An examination of the role and activities of nurses caring for patients admitted to a model 4 hospital as part of the National Acute Medicine Programme in Ireland

Dr Melissa Corbally, Dr Gloria Macri, Ms Susan Hawkshaw
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• Collaborative project between NPDC Beaumont Hospital Dublin and Dublin City University
Background

- Launched in 2010
- Objectives
  - Quality
  - Access
  - Cost
- Some initiatives
  - NEWS
  - Recommendation of Hospital Model concepts
Service provision - 4 Hospital Models

• Level of service deliverable determines ‘model’

• Model 1
  – community/district hospital (no ED, ICU, HDU, CCU, or an AMU/AMAU/MAU).

• Model 2
  – Daytime MAU

• Model 3
  – Acute Floor Concept - ED, ICU, HDU, CCU, 12-24 hr. AMAU (CNS/ANP potential)

• Model 4
  – Acute Floor Concept (large tertiary hospital) including 24 hour AMU (CNS/ANP potential)
<table>
<thead>
<tr>
<th>Diagnostic Support</th>
<th>Acute Assessment Teams e.g. Mental Health</th>
<th>Interventionsal cardiology (only included if available on site)</th>
<th>Coronary Care Unit</th>
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</thead>
<tbody>
<tr>
<td>Acute Medical Unit (AMU)</td>
<td>Emergency Medicine Clinical Decision Unit</td>
<td></td>
<td>Acute Stroke Unit</td>
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<tr>
<td></td>
<td>Emergency Department</td>
<td></td>
<td>Intensive Care Unit (Category 3/3S)</td>
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<td></td>
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<td></td>
<td>High Dependency Unit (HDU)</td>
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<td>Acute Surgical Assessment Unit</td>
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</table>
# Beaumont Hospital (model 4) Acute Floor

## Diagnostic Support

<table>
<thead>
<tr>
<th>Acute Assessment Teams e.g. Mental Health</th>
<th>Interventional cardiology (Available on site Monday to Friday 9-5)</th>
<th>Coronary Care Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Department (ED)</td>
<td></td>
<td>Acute Stroke Unit</td>
</tr>
<tr>
<td>Acute Medical Unit (AMU)</td>
<td></td>
<td>Intensive Care Unit (Category 3/3S)</td>
</tr>
<tr>
<td>Short Stay Unit (SSU)</td>
<td></td>
<td>High Dependency Unit (HDU) (currently in planning)</td>
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<tr>
<td></td>
<td></td>
<td>Acute Surgical Assessment Unit (currently in planning)</td>
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Beaumont Hospital (model 4) Acute Floor

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<td>Acute Stroke Unit</td>
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<tr>
<td></td>
<td>Intensive Care Unit (Category 3/3S)</td>
<td>High Dependency Unit</td>
</tr>
<tr>
<td>AMU - 14 beds/ trolleys + chairs</td>
<td>Acute Surgical Assessment Unit (currently in planning)</td>
<td>SSU - 21 beds</td>
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</tbody>
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ACUTE FLOOR

Emergency Department (ED)
Acute Medical Unit (AMU)
Short Stay Unit (SSU)
Nursing Challenges

• Difficult to make visible the nursing contribution to care as it is a complex entity

• ‘glue function’

• Little known about what ‘Acute Medical Nursing’ looks like

• No ‘evidence’ / ‘data’
Research objectives

1. To articulate the nursing contribution to patient care by examining activities and decision-making at individual, interpersonal and organisational levels.

