The Other Side of the Bed: When Nurses Train Doctors

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The Other Side of the Bed

- Resurrection of a program implemented during the late 80s and early 90s

- End-of-first-year medical students paid to work over the summer as health techs on inpatient units

- Opportunity for medical students to engage in intensive patient care experience prior to their first clinical rotations

- Direct exposure of medical students to the nurse’s professional responsibilities, environment and experience
Challenges in the Hospital Setting

- Decline over past 30 years in physician-nurse rounds, communication, and interactions
- Inadequate understanding by physicians and nurses of counterpart roles, responsibilities
- Need for effective multidisciplinary treatment teams to understand and accept the contributions of each discipline
Challenges in Medical Education

- Rapidly expanding, complex base of technical knowledge underpinning medical care
- Increased patient documentation requirements
- Shorter hospital lengths of stay
- Increased availability of ancillary services
- Decreased physician time with patients
- Decreased physician skills for basic patient care
Challenges in Medical Student Finances

- Rising cost of medical student tuition and living expenses; increasing student debt
- Need for paid work experience during summer of first year of medical school
Challenges in Summer Inpatient Staffing

- Shortage of nurses and health technicians
- Summer vacations exacerbate existing shortages
Program Goals: Transforming Care at the Bedside

- Enhanced physician understanding and appreciation of the role of nurses in patient care
- More and better physician-nurse interaction in patient care teams
- Increased quality of physician-patient interactions
Program Goals:
Enhanced Patient Care Skills in Physicians

- More competent and humane physician-patient interactions
- Increase technical skills:
  - Basic patient care and handling
  - Phlebotomy and IVs
  - Respiratory care
  - Vitals, I&O, hygiene, catheters, lines, and wound care
Program Goals: Enhanced Nurse Staffing During Summer Vacations

- 22 medical students hired as health technicians (GS6)
- Single ward assignments for nine summer weeks
- Learning while working
Participants: 2009

- 22 end-of-first-year medical students
  - 16 Boston University School of Medicine
  - 6 Harvard Medical School
- 12 male; 10 female
- Median age 24 (range 20-36)
- Family member in nursing
  - Mother 4
  - Grandmother 2
Participants: 2010

- 36 applicants including 4 from around the country
- 23 selected
  - 19 Boston University School of Medicine
  - 2 Harvard Medical School
  - 1 Wake Forest
  - 1 U Wisconsin
# Premedical Clinical Experience

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital volunteer</td>
<td>17</td>
</tr>
<tr>
<td>Laboratory technician</td>
<td>4</td>
</tr>
<tr>
<td>Miscellaneous clinical research</td>
<td>4</td>
</tr>
<tr>
<td>Patient transport</td>
<td>4</td>
</tr>
<tr>
<td>EMT</td>
<td>3</td>
</tr>
<tr>
<td>Nursing care assistant</td>
<td>2</td>
</tr>
<tr>
<td>Medical interpreter</td>
<td>1</td>
</tr>
<tr>
<td>Home health aid</td>
<td>1</td>
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<tr>
<td>Anesthesia tech</td>
<td>1</td>
</tr>
<tr>
<td>Hospice care</td>
<td>1</td>
</tr>
<tr>
<td>Home women substance abuse</td>
<td>1</td>
</tr>
<tr>
<td>Medical assistant free clinic</td>
<td>1</td>
</tr>
</tbody>
</table>
Program Format: 2009

- Program announcement in February
- Interviews and selection in April
- Three-day orientation to basic nursing skills
- Nine-week assignments to a single inpatient unit with a single nurse mentor
- Five weekly noon lectures
- Three single-day rotations
  - Respiratory Care
  - EKG
  - IV/phlebotomy
Program Format: 2010

- Program announcement in December
- Interviews and selection in February
- Three-day orientation to basic nursing skills
- Eight-week assignments to a single inpatient unit with a single nurse mentor.
- Elective time on a different unit for the last two weeks
- Five weekly noon lectures
- Three single-day rotations
  - Respiratory Care
  - EKG/cath lab/ICU/OR/prosthetics
  - IV/phlebotomy
## Orientation: Day 1

