Unilateral treatment planning	Multidisciplinary treatment planning
Patients taking direction from physicians	Patients actively involved in decisions

Source: Siddhartha Mukherjee (NPR Interview) and Kurt Salmon analysis

Chronic Cancer: Implications

In this environment

- Treatment planning and treatment delivery functions are likely to de-couple
  - Tailored treatment plans will require subspecialty expertise and infrastructure, which is often consolidated
  - Frequent, chronic treatments will require convenient, distributed access points
- Leading diagnostic centers will continue to make significant investments (capital and personnel) in technology
  - In addition to EHRs, cancer care will require sophisticated analytical capabilities to match treatment protocols to tumor and patient characteristics and measure efficacy

Chronic Cancer: Implications

- Levers to value creation will remain unchanged
  - Reduce incidence via prevention - 50-75% of deaths are preventable; research is under-funded
  - Reduce direct treatment costs – Downstream consequences of each diagnosis are significant

Example: Annual Treatment Costs

Top 3 Cancers for Men		Top 3 Cancers for Women	
Prostate	$23,652	**Breast**	$27,693
Lung	$73,062	**Lung**	$72,639
Colorec	$62,174	**Colorec**	$61,593

Note: Costs are for a patient younger than 65 years and in the initial year of the disease. Costs are in 2010 US dollars.

Population

Cancer Incidence

Proportion of patients treated

Cancer Patients Served

Disease Specific Utilization Rates

Exam Room Visits | Diagnostic Imaging | Laboratory Medicine | Outpatient Procedures | Inpatient Procedures | Inpatient Stays | Follow Up Visits | Rehab Services | Palliative Care | Home Health | Hospice

Source: *Journal of the National Cancer Institute* and Kurt Salmon analysis

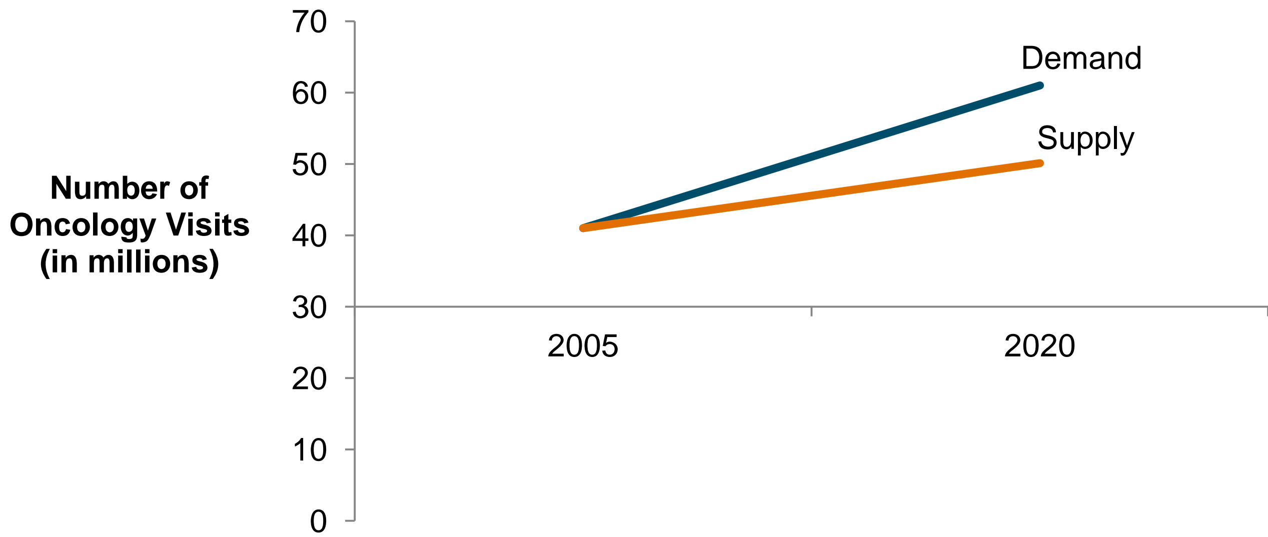
Considerations for Comprehensive Cancer Center Design

