

VANDERBILT UNIVERSITY  
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## Patient Focused Care in a Growing, Landlocked Environment

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Vanderbilt-Ingram Comprehensive Cancer Center

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- Overview/ History
- Process
- Hurdles
- Outcome
- Lessons Learned

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## Vanderbilt University Health System

**One of the Largest, Fully Integrated University Health Systems**

- Level I Trauma & Burn Centers
- Level III Neonatal Intensive Care Unit
- Largest Transplant Center in Southeast
- National Comprehensive Cancer Center
- Adult & Pediatric Heart Surgery and Neurosurgery Centers of Excellence



**FY2010 volumes:**

- 51,874 discharges
- 1.6M ambulatory visits
- 108,000 ER visits
- 45,500 surgical operations

**16,215 staff**  
**3000 faculty (MD's, PhD's)**

**Patient Care Facilities**

- 4 Hospitals (Adult, Children, Psychiatric and Rehab)
  - 916 licensed beds (82% occupancy rate in FY10)
- The Vanderbilt Clinic
- Vanderbilt Health at One Hundred Oaks
- Williamson County Clinics and Surgery Centers

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### Vanderbilt-Ingram Cancer Center

1993 – Cancer Center formed

- Director, Dr. Hal Moses
- Combined research and clinical activities
- 1995 – National Cancer Institute designation as Clinical Cancer Center
- 2000 – National Cancer Institute designation as Comprehensive Cancer Center
- 2008 – Jennifer Pietenpol, Ph.D. - Director

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### Vanderbilt-Ingram Cancer Center - Today

FY 2011 volumes:

- 1,066 Hospital discharges
- 119,091 Ambulatory visits and procedures
- 79,065 on campus
- 32,026 off campus
- 360 staff
- 75 physicians
- 42 nurse practitioners/PA's




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### History

	<b>1988-1996</b> <b>Original Cancer Clinic</b> 10,000 patients annually 23,000 sq ft (contiguous)	Includes all service lines 14 Exam rooms 3 Procedure rooms 10 Infusion chairs
	<b>2008</b> <b>Infusion Expansion</b> 14,500 patients annually 19,000 sq ft	Serves all adult infusion pts 23 Infusion chairs/beds Combination of private/shared space
	<b>2009</b> <b>Clinic Expansion</b> 31,100 patients annually 31,000 sq ft	Excludes Hem/SCT 30 Exam rooms 4 Procedure rooms 6 Consult rooms

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### 2007 - The Imperative

- Oncology admissions accounted for 16% total VUH admissions
- Oncology net patient revenue represented 21% of total net patient revenue for VUH
- Market share is approximately 7-8% within the service area
- Assessment of VICC yields a below par score in key areas critical to attaining future success and growth
- VICC needed institutional commitment, organizational capabilities and enhanced clinical facilities to grow

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### Current Reality

- Demographics show that prevalence rates in TN will increase by 10% in top 7 cancer diagnosis over the next 5 years
- Transplants have increased 10.8% over the last 3 years
- New patients need to be seen within 5 business days
- Increasing emphasis on multi-disciplinary approach to cancer diagnosis and treatment

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### Process

**The Plan to Grow**

- The plan to grow the Cancer Center began as part of a Medical Center Clinic Master Plan developed in 2005 by KSA
- Cancer Strategic Plan developed to double volume over 5 years
- Cancer Master Plan developed to double the amount of space
  - Cancer Registration and Lab
  - Cancer Clinic
  - Cancer Infusion
  - Out Patient Transplant Unit / Stem Cell
  - Hematology Clinic
- UM Cancer Center Site visit & review of best practices at other NCI Designated Cancer Centers

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### Process

**Milestones**

- KSA Program – 2005
- Strategic Planning Market Analysis – 2005/2006
- Master Plan/Programming - 2006
- UM Cancer Center site visit - January 2007
- Design Development - 2007
- Multi Phase Construction - 2008-2012

**People**

- Patients
- Board members
- Faculty
- Staff
- Pharmacy
- Lab

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### Phasing Hurdles

- Expansion of occupied space
  - Phase I – move to temporary clinic
  - Phase II – renovation of Cancer Clinic
  - Phase III – renovation for infusion
  - Phase IV – Registration & Lab
  - Phase V – Renovation for Hematology
  - Phase IV – Renovation of Stem Cell
- Timing of expansion space availability
- Remote registration/ no clinic entry

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### Funding Hurdles

- Economy
  - Philanthropic targets
  - Capital freeze in 2009
- Cash flow requirements for non capital expenses

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### Program Hurdles

- Central Registration
- Expandable Lab
- Clinical Trials
- Additional clinical services (Thoracic, etc)

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### Registration and Lab - Outcome



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### Henry Joyce Cancer Clinic - Outcome



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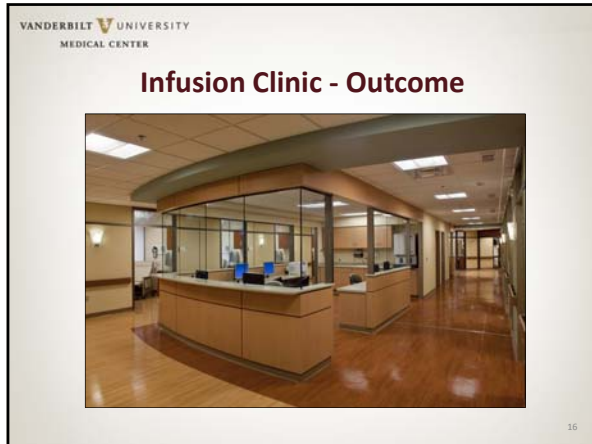
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### Infusion Area

Bigger changes things

- Difficult cross coverage
- Charge Nurses
- Lunches
- Call light system

Technology Dependencies

- Culture
- Less continuity, more independent care
- Staff and faculty don't 'know' each other

Price of innovation

- Infusion chairs
- Infusion sound system
- Planning for support **staff** growth

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### Infusion - continued

Having options creates unrealistic expectations

- Chair versus stretcher
- Window versus no window

Wall suction on only a few rooms – increasing number of patients with trachs

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### Pharmacy

Investigational Drug Storage (IDS)

- Increased space requirements
- More clearly separate IDS and standard of care

More Counter Space

- Increased volume early in day
- Computer monitors

Storage for ambient temp drugs

- Med Carousel – 24 shelves at 2 years 80% capacity

Short on office/work space

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### Cancer/Registration Areas

- Desks in main waiting area – no privacy
- Lab check-in: not large enough
- Patient restrooms – paper towel holders across room from sink – patient fall risk
- Physician/staff work areas are very noisy – more computers/phones
- No separate patient intake rooms
- Computer work stations in hallways

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### One Hundred Oaks - Infusion

- Nurses' station – not glass enclosed
- Large number of drawers/doors needing to be locked
- Electrical outlets at waist level for easier access
- Bins for waste that are enclosed and foot operated
- Lights focused on "fine motor skills areas" and dimmer for other lights
- Consideration of impact of future technology
- Location of all supplies centrally

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### Vanderbilt Breast Center – Front Desk



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## One Hundred Oaks – Breast Center

Front desk

- High counter leads to bad dynamics from patient to PSR
- No wheelchair access
- Wide open, no privacy, poor lighting

Provider rooms

- Poor use of space
- Loud
- No private phone calls/competing for communication

Dressing Room

- Larger bus station/poor lighting
- Too many dressing rooms
- No private consult area

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## Questions and Discussion

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