St. Michael’s Hospital Emergency
FAST TRACK

Mary Dimeo RN(EC) Adult
St. Michael’s Hospital Emergency Department
Toronto, Ontario
ER NURSES HELP PATIENTS GET SEEN SOONER

Mary Dimeo is a nurse practitioner who works in a dedicated Fast Track area of St. Michael’s Hospital’s Emergency department. Fast Track, which is supported by donor Marjorie Waters, is staffed by two nurse practitioners.

“Nurse practitioners are independent nurses who can use their knowledge and skills to provide timely and effective care to patients,” says Ella Farris, executive vice president, Programs, and chief nursing executive. “They help direct people with minor injuries and illnesses through the system faster, removing stress on the system, and importantly improving patients’ experience.”

This area is also proving to be an effective wait-time strategy. “With the Fast Track area, we are now able to double the number of patients we can see,” says Mary. “and the majority can be treated within one hour.”

“Offload nurses” like Annette Garland are also speeding up care. Annette is a registered nurse who meets the emergency team at the ambulance bay to evaluate an incoming patient’s condition and prioritize his or her care. This means quicker attention and care, while freeing up paramedics to answer other emergency calls.

Mary Dimeo (left) treats a patient in St. Michael’s Fast Track system. Mary, and fellow RN Annette Garland, showed the Ontario Minister of Health during a recent visit to St. Michael’s how they are improving patient wait times and care in the Emergency department.
Presentation Overview

- Provide a brief history of St. Michael’s Hospital and its Mission and Values
- Describe the distinguishing attributes of St. Michael’s Hospital Emergency Department
- Explain how things work in an Emergency Department
- Detail who Nurse Practitioners are and what they do
- Outline the driving forces for a change in care in the ED
- Discuss Ontario Emergency Fast Tracks
- Describe St. Michael’s Hospital Fast Track vis-à-vis planning, implementation, and evaluation
St. Michael’s Hospital

- Founded 1892
- Catholic Teaching Hospital in downtown Toronto
- In 2008 named one of Greater Toronto’s Top Employers
- In 2009 honoured as best employer for New Canadians
- Specializes in
  ... Trauma + Neurosurgery
  ... Coronary Care
  ... Cancer Care
  ... Care of our vulnerable populations…Inner City Health
St. Michael’s Hospital Mission & Values

- Human Dignity
- Excellence
- Compassion
- Social Responsibility
- Community of Service
- Pride of Achievement
## St. Michael’s Hospital Mission & Values

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>SMH PHYSICIANS VOTING AFFIRMATIVELY</th>
<th>DIFFERENCE FROM NATIONAL AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe the hospital is great to work for</td>
<td>56.4%</td>
<td>+26%</td>
</tr>
<tr>
<td>I am willing to put in more effort than expected</td>
<td>64.5%</td>
<td>+19%</td>
</tr>
<tr>
<td>I am proud to be part of the hospital</td>
<td>70.4%</td>
<td>+30%</td>
</tr>
<tr>
<td>The hospital and I share similar values</td>
<td>62.4%</td>
<td>+28%</td>
</tr>
<tr>
<td>The hospital inspires the best in me</td>
<td>51.5%</td>
<td>+26%</td>
</tr>
<tr>
<td>I am glad to have chosen the hospital over others</td>
<td>61.8%</td>
<td>+24.4%</td>
</tr>
<tr>
<td>I care about the fate of the hospital</td>
<td>51.3%</td>
<td>+25.1%</td>
</tr>
</tbody>
</table>
St. Michael’s Hospital Emergency Department

- Inner City population
- Annual Visits
- Daily Visits
- Weekly Volume Pattern
- Daily Volume Pattern
- Regional Stroke Centre
- Regional Trauma Centre
- Pregnant Trauma Specialists
- Quaternary Neurosurgery Referrals
- Rotary Transition Centre
<table>
<thead>
<tr>
<th>CTAS Score</th>
<th>Time to Nurse</th>
<th>Time to Physician</th>
<th>Proportion of SMH ED Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Immediate</td>
<td>Immediate</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>2</td>
<td>Immediate</td>
<td>15 minutes</td>
<td>20-25%</td>
</tr>
<tr>
<td>3</td>
<td>30 minutes</td>
<td>30 minutes</td>
<td>40-45%</td>
</tr>
<tr>
<td>4</td>
<td>60 minutes</td>
<td>60 minutes</td>
<td>25-30%</td>
</tr>
<tr>
<td>5</td>
<td>120 minutes</td>
<td>120 minutes</td>
<td>5-7%</td>
</tr>
</tbody>
</table>
St. Michael’s Hospital Emergency Department

- Triage
- Trauma Room
- Major
- Intermediate
- Minor
- Fast Track
St. Michael’s Hospital Emergency Physical Lay-out
History of NPs in St. Michael’s Hospital Emergency Department