Collapse of Private Practice Oncology

Private Practice Oncology: Context

The U.S. is facing an impending, acute shortage of Oncologists, driven by

- Aging population
- Increased survivorship
- Aging physician workforce

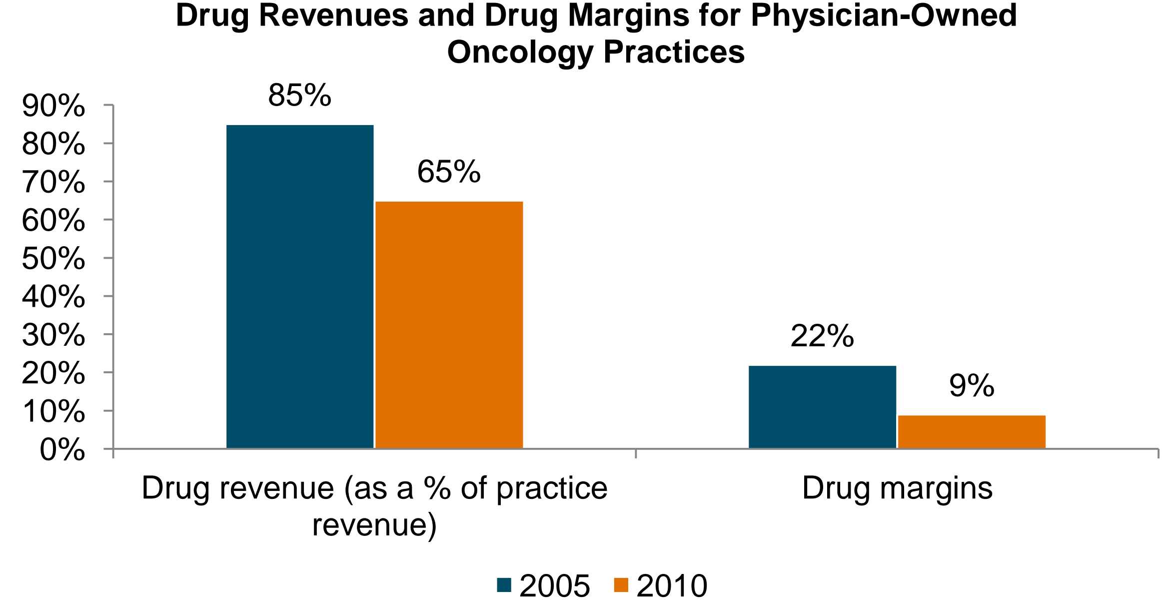


Source: American Society of Clinical Oncology and Kurt Salmon analysis

Private Practice Oncology: Context

Worse, declining reimbursement is threatening viability of existing practices

- Cancer drugs represent the largest drivers of revenues in oncology practices
  - 2003: Medicare Modernization Act reduced drug net income by ~25-35%
  - 2004-2010: Further real chemotherapy cuts of 47%
- Practice expenses continuing to rise, despite waning reimbursement



Source: American Society of Clinical Oncology, Journal of Oncology Practice, Community Oncology Alliance and Kurt Salmon analysis

Private Practice Oncology: CCC Positioning

Hospitals continue to enjoy an arbitrage opportunity in acquiring private practices

- For many specialties/services, technical fee gains in converting to hospital-based reimbursement overwhelm professional fee reductions
- Often, opportunities for incremental technical fees allow hospitals to cross-subsidize employed physician practices
- Coupled with deteriorating practice economics, these dynamics have led to the virtual collapse of private practice models in cardiology