<table>
<thead>
<tr>
<th>Welcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources processing</td>
</tr>
<tr>
<td>Emergency procedures</td>
</tr>
<tr>
<td>Computer training</td>
</tr>
<tr>
<td>Distribution of ID, scrubs, facilities tour</td>
</tr>
<tr>
<td>Pain management</td>
</tr>
<tr>
<td>Use of text page</td>
</tr>
<tr>
<td>Orientation: Day 2</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Infection control</td>
</tr>
<tr>
<td>Review of health tech role</td>
</tr>
<tr>
<td>Policy review</td>
</tr>
<tr>
<td><strong>All-employee picnic</strong></td>
</tr>
<tr>
<td>Critical thinking</td>
</tr>
<tr>
<td>Use of restraints</td>
</tr>
<tr>
<td>Complete survey of skills and attitudes</td>
</tr>
</tbody>
</table>
### Orientation: Day 3

<table>
<thead>
<tr>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory care</td>
</tr>
<tr>
<td>Hand hygiene</td>
</tr>
<tr>
<td>Spinal cord injury patient</td>
</tr>
<tr>
<td>Wounds</td>
</tr>
<tr>
<td>Foley care</td>
</tr>
<tr>
<td>BVI Bladder Scan</td>
</tr>
<tr>
<td>Danniflex CPM</td>
</tr>
<tr>
<td>GE Critikon Vital Signs Monitor</td>
</tr>
<tr>
<td>Ross Patrol Feeding Pump</td>
</tr>
<tr>
<td>ALP Athrombic Pump</td>
</tr>
<tr>
<td>Liko Golvo (patient lift device)</td>
</tr>
<tr>
<td>Topic</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| The VA Healthcare System                                   | Michael Kussman, M.D.  
Under Secretary for Health  
Department Veterans Affairs  
Michael Charness, M.D., Chief of Staff |
| Patient Safety                                             | Pam Bellino, M.S., O.T.  
Director Patient Safety |
| Physician-Nurse Collaboration                              | Cecilia McVey, BSN, MHA, CNA; Nurse Executive  
Michael Charness, M.D. |
| Communication with Medical Team                            | James Doelling, R.N., M.S.N.                                           |
| Interdisciplinary Approach to Spinal Cord Injury and Disability | Sunil Sabharwal, M.D.;  
Chief Spinal Cord Injury Service |
| What to Say to a Dying Patient                             | Michal Skarf, M.D.  
Director, Palliative Care |
# Unit Assignments: 2009

<table>
<thead>
<tr>
<th>Department</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Medicine/Telemetry (3 units)</td>
<td>7</td>
</tr>
<tr>
<td>Surgery</td>
<td>3</td>
</tr>
<tr>
<td>Surgery/Neurology/Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>Spinal Cord Injury</td>
<td>2</td>
</tr>
<tr>
<td>Emergency Department</td>
<td>3</td>
</tr>
<tr>
<td>Progressive Care (MICU/SICU step-down)</td>
<td>2</td>
</tr>
<tr>
<td>Medical Intensive Care</td>
<td>1</td>
</tr>
<tr>
<td>Coronary Care</td>
<td>1</td>
</tr>
<tr>
<td>Surgical Intensive Care</td>
<td>1</td>
</tr>
</tbody>
</table>
Comfort Level: Catheters and Trachs

- Suctioning a patient that does not have a tracheostomy tube
- Suctioning a tracheostomy tube
- Changing a tracheostomy tube
- Removing a urinary catheter
- Flushing a urinary catheter
- Urinary catheterization, female
- Urinary catheterization, male

(pre) Very uncomfortable to (post) Very comfortable
Comfort Level: Phlebotomy and IVs

- Obtaining a pulse
- Obtaining a temperature
- Obtaining a blood pressure
- Adjusting a flow rate of an intravenous medication
- Flushing an IV
- Starting an IV
- Drawing blood

Very uncomfortable - Very comfortable
Comfort Level: Patient Care

- Positioning quadriplegic patients
- Positioning paraplegic patients
- Performing an exam for pressure ulcers
- Performing dressing changes
- Helping a patient transfer to a commode
- Placing a patient on a bed pan and removing the bed pan
- Moving patients from bed to chair
- Feeding a patient who is flat in bed
- Making a hospital bed with a patient in it
Medical Student Comments

I've had a great experience and I will be a huge advocate for next year’s students. Thank you.