✓ First NP hired in 2001
✓ Double NP coverage since 2006
✓ Fast Track established in April 2008
✓ Third NP hired - starting July 2010
A Nurse Practitioner is a Registered Nurse with additional education and experience who is able to order and interpret diagnostic tests, communicate diagnoses, prescribe drugs and perform specific procedures.
Nurse Practitioners in Ontario

<table>
<thead>
<tr>
<th></th>
<th>RN(EC)Adult/ Pediatric</th>
<th>RN(EC)Primary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Previously known as</strong></td>
<td><strong>Acute Care Nurse Practitioner</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Scope of practice** | Medical directives transitioning into the same 3 additional controlled acts of the Primary RN(EC) | 3 additional controlled acts under Ontario’s RHPA and the Nurses Act  
- communicate a diagnosis;  
- prescribe drugs from a limited list;  
- order forms of energy, such as ultrasounds |
| **Provincial Licensing exam** | Yes | Yes |
| **Educational preparation** | Masters degree | BScN + PHCNP program transitioning into Masters degree |
| **Usual practice setting** | Acute care setting i.e. hospital | Primary care setting i.e. community |
## Nurse Practitioners in Ontario

<table>
<thead>
<tr>
<th>Patient Population</th>
<th>RN(EC) Adult/Pediatric</th>
<th>RN(EC) Primary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acutely ill</td>
<td></td>
<td>Well, stable chronic and complex conditions</td>
</tr>
<tr>
<td>Unpredictable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complex</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nurse Practitioners in Ontario

- NPs in Ontario: 1000 RN(EC) Primary + ~500 RN(EC) Adult + Pediatric
- Most GTA hospitals have 30+ RN(EC) Adult
- At SMH, we have 30-35 Adult Nurse Practitioners, working in a multitude of areas including diabetes, nephrology, trauma, ICU, cardiology, CVICU, NICU, CF, pain service, RGP, wound care, psychiatry
Impetus for Change in Care Delivery

- NP Role Delineation
- Department Needs Assessment
  - Majority of daily volume is Minor, CTAS 3-5
  - Continuity of care
  - Consistency of applying clinical guidelines
- Job Satisfaction
Planning for and Developing St. Michael’s Hospital Fast Track

• Literature Review
• Site Visits
• Departmental Review
  – Needs assessment
  – Added value
# Fast Track Triage Criteria

<table>
<thead>
<tr>
<th>Health System</th>
<th>Patient Presentation (*)Criteria for NP care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENT</strong></td>
<td>Ear pain *no dizziness, no vertigo</td>
</tr>
<tr>
<td></td>
<td>Ear FB</td>
</tr>
<tr>
<td></td>
<td>Impacted cerumen</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>Burns * &lt;10% BSA</td>
</tr>
<tr>
<td><strong>General + Minor</strong></td>
<td>Abnormal results lab/radiology – well pt.</td>
</tr>
<tr>
<td></td>
<td>Extremity swelling/infection</td>
</tr>
<tr>
<td></td>
<td>Minor assault</td>
</tr>
<tr>
<td></td>
<td>wound r/a</td>
</tr>
<tr>
<td></td>
<td>Needlestick/body fluid exposure</td>
</tr>
<tr>
<td><strong>GU/Perineal</strong></td>
<td>Dysuria/possible UTI</td>
</tr>
<tr>
<td></td>
<td>Labial/external vaginal complaints</td>
</tr>
<tr>
<td><strong>Gyn/Ob</strong></td>
<td>FB vagina</td>
</tr>
<tr>
<td></td>
<td>Labial/external vaginal complaints</td>
</tr>
<tr>
<td></td>
<td>Vaginal discharge</td>
</tr>
<tr>
<td><strong>Infectious Disease</strong></td>
<td>Cold + flu symptoms – no fever</td>
</tr>
<tr>
<td></td>
<td>Cough – no fever</td>
</tr>
<tr>
<td></td>
<td>Sore throat *no stridor, no drooling</td>
</tr>
<tr>
<td><strong>MSK</strong></td>
<td>Acute extremity injuries *no chronic pain, no deformity, no neurovascular compromise</td>
</tr>
<tr>
<td></td>
<td>Acute minor back strain *able to ambulate and sit in chair</td>
</tr>
<tr>
<td></td>
<td>Animal or human bite *first day of bite only</td>
</tr>
<tr>
<td></td>
<td>Subungual hematoma *&lt; 50% nailbed hematoma</td>
</tr>
<tr>
<td><strong>Respiratory</strong></td>
<td>Cold/flu symptoms – no fever</td>
</tr>
<tr>
<td></td>
<td>Cough – no fever</td>
</tr>
<tr>
<td></td>
<td>Difficulty swallowing/dysphagia/sore throat *no stridor, no drooling</td>
</tr>
<tr>
<td><strong>Skin Complaints</strong></td>
<td>Abrasions</td>
</tr>
<tr>
<td></td>
<td>Abscess</td>
</tr>
<tr>
<td></td>
<td>Animal or human bite * first day of bite only</td>
</tr>
<tr>
<td></td>
<td>Burns * &lt;10% BSA</td>
</tr>
<tr>
<td></td>
<td>Fingernail/toenail complaints</td>
</tr>
<tr>
<td></td>
<td>Laceration/puncture *no deep lacerations</td>
</tr>
<tr>
<td></td>
<td>Needlestick/body fluid exposure</td>
</tr>
<tr>
<td></td>
<td>Post-op wound complaints</td>
</tr>
<tr>
<td></td>
<td>Subungual hematoma *&lt;50% nailbed hematoma</td>
</tr>
</tbody>
</table>
Driving Forces for Maintaining Fast Track