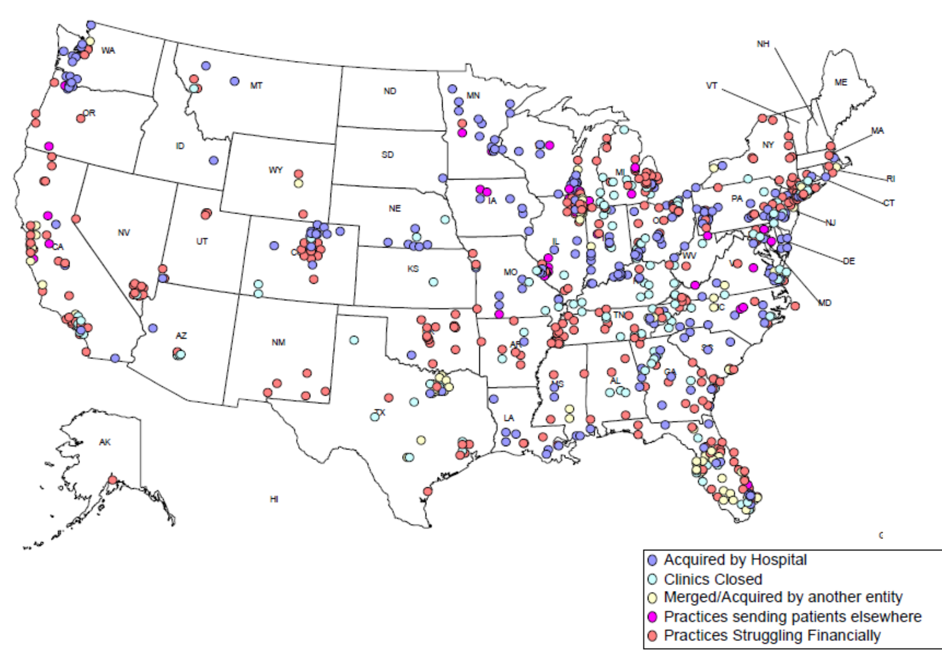
Private Practice Oncology: CCC Positioning

Oncology may be the next cardiology

- Oncology private practices are rapidly consolidating/being employed by hospitals
- ~36% of community practices were economically threatened in the past 3-4 years

315	Practices acquired by hospitals
199	Clinics closed
111	Practices merged/acquired by another entity
48	Practices sending **all** chemotherapy patients elsewhere
369	Practices struggling financially

Community Oncology Cancer Care Impact Map



Source: Community Oncology Alliance and Kurt Salmon analysis

Private Practice Oncology: CCC Positioning

These forces will provide Comprehensive/Academic Centers opportunities to “buy” community presence and further consolidate local volumes

Case Study: UVA

- Acquiring Hematology Oncology Patient Enterprises (HOPE), a private oncology practice
  - Based in Charlottesville, VA
  - Will retain four clinical locations and all physicians
  - Projected to generate $35 million in additional revenue to UVMC
  - Physicians at HOPE expect improved access to clinical trials and support UVA pursuit of CCC designation

Source: *Becker’s Hospital Review, The Daily Progress* and Kurt Salmon analysis

Private Practice Oncology: Implications

In addition, the environment is enabling community hospitals to consolidate expertise and build advanced programs

Case Study: Norton Cancer Institute

- ~20 employed oncologists
  - Hematology/Oncology
  - Radiation Oncology
  - Pediatric Radiation Oncology
  - Orthopedic Oncology
  - Neuro Oncology
- One of 14 NCI Community Cancer Centers
- Sponsored clinical trials
- Prevention, screening and survivorship programs

Source: Norton Cancer Institute Website, Kurt Salmon interviews and Kurt Salmon analysis

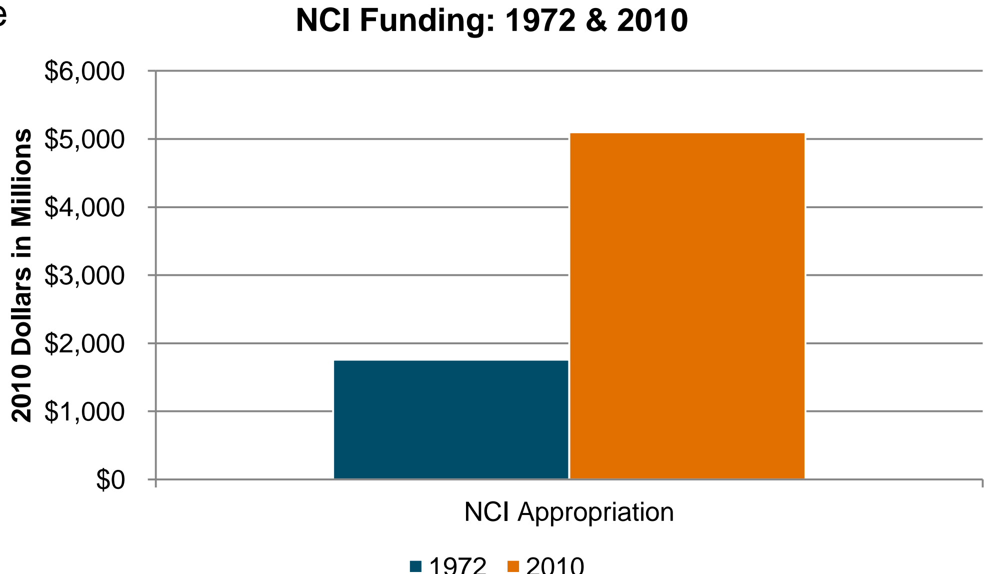
Considerations for Comprehensive Cancer Center Design