2. To explore the scope for role expansion within current nursing practice along with clinical nursing pathway development within the context of acute medicine nursing within a model 4 hospital (e.g. CNS /ANP roles).
Overview of participants (n=24)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ED</th>
<th>AMU/SSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSES</td>
<td>- 3 FOCUS GROUP DISCUSSIONS (8 NURSES - INCLUDING ONE CNM2)</td>
<td>- 2 FOCUS GROUP DISCUSSIONS (4 NURSES)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 3 INDIVIDUAL INTERVIEWS WITH NURSES (3 NURSES)</td>
</tr>
<tr>
<td>STAKEHOLDERS</td>
<td>9 INTERVIEWS</td>
<td></td>
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<tr>
<td></td>
<td>- 4 CNMS (AMU/SSU, ED, PATIENT FLOW) - 1 X CNM3; 2 X CNM2; 1 X CNM1</td>
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<tr>
<td></td>
<td>- 2 CONSULTANTS (AMU/SSU)</td>
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<tr>
<td></td>
<td>- 1 PROJECT MANAGER OF THE ACUTE MEDICINE PROGRAMME</td>
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<td></td>
<td>- 1 DIRECTOR OF NURSING</td>
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<td></td>
<td>- 1 PATIENT FLOW MANAGER</td>
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</table>
Nursing participant experience
Interview schedule (nurses)

Contribution to nursing care
1. Could you tell me about the range of acute medical patients you care for?
2. In relation to caring for these patients, what kind of work does this typically involve?
   - Prompt: Direct/Indirect care
3. What qualities and skills do you bring to the care of acute medical patients?

Expanding roles
4. What would you say is unique to acute medicine nursing?
5. Has the work you do for acute medical patients changed? (as part of the Acute Medical Programme).
   - Prompt: If yes, how has it changed?
6. What challenges do you face in caring for the range of acute medical patients you mentioned earlier in the first question?.
   - Prompt: please refer to a particular acute medical diagnosis such as COPD
7. Are there any skills which you would like to be able to perform to improve your role in caring for acute medical patients?
   - Prompt: Challenges in acquiring these skills
8. Is there a role for an Advanced Nurse Practitioner or Clinical Nurse Specialist in this area?
Interview Schedule (stakeholders)

1. Could you tell me about your role and its relationship to the care of acute medical patients?

2. In relation to carrying out your role (for acute medical patients), what kind of work does this typically involve?
   - Prompt: Link to the range of acute medical patients mentioned in Q1. Direct/Indirect care

3. What would you say is unique to acute medicine nursing?
   - Prompt: How has the work you do for acute medical patients changed? (as part of the Acute Medical Programme)

4. Are there any skills which you feel should be performed by nurses in order to improve the care of acute medical patients?

5. Is there a role for an Advanced Nurse Practitioner or Clinical Nurse Specialist in this area?
   - Prompt: If so, what would they do? If not, why is it not necessary?
Data Analysis

• Qualitative exploratory

• Combined Content and Thematic analysis

• Interview schedule – primary thematic frame
### Thematic sections

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>The range of acute medical patients admitted to Beaumont Hospital</td>
</tr>
<tr>
<td>2</td>
<td>Routes into the AMU / SSU</td>
</tr>
<tr>
<td>3</td>
<td>Activities and roles of nurses caring for acute medical patients</td>
</tr>
<tr>
<td>4</td>
<td>Qualities and skills</td>
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<tr>
<td>5</td>
<td>What is unique to acute medical nursing?</td>
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<tr>
<td>6</td>
<td>Changes since the introduction of the Acute Medicine Programme</td>
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<tr>
<td>7</td>
<td>Challenges encountered in caring for acute medical patients</td>
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<tr>
<td>8</td>
<td>Developing advanced practice</td>
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</tbody>
</table>
1. Range of acute medical patients