MOHLTC Emergency Wait Time Strategies

Targets
- Minor/uncomplicated conditions; maximum ED LOS 4 hours. Starting point: ED LOS 4.6 hours
- Complex conditions +/- admission; maximum ED LOS 8 hours. Starting point: ED LOS 13.5 hours

Means of meeting those goals

Pay for performance funding
- $7.5 million for ER Process Improvements
- $6.5 million to enhance community services
- $5 million for off-load nurses
- $4.1 million to trial Physician Assistants
Evaluation of St. Michael’s Hospital
Emergency Fast Track

Outcome measurements

- Number of Patients Seen
- Time to being seen
- Length of Stay
- Patient Satisfaction
- Colleague Satisfaction
- Meeting MOHLTC Targets
### Number of Patients Being Seen by NP with Old Model Versus Fast Track Model

<table>
<thead>
<tr>
<th></th>
<th>May 2007</th>
<th>May 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Patients Seen</td>
<td>Average Length of Stay (hrs)</td>
<td>Number of Patients Seen</td>
</tr>
<tr>
<td>Resident</td>
<td>255</td>
<td>6.99</td>
</tr>
<tr>
<td>Emergency Physician</td>
<td>3,761</td>
<td>6.29</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>214</td>
<td>3.90</td>
</tr>
<tr>
<td>Trauma</td>
<td>47</td>
<td>2.62</td>
</tr>
<tr>
<td>Direct</td>
<td>171</td>
<td>6.85</td>
</tr>
</tbody>
</table>
Number of Patients Seen

Average per Month
NP 346
MD 4218

St. Michael’s
Inspired Care. Inspiring Science.
**Time to Being Seen**

Average in Minutes
NP 45
MD 111

**Time in Minutes**

**NP**

**MD**

**Time to Being Seen**

St. Michael's
Inspired Care. Inspiring Science.
Average Length of Stay (LOS)

Average LOS in Hours
NP 1.8
MD 5.6

Length of Stay

Time in Hours

January
February
March
April
May
June
July
August
September
October
November
December
2009

NP
MD
Patient Satisfaction Survey

1) How thoroughly did the NP ask about your symptoms and your health concerns? 97% rated excellent or very good

2) How well did the NP listen to what you had to say? 97% rated excellent or very good

3) How well did the NP put you at ease during your physical examination? 100% rated excellent or very good

4) How much did the NP involve you in decisions about your care? 83% rated excellent or very good

5) How well did the NP explain your problems or any treatment that you need? 90% rated excellent or very good

6) The amount of time the NP spent with you today? 86% rated excellent or very good
Patient Satisfaction Survey

1) I feel I understand my health problems or illness more than I did before my visit. 80% rated as strongly agree or agree, 20% n/a

2) I feel I am able to cope with my problems or illness more than I did before my visit. 77% rated as strongly agree or agree, 20% n/a

3) I felt the NP understood my health concerns. 97% rated as strongly agree or agree, 3% n/a

4) I still want to seek further care for my health concern(s). 77% strongly disagree or disagree, 20% n/a

5) Overall I am satisfied with the health care I receive today. 97% strongly agree or agree
Colleague Satisfaction Survey

1) I feel comfortable when the NP is the first-line practitioner for the patients 93% strongly agree or agree, 7% undecided

2) I believe that the NP provides safe quality of care 100% strongly agree or agree

3) I believe that the NP is effective in planning the care and treatment goals for the patients 100% strongly agree or agree
4) I believe that the NP offers acceptable technical quality in implementing procedures. **86% strongly agree or agree, 7% blank, 7% undecided**

5) In my judgment, the Minor Treatment Area runs more smoothly and efficiently since the NP Fast Track Area has been implemented **100% strongly agree or agree**

6) What do you believe to be the most beneficial aspects of the NP Fast Track Area that adds value to the ED +/- your own practice? **enhances “flow” 93%, nursing expertise 21%, additional nursing care 21%**
Meeting Ministry Targets

March 2010

• Minor/uncomplicated conditions; maximum ED LOS 4 hours. Starting point May 2009: ED LOS 4.6 hours
Going Forward…

• Areas of success and development
• Role of the third NP

Questions? Comments?