Funding Vulnerability Facing the Research Mission

Research Funding: Context

Calls to overhaul the current U.S. cancer research system

- Since Nixon declared "war on cancer" in 1971, the NCI has funded $100 billion of research, but the current system is perceived as inefficient
  - Concerns that NCI process leads researchers to apply for funding only when outcomes are predictable
  - Minimal coordination or prioritization of different clinical trials within the same disease categories
  - Only 3% of cancer patients participate in clinical trials
  - 54.2% of trials at CCCs were not able to accrue any patients
  - As many as 40% of NCI-funded late stage trials have to be shelved



Source: *New York Times, Journal of Clinical Oncology, Boston Globe*, Institute of Medicine, NCI, Bureau of Labor Statistics and Kurt Salmon analysis

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Research Funding: CCC Positioning

Perceived inefficiencies and pressure to reduce federal spending yields an unfavorable near-term outlook for cancer research funding

- Federal funding for clinical trials has been flat or declining for years
  - The Clinical Trials Cooperative Group Program, part of the NCI, has seen its funding reduced by 20% since 2002
- Efforts to cut the deficit have made budgets vulnerable
  - A pending Senate bill would cut NCI funding by $58 million
  - The Department of Defence's Congressionally Directed Medical Research Program (CDMRP) has also come under fire by opponents of federal spending

Source: American Association for Cancer Research, *Journal of the National Cancer Institute, US Medicine*, The Institute of Medicine and Kurt Salmon Analysis

Research Funding: Implications

Implications of reduced research funding

- Academics/Comprehensive Centers likely to focus on recapturing space v. building new
  - At many Centers today, space is not consistently re-assigned based on needs/funding
- New space and back office infrastructure will need to be efficient and flexible
  - Easily transferred from one PI to another
  - Easily shared by multiple PIs
- Collaboration across institutions is likely to increase
  - The NCI is already seeking efficiency and has begun consolidating its clinical trials system
  - Increased focus on clinical trials accruals/participation may require increased collaboration

Considerations for Comprehensive Cancer Center Design

Blurring of Organizational Boundaries

Organizational Boundaries: Context

Comprehensive Cancer Centers will increasingly face resource constraints

- Waning reimbursement for employed physician bases
- Cuts to federal research funding
- Reduced reimbursement/cost containment strategies from payors