<table>
<thead>
<tr>
<th>TYPES OF PATIENTS</th>
<th>CONDITIONS</th>
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<tbody>
<tr>
<td>Cardiac</td>
<td>• Chest pains</td>
</tr>
<tr>
<td></td>
<td>• Atypical chest pains</td>
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<tr>
<td></td>
<td>• Cardiac patients</td>
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<tr>
<td></td>
<td>• CCF (Congestive Cardiac Failure)</td>
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<td></td>
<td>• MIs/Heart attacks</td>
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<td></td>
<td>• STEMI (ST elevation MI)</td>
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<tr>
<td></td>
<td>• Non-STEMI</td>
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<td></td>
<td>• ACS (Acute Coronary Syndrome)</td>
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<td></td>
<td>• Palpitations</td>
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<tr>
<td>Respiratory</td>
<td>• COAD (Chronic Obstructive Airways Disease) and infective exacerbations of that</td>
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<tr>
<td></td>
<td>• COPD (Chronic Obstructive Pulmonary Disease)</td>
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<td></td>
<td>• Shortness of breath</td>
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<td></td>
<td>• Asthma</td>
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<td></td>
<td>• PE (Pulmonary Embolism)</td>
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<td></td>
<td>• Pneumonia</td>
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<td></td>
<td>• Pneumothorax</td>
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<td></td>
<td>• Emphysema</td>
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<tr>
<td></td>
<td>• Chronic lung infections</td>
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<tr>
<td></td>
<td>• Lower respiratory tract infections</td>
</tr>
<tr>
<td>Medical</td>
<td>• DKA (Diabetic Ketoacidosis)</td>
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<td></td>
<td>• HONK (HyperOsmolar Non ketotic Ketoacidosis)</td>
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<tr>
<td></td>
<td>• Diabetes, low blood sugar and high blood sugar</td>
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<td></td>
<td>• Dehydration and hypothermia</td>
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<td></td>
<td>• Sepsis</td>
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<td></td>
<td>• Pyelonephritis</td>
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<td>• Liver disease</td>
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<td>• Osteomyelitis</td>
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<td>• Crohns disease</td>
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<td></td>
<td>• Gastrointestinal disease</td>
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<td></td>
<td>• Alcohol related conditions</td>
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<td></td>
<td>• Overdoses</td>
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<td></td>
<td>• DVT (Deep Venous Thrombosis)</td>
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<td></td>
<td>• Urinary tract infections</td>
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<td></td>
<td>• Cellulitis</td>
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<td></td>
<td>• Delerium Tremens (in relation to alcohol withdrawal)</td>
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<tr>
<td></td>
<td>• Collapsed patients</td>
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<tr>
<td>Neuro</td>
<td>• TIAs (Transient Ischaemic Attacks)</td>
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<td></td>
<td>• CVA (Cerebro-Vascular Accident/Stoke)</td>
</tr>
<tr>
<td>Care of the older person</td>
<td>• Elderly patients who need antibiotics</td>
</tr>
<tr>
<td></td>
<td>• Acopia</td>
</tr>
<tr>
<td></td>
<td>• Patients with diarrhoea from Nursing Homes</td>
</tr>
</tbody>
</table>

Illness acuity vs. acute medical patient
3. Activities and roles of nurses caring for acute medical patients included:

- Quickly and continuously assessing patients (often assessing for aspects which were not always quantifiable)
- Making judgements and decisions in relation to patient’s condition and treatment
- Thinking ahead and anticipating potential patients’ needs
- Assessing, planning, implementing and evaluating care in a holistic way (nursing process)

Direct nursing care
- Fundamental nursing (e.g. toileting, washing, helping patients putting on their gown)
- Tasks performed:
- Performing venpunctures and cannulations
- Taking blood tests (which were deemed by many nurses as a priority)
- Performing ECGs
- Checking blood results
- Ensuring that other tests were ordered depending on the patient’s condition and needs (ECHO, x-rays, MRI etc.).
- Performing frequent clinical observations (temperature, pulse, blood pressure, respiration and oxygen saturation, peak flow).
- Checking patients’ weight
- Catheterisation (for female patients only)
- Preparing the patient for their journey

Indirect nursing care
- Processing the patients, doing the paper-work
- Documentation of care
- Following up on tests/procedures (“fighting” for the patient) - making many phone-calls, scheduling their tests, getting the tests prioritised if needed, following up on the tests etc.
- Communicating and liaising with other teams
  - communicating vital information to the doctors/consultants
  - offering logistic support for consultants
  - teamwork – working as a team, keeping an eye on each other’s’ patients
- Interacting with other organisations and institutions outside the hospital
- Communicating with patients and relatives
  - informing patients and families
  - educating patients and families
  - ‘translating’ the information for patients
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4. Qualities and Skills

- Difficult to articulate !!!

