IOM National Cancer Policy Forum:

Ensuring Quality Cancer Care through the Oncology Workforce

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The Healthcare Provider Dilemma

“Access Denied: A Look at America’s Disenfranchised”

Nearly one in five Americans -- 56 million individuals -- are medically disenfranchised, meaning they have inadequate or no access to primary care physicians because of the shortage of such physicians.

National Association of Community Health Centers (NACHC) and the American Association of Family Physicians’ Robert Graham Center 2007
National Trends in Healthcare Turnover

• In large part, turnover rates are variable by region. Most estimates place the overall turnover rate in the healthcare sector at around 20%.

• Rate is steadily increasing as median age of workforce increases and ‘baby boomers’ enter into retirement.

• Imbalance between the supply of and demand for qualified healthcare workers.

The Need for Nurses

The U.S. faces a projected shortage of more than 1 million nurses by 2020.

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand (in Millions)</th>
<th>Supply (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.89</td>
<td>2.00</td>
</tr>
<tr>
<td>2005</td>
<td>1.94</td>
<td>2.16</td>
</tr>
<tr>
<td>2010</td>
<td>1.94</td>
<td>2.35</td>
</tr>
<tr>
<td>2015</td>
<td>1.90</td>
<td>2.57</td>
</tr>
<tr>
<td>2020</td>
<td>1.81</td>
<td>2.82</td>
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</tbody>
</table>

Source: Health Resources and Services Administration, The Washington Post
Physician Retention and Turnover Trends

• Total average rate of physician turnover was 6.7% in 2006.
• There has been a major demographic shift among physicians.
  – Now 35% female
  – Women comprise 50% of new medical school graduates
  – These trends will influence that way we recruit and retain physicians
• Retention efforts should address workforce trends.
  – Cultural fit
  – Relocation to better community
  – Family plays a key role in physician turnover
  – Work schedule
Medical Oncology Retention and Turnover Trends

• Physicians
  – By the year 2020, the U.S. could face a shortage of as many as 4,080 medical oncologists. – American Society of Clinical Oncology (ASCO)

• Extenders and other providers
  – The magnitude of the shortage is not limited to physicians. This issue will impact “...the entire cancer care delivery team, from ambulance drivers to nutritionists.” Ramifications will be felt across the entire continuum of cancer care. – Michael Goldstein, M.D. chair of ASCO’s Workforce in Oncology Task Force
RN Retention and Turnover Trends

• In September 2007, Dr. Christine T. Kovner and colleagues found that 13% of newly licensed RNs had changed principal jobs after one year, and 37% reported that they felt ready to change jobs.¹

• A July 2007 report found that though the average nurse turnover rate in hospitals was 8.4%, the average voluntary turnover for first-year nurses was 27.1%.²

• In March 2005, the results of a national poll of 138 health care recruiters found that the average RN turnover rate was 13.9% and the vacancy rate was 16.1%.³
Call to Action

• The type of care models we develop will drive the retention strategies required to further advance improved outcomes across the cancer trajectory.
  – Early prevention and detection
  – Diagnostic work-up
  – Treatment
  – Survivorship care
  – Palliative care
Responding to the Needs of a Community:  
*Duke Oncology Network*

- The Duke Oncology Network (DON) capitalizes on Duke’s strengths in Oncology and provides one collaborative group to bring these strengths into local community practices.
  
  - Affiliations with the DON can have one of three primary focuses:
    
    1. Clinical Professional Services and Oncology Mgmt. Affiliation
    2. Research Affiliation
    3. Program Development Affiliation
Community Affiliations:  
*Duke Oncology Network*

1. **Clinical Professional Services and Oncology Mgmt. Affiliation**
   - Hospitals within close geographic proximity to Durham, NC. Duke Oncology Network and the community hospital partner to develop and manage a clinical Oncology program, whether medical Oncology, radiation Oncology, or both. Clinics are staffed by Duke University Medical Center physicians, physician extenders, and fellows.

2. **Research Affiliation**
   - Quality patient care and clinical operations are in place. A Research Affiliation with the Duke Oncology Network offers assistance with development and ongoing management of a quality clinical trials program, as well as access to in-house Duke studies, national cooperative group trials, pharmaceutical industry studies, and collaborative research.

3. **Program Development Affiliation**
   - Hospitals not within ready geographic proximity to Durham, NC that require development, growth, and expansion assistance. This affiliation combines consultative management and administrative functions outlined in the Management Affiliation, clinical relationships between community-based providers and faculty/staff at Duke, and clinical trials development and management outlined in the Research Affiliation.
Duke Oncology Network:
Affiliate Sites of Service

- Oncology Research Programs
- Bone Marrow Transplant Programs
- Oncology Program Development
- CALGB Affiliates
- Clinical Medical Oncology Practices
- Clinical Radiation Oncology Clinics
- Consultative Clinics
### Duke University Hospital : Focused Workforce Strategy

<table>
<thead>
<tr>
<th>Anesthesia Techs</th>
<th>Nursing</th>
<th>Physician Assistants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Sterile Processing Techs</td>
<td>Clinical Nurses</td>
<td>Respiratory Care Practitioners</td>
</tr>
<tr>
<td>Imaging Techs (all specialties)</td>
<td>Nurse Managers</td>
<td>Physical Therapists</td>
</tr>
<tr>
<td>Clinical Pharmacists</td>
<td>Nurse Practitioners</td>
<td>Medical Record Coders</td>
</tr>
<tr>
<td>Pharmacy Techs</td>
<td>Transplant Coordinators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Certified Registered Nurse Anesthetists</td>
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</tbody>
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Recruitment, retention and employee development strategies much remain creative, broad and flexible – focusing on the needs of both new and long-term staff. In addition, it must address the various aspects of a multi-generational diverse workforce.
Duke University Hospital: 
*Workforce Development Initiatives*