Organizational Boundaries: CCC Positioning

Collaborative models emerging to mitigate resource constraints

Arm's Length → **Programmatically Integrated**

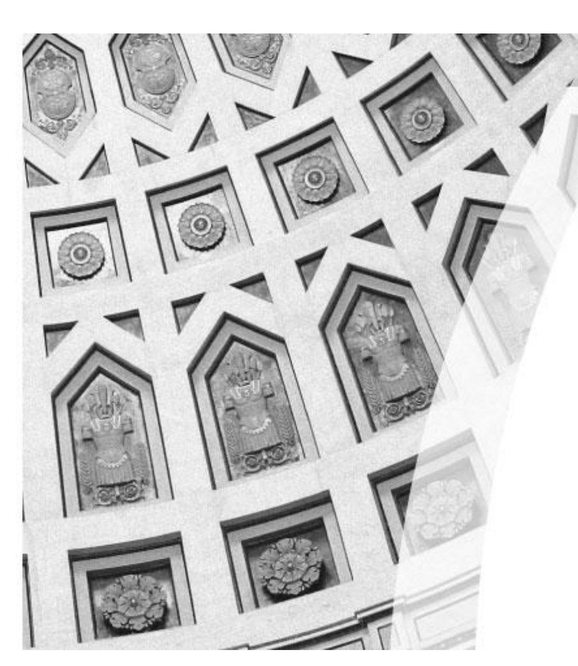
Est.	2005	2006	2011
Type	Community outreach	Hub & spoke affiliation	Program extension
Aim	Create/implement effective community-based interventions to impact cancer disparities in the Tampa area	Work with community physicians to keep patients closer to home and ensure coordinated care	Deliver an unprecedented level of cancer care to residents of AZ and the Southwest
Scope	Components • Partnerships with local non-profits • Community education • Community-based research • Survivorship support	Affiliates offered • Physician rotations • Access to research • Treatment planning • Nurse training	Banner site • MDA clinical oversight • Full implementation of MDA clinical model • Joint recruiting • Extension of Main Campus research • Connectivity to Houston

Source: Network websites, Kurt Salmon interviews and Kurt Salmon analysis

Organizational Boundaries: Implications

Implications of increased partnerships

- Scope and scale of existing partnerships is likely to expand
  - Continued, increasing resource constraints are likely to encourage further collaboration
- Planning function must cross organizations
  - Scale benefits cannot be accrued without cooperative resource allocation/investments
- Care protocols at new affiliates may change dramatically
  - Downstream implications on capacities required and achievable throughput
- Investments in connectivity will often be required
  - Data sharing is required to coordinate care, execute research and learn
  - Partners often using different systems for records management and cost accounting



Considerations for Comprehensive Cancer Center Design

Questions

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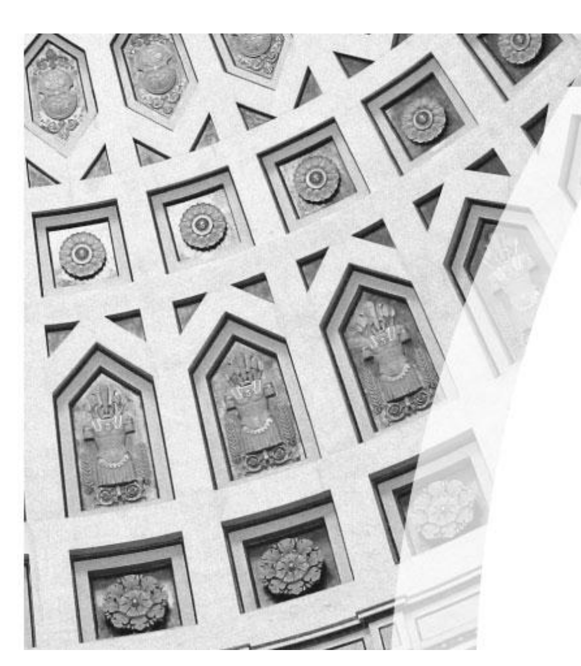

Considerations for Comprehensive Cancer Center Design

Appendices

Appendix A: Kurt Salmon Contact Information

Farzan Bharucha, Partner
farzan.bharucha@kurtsalmon.com
1355 Peachtree St. NE, Suite 900
Atlanta, GA 30309
O: (404) 892-0321 C: (404) 788-3851

Thomas Dixon, Manager
thomas.dixon@kurtsalmon.com
120 S. 6th St., Suite 1600
Minneapolis, MN 55402
O: (612) 378-1700 C: (612) 432-1107

Anne Vars, Consultant
anne.vars@kurtsalmon.com
120 S. 6th St., Suite 1600
Minneapolis, MN 55402
O: (612) 378-1700 C: (651) 485-9269

Kurt Salmon Healthcare Group, 1355 Peachtree St. NE, Suite 900
Atlanta, GA 30309
T (404) 892-0321 **F** (404) 898-9590
www.kurtsalmon.com