- Newly acquired skills (i.e. ordering blood tests, venupuncture and cannulation) were believed to be useful insofar as they were beneficial for the patient (e.g. reduced waiting time for diagnosis, fluid therapy etc.). It gave nurses confidence and pride as well as a sense of independence to be able to facilitate a smoother patient journey.

- Having a broad medical and nursing knowledge was felt to be essential.

- Being experienced, discovering vital information and clues that are sometimes ‘hidden’ in what patients are saying was felt to be important

- Good clinical decision-making and the ability to think very quickly and to be able to ‘juggle’ all cases in one’s mind was important

- Being able to cope with “whatever is thrown at you” and to manage the complexity of multi-tasking.

- Communication and teamwork skills

- Offering a holistic approach to the care of the acute patient

- Friendliness

- Protecting/ “sheltering” the patient

- Ability to ‘translate’ (explain information clearly) to the patient and their relatives
• It is kind of **hard to articulate**... You just do it and nobody really asks you... and you’re never gonna’ say how great you are or your qualities or things like that (AMU3)

• A lot of it is **in your head** more so than on paperwork. Especially when we’ve got the assessment patients...So it’s all [...] in your head: knowing what they’ve gone for, what they’re waiting for; or the doctors might come up to you and say they need another blood test in two hours (AMU4)

• You come to a point where you are watching everything, you are watching everyone. [...] when it’s really busy your **mind is rolling over the whole thing, you’re watching everyone**. You could be keeping an eye on each other’s patients as well because everyone is so stretched here lots of the time that you are watching all of them... (ED5)
5. What is unique to Acute Medical Nursing?

• The nature of the work in acute medicine
  – quick, fast-tracked nature of work
  – a very interesting and very dynamic environment
  – better patient experience
  – knowing what to expect - knowing the patterns, the specificities of acute medical patients
  – very rich and broad knowledge needed in order to cope with the diversity of acute medical conditions

• The set of skills which nurses working with acute patients have
  – the ability to assess patients and make good clinical decisions quickly.
  – a great deal of teamwork and a lot of coordination skills required in order to get things done quickly.
  – making very quick assessments and judgements
  – holistic approach
• You’re **thinking of everything** [...] Literally from the minute they come in [...] who’s at home with them [...] what’s there in terms of home help. You’re kind of getting them out the door before they even sat in the chairs sometimes (ED8)

• You’re trying to get things done **quicker**. You’re trying to get patients assessed and you’re trying to get everything done and turn them around **quicker**. And picking up on any delay that goes from the moment they come through the door. Like if you think they need physio, get physio involved **straight away** or get the social worker involved **straight away**. While before you maybe knew that you had a bit of time to get those things done, now you’re trying to get all that right at the start (M2)

• They’re constantly looking to: “**What’s next? What’s next?**”, to **move** the patient if it’s not to discharge but to move them along to the next point of care or the decision point. And it’s probably unique in that it’s quite a **fast setting** from a **turnover** perspective. And it means they’ve a lot of... they’ve a big leadership role in that sense, that they can proactively manage the patient (PF2)
6. Changes since the introduction of the Acute Medicine Programme

- The quick nature of the process led to a positive impact on patients’ perceptions of their journey and their experiences.

- There was less emphasis on bedside care and more focus on checking that tests were ordered.