This program has been amazing! I am very pleased with it and hope it continues for many years!

I had a great experience. I learned a lot from the patients, doctors, and especially the nurses. The SICU was a steep learning curve, but within a week, I felt comfortable enough in the unit.

Everything was pretty much awesome, no complaints!
Being on AG (Medicine), I was exposed to a vast variety of things, my experience there was amazing and I am grateful for having been provided with such an opportunity.

Having an assignment was useful. I felt very well trained on A1 and the nurses were always showing us new stuff and trying to teach us.

The ER staff was extremely welcoming, instructive and fun to work with. I learned a ton, and everyone was more than willing to go out of their way to make sure that I had an enjoyable learning experience.

I found 2 South to be a great floor. They had us shadow both nurses and nursing assistants at first and the transition to being more independent came naturally.
Medical Student Subliminal Insights into the Challenges of Nursing

..the last two weeks were so overwhelmingly busy on my floor that I didn't even look at my patients' medical charts to learn about their conditions, I just ran from bed to bed trying to keep up with the needs.

I chose a medicine floor because I thought it would provide the most variety of medical conditions so that I would get a lot of exposure and learn more. Was I wrong! In the end, I never got to practice the more technical skills -- doing IV's and EKG's, working with tracheotomies and nasogastric tubes, working the IV infusion pumps, etc. I got to be an expert at cleaning up incontinent patients, but that is the only skill I really practiced on a daily basis.

Assignments were done with consideration of a focus on education, but on some days it just felt as if the toughest patients were given to my care. I enjoyed the challenge but sometimes struggled with feelings of being overwhelmed. -this psychological effect was not specific to myself as on other days other nurses with heavy loads also exhibited burn out and psychological strain throughout the day even up to the point of tears...

I enjoyed the blocked off time for food and education. Regardless of the presentation, they were all informative and well received breaks to the long days.
Medical Student Insights into the Relationships between MDs and Nurses

I shadowed one of the physicians on A2 the day after my last day of work. It answered questions that I had about the relationship between MD's and nurses. I can see that more communication is necessary between the two. At first, I was unclear about the responsibilities that the MD's have that prevent them from being as helpful at the bedside as nurses would wish them to be. After seeing both sides of the spectrum I recognize that it is a delicate balance of professionalism and manpower. I suggest that a day be reserved for students to shadow a physician on their floor or another floor of their preference so that they can come full circle at the end of the experience.
Special Thanks

Charles Kerr, R.N. and Maureen Levesque, R.N.
Program Coordinators

Judith Vessey, RN, Ph.D.;
Lelia Holden Carroll Professor of Nursing;
Boston College
Survey Analysis
The program was featured on WCVB ABC evening news on July 15, 2009.

http://www.thebostonchannel.com/health/20062212/detail.html

To watch the video clip:

THE OTHER SIDE OF THE BED at Veterans Affairs Boston Healthcare System

Program Directors: Michael E. Charness, M.D., Chief of Staff
Cecilia McVey, MSN, MHA, CAN, Associate Director for Nursing/Patient Care Services
email: medstudenthealthtech@va.gov

Program is designed to give students a paid opportunity to participate directly and intensively in the care of veteran patients during the summer after their first year of medical school. Accepted students are hired for the summer as health technicians at the VA Boston Healthcare System. Students undergo four days of intensive orientation and training to learn skills and responsibilities of a health tech on a nursing unit. They are assigned to a nurse mentor on the unit of their choice at the West Roxbury Campus

- Medical
- Surgical
- spinal cord injury,
- medical intensive care,
- coronary care
- surgical intensive care
- progressive care
- emergency

During their two-month service, medical student-health techs engage in direct patient care, and learn a multitude of skills:

- patient assessment
- determination of vital signs
- patient hygiene & feeding
- repositioning and wound care
- placement and monitoring of catheters, IV lines and feeding tubes
- suctioning and respiratory care and care of tracheostomies
- blood drawing
- recording of EKGs

Students attend weekly lectures about a wide array of practical topics such as how to talk to dying patients, physician-nurse collaboration, and patient safety. Upon completion of this program, students will increase their comfort level in direct patient care, learn valuable skills that are not taught directly in medical school, and gain an increased appreciation of the important role that nurses play as part of a multidisciplinary healthcare team.