- Healthcare Career Transition Program
  - GED basic education
  - Basic healthcare prep
    - Math
    - Science
    - Writing
  - Transitions to specialty care
    - New to Neurology orientation program for nurses
    - Transition to mid-level practitioners
    - Specialty training with radiologic classes
  - Retiree’s Institute

- Leadership development
  - Manager/Leader development
  - Succession planning
Duke University Hospital: *Workforce Recruitment/Retention Initiatives*

- Expansion of nursing expo as a recruitment tool to include allied health classifications
- Recruitment website enhancement
- Employer assisted housing options
- Conversion of temp and agency employees
- Expansion of loan repayment program for allied health staff
- Duke Health Career Development Institute
  - Incumbent worker development
  - Speakers bureau for elementary and middle school students
  - Expansion of summer camp program in partnership with AHEC
  - ‘Pipeline Development’: partnership with City of Medicine Academy
Duke University Hospital’s Experience: 
*Focus on the Work Culture*

1. Defining the organizational model
2. Organizational on boarding and startup resources
3. Orientation, enculturation and mentoring
4. The role of leadership: setting expectations, giving feedback, providing recognition, and listening
Challenges of the Model: “Community vs. Academic” Objectives

The Center Model will organize people, resources, and activities around the science and delivery of a continuum of Oncology services across all DUHS entities through a collaborative, integrated, and evidence-based multidisciplinary approach in order to achieve the highest level of excellence, innovation, and leadership in patient care, research, and education.
Oncology Workforce: Retention

- Retirement of “knowledge workers” and job re-sculpting
  - Modified primary nursing model in ambulatory setting
    - RNs paired with 1-3 physicians in a disease based model
      - Direct patient care
      - Patient education
      - Symptom management
      - Counseling and support
      - Centralized point of contact for a care area
    - RNs rotate between disease team and triage role
  - Exploring inpatient and outpatient rotation options
    - Bone marrow transplant
    - Inpatient units and outpatient infusion area
  - Nurse practitioner and physician assistant clinic models
    - Follow-up care
    - Symptom management
    - Survivorship
Oncology Workforce: Retention

- On boarding
  - Physician orientation website
  - Central orientation vs. oncology nursing orientation
  - Nurse residency program (~10 yrs), currently integrating UHC residency components
  - Role of clinical nurse specialist
  - Clinical ladder

- Job sharing

- Alignment of performance targets
Workforce Development: Opportunities for Advancement

“Clinical Ladder”

- **CNI**
  - New grads: after 6-18 months, advanced to the CNII level by their Nurse Manager if meeting the expectations of the CNII role.

- **CNII**
  - Must advance to a CNII to continue employment at Duke.

- **CNIII / CNIV**
  - Advancement requires submission of a professional portfolio to a health system central review board.
    - Support by the manager and peers regarding leadership at the unit level, descriptions of leadership activities and exemplars of practice.
    - The exemplars are focused on an individual patient for CNIII and activities that lead to changes in measurable outcomes for any quadrant of the balanced scorecard (clinical, customer service, work culture or financial).
    - Three tracks to pursue (administrative, clinical or educational).
Workforce Development: 
*Opportunities for Advancement*

“Clinical Ladder”

<table>
<thead>
<tr>
<th></th>
<th>Inpatient</th>
<th>Outpatient</th>
<th>Total</th>
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<tbody>
<tr>
<td>CNII</td>
<td>26</td>
<td>7</td>
<td>33</td>
</tr>
<tr>
<td>CNIII</td>
<td>12</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>20</td>
<td>58</td>
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Workforce Development:  
*Professional Advancement*

- Grand rounds
- Journal club
- Oncology certification review course
- Mentored article writing
- Abstract assistance program
- Research committee
Workforce Development: 
*Developing Better Leaders*

- Guide to Managing at Duke
- Guide to Leading at Duke
- Mentorship opportunities
- Grinnell Leadership
- Physician Leadership Institute (early 2009)
- Attendance at ONS Leadership Development Institute
Resources: 
*Rewards & Recognition*

- Awards subcommittee of (PDM)
- Duke Strength, Hope and Caring Award
- Duke Friends of Nursing
- Oncology Nursing Society and Foundation
- North Carolina Great 100
- American Cancer Society master's and doctoral scholarships
The Business Case:  
*Investments in Retention*

- No clear consensus on how to define the ‘cost of turnover’, which may explain the variability in turnover costs reported.\(^1\)
  - Direct vs. Indirect
  - Visible vs. Invisible
  - Pre-hire vs. Post-hire

- “It costs $50,000 to $100,000 to replace one nurse - and that’s not counting salary.” *(Patricia Rutherford, RN, MS, Vice President at the Institute for Healthcare Improvement)*
  

- A stable workforce is essential to organizational success.
  - Creates a safe and high-quality health care environment
  - Limited financial resources can be better utilized (reinvest in infrastructure, reward employees, training, technology, etc…)
Duke University Hospital: Overall - Low Turnover Rates
Duke University Hospital:
*Total RN - Low Turnover Rates*
Duke University Hospital:
*Oncology RN - Low Turnover Rates*

![Graph showing Oncology - Percent Terminations: RN Hires Within 1 Year](image)

- **YTD Target**: Blue line
- **Target**: Red line
- **YTD Actual**: Orange line
- **Actual**: Green line

*Source: DukeMedicine*
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