- A move to a consultant-led service

- The existence of pathways allowed nurses to see the patient’s journey, to be more aware of the plan of care

- The nature of the patients also changed with older (over 60 years), sicker patients being now the typical patients admitted into the AMU/SSU.

- Newly expanded nurses’ roles improved confidence when contrasted with their experience in general medical wards.
• I have worked before in an ordinary ward, so there it’s just the routine...Here it’s action, all action and [...] it’s like very quick turnover and like you do one blood test after another and one venupuncture after another, follow up procedures and, you know, your mind will be really like: “This patient needs this. Maybe this patient would be needing this. I don’t think she needs this” [...] You have to think quick. (AMU5)

• [...] that has evolved, that is a really big change that we don’t want to get involved with the lower acuity patients because they can be seen by the ED. If we see then sicker ones and they get the diagnostics and if the consultant is involved more at the earlier stages of the intervention then I think that can be a benefit for the patient and they length of stay will actually decreased. That has evolved, that is a new thing. (D1)

• Because we didn’t have many junior doctors and CHDs under us so it was very much consultant delivered. A lot of time we’d be doing their history, we’d be ordering the x-rays, a lot of time we’d be doing the scans, and liaising with the other consultants. Now that the Acute Medical Programme have expanded we have a few junior doctors underneath us. So now it can be more consultant-led (D1).
7 Challenges in caring for acute medical patients

- The quick, fast-tracked nature of the process
  - Trying to keep up with everything, to keep everything flowing and coordinated and getting patients through the system
  - Not having enough time to carry out all tasks which they are expected to do
  - Finding time to spend with patients
  - Finding time to attend study days/courses

- Space limitations, lack of beds/waiting for long periods on a chair, and the lack of dignity caused by the fact that patients are too close to one another

- The lengthy duration needed to run some of the tests (e.g. CT, MRI) or the occasional cancelling of some procedures

- The frequent blocks to the flow of the service – due to seasonal variations in the number of patients as well as due to patients who require a longer stay.
  - Difficulties in caring for patients who don’t easily fit into a clear cut speciality (i.e. complex patients with multiple morbidities)

- Challenges surrounding the staffing process (referring to nursing staff as well as the need to have more junior doctors)

- Certain patient groups presented more of a diagnostic challenge for the acute team (e.g. patients with chest pains, Afib and acopia patients)
• So to **keep all that in your head** is very challenging particularly for the nurses on the bedside because you are managing staffing issues, patient safety issues, patient care. And they’re quite under-resourced at all times (PF2)

• The noise level in this place will drive you bananas if you’re not feeling well (ED8)

• [...] if you get a definite cardiology patient, or a definite gastro patient, very definite respiratory failure patient... But certain patients fall in-between. You know, just general medical [patients] maybe low sodium, slightly confused type patients that don’t fit a particular speciality. There’s often difficulty in handling the patient often and getting other teams to reach in for those patients. So as a result for us it’s a challenge [...] cause it’s not clear-cut and it’s hard to put patients into boxes, into categories. Somebody can be very straightforward on paper, but be a little bit more complex [in reality] or sound very very complex but probably be a straightforward admission (PF2)
8. Developing Advanced Nursing Practice

Most nurses and all stakeholders felt that having an ANP would positively and significantly impact on the patient experience.
Summary

Similarity between ‘traditional’ nursing and Acute Medical Nursing i.e. it is an incredibly complex endeavour!

- Perpetual challenge remains to enhance visibility of nursing work and measure the nursing contribution

Acute Medical Nursing distinct in terms of
1. Speed of care delivery
2. Frequency of activities
3. High diversity of patient groups
Implications

• Generates insights into Acute Medical Nursing work from an Irish perspective

• Resonance with studies of similar groups in UK (e.g. Lees 2012, Lees et al 2013)
  – Useful for staff given newness of medical speciality

• Establishes support for the development of ANP roles

• Highlights need for further investigation
  – Within other Model 4 hospitals
  – Nationally
Thank you!