The First National Survey of Medication Aides

Jill Budden, PhD
Research Associate
Background

- Goal to provide insights into Med Aide:
  - Work setting
  - Training
  - Supervision
  - Work role

- Help regulators make decisions about the implementation or development of safe and effective Med Aide programs
<table>
<thead>
<tr>
<th>State</th>
<th>Total Medication Aide Population</th>
<th>Study Sample</th>
<th>Number Mailed</th>
<th>Number Received</th>
<th>Who Regulates?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>17</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>BON</td>
</tr>
<tr>
<td>Arkansas</td>
<td>47</td>
<td>15</td>
<td>15</td>
<td>5</td>
<td>BON</td>
</tr>
<tr>
<td>DC</td>
<td>465</td>
<td>155</td>
<td>155</td>
<td>28</td>
<td>BON</td>
</tr>
<tr>
<td>Indiana</td>
<td>3,161</td>
<td>1,053</td>
<td>1,053</td>
<td>237</td>
<td>Other Agency</td>
</tr>
<tr>
<td>Kansas</td>
<td>9,036</td>
<td>3,012</td>
<td>2,815</td>
<td>511</td>
<td>Other Agency</td>
</tr>
<tr>
<td>Maryland</td>
<td>68,479</td>
<td>22,826</td>
<td>3,967</td>
<td>275</td>
<td>BON</td>
</tr>
<tr>
<td>Montana (a)</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>BON</td>
</tr>
<tr>
<td>Nebraska (a)</td>
<td>8,933</td>
<td>2,977</td>
<td>2,810</td>
<td>293</td>
<td>Combination</td>
</tr>
<tr>
<td>Nebraska (b)</td>
<td>32</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>Combination</td>
</tr>
<tr>
<td>Nebraska (c)</td>
<td>9,590</td>
<td>3,196</td>
<td>2,825</td>
<td>501</td>
<td>Combination</td>
</tr>
<tr>
<td>State</td>
<td>Total Medication Aide Population</td>
<td>Study Sample</td>
<td>Number Mailed</td>
<td>Number Received</td>
<td>Who Regulates?</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------</td>
<td>--------------</td>
<td>---------------</td>
<td>-----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>144</td>
<td>48</td>
<td>48</td>
<td>16</td>
<td>BON</td>
</tr>
<tr>
<td>New Jersey</td>
<td>2,088</td>
<td>696</td>
<td>696</td>
<td>141</td>
<td>Other Agency</td>
</tr>
<tr>
<td>New Mexico</td>
<td>452</td>
<td>150</td>
<td>150</td>
<td>29</td>
<td>BON</td>
</tr>
<tr>
<td>North Carolina (a)</td>
<td>2,628</td>
<td>876</td>
<td>876</td>
<td>137</td>
<td>Combination</td>
</tr>
<tr>
<td>North Dakota</td>
<td>1,772</td>
<td>590</td>
<td>590</td>
<td>158</td>
<td>BON</td>
</tr>
<tr>
<td>Ohio</td>
<td>93</td>
<td>31</td>
<td>31</td>
<td>7</td>
<td>BON</td>
</tr>
<tr>
<td>Oregon</td>
<td>1,274</td>
<td>424</td>
<td>424</td>
<td>101</td>
<td>BON</td>
</tr>
<tr>
<td>Texas</td>
<td>10,457</td>
<td>3,485</td>
<td>2,840</td>
<td>580</td>
<td>Other Agency</td>
</tr>
<tr>
<td>Virginia</td>
<td>3,989</td>
<td>1,329</td>
<td>1,329</td>
<td>312</td>
<td>BON</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1,369</td>
<td>456</td>
<td>456</td>
<td>116</td>
<td>Other Agency</td>
</tr>
</tbody>
</table>
Response Rate

- 20,819 surveys were mailed
- 2,263 were returned with bad addresses
- 1,273 opted out
- 57 surveys were pulled for data quality concerns
- 3,455 surveys were received

\[ \rightarrow 20.06\% \text{ response rate} \]
Demographics & Work Setting
### Work Setting

- **1. Assisted living**: 1,107 (33%)
- **2. Nursing home**: 1,330 (39%)
- **3. A combination of assisted living or nursing home and some other facility**: 16 (< 1%)
- **4. Other long-term care**
  - Community-based services: 49 (1%)
  - Board and care homes: 18 (1%)
  - Home health: 86 (3%)
  - Continuing care retirement communities: 19 (1%)
  - Housing for aging and disabled individuals: 41 (1%)
  - Adult day care: 24 (1%)
  - Group home: 135 (4%)
  - Residential care facility: 81 (2%)
  - Intermediate care facility (for example, developmentally disabled facility): 112 (3%)
- **5. Other**
  - Hospice: 14 (< 1%)
  - Hospital: 33 (1%)
  - Rehabilitation facility: 62 (2%)
  - Psychiatric or mental health facility: 69 (2%)
  - Correctional facility: 52 (2%)
  - Schools: 33 (1%)
  - Other: 103 (3%)
- Average age = 45
- 91% female
- 60% white, 27% African American, 7% Hispanic
- Primary employment title "Medication Aide" (72%)
- Average time worked = 8.05 years.

**Workload**
- Assisted living (median = 25 clients)
- Nursing home (median = 31 clients)
- Other long-term care facilities (median = 4 clients)
- Other facilities (median = 15 clients)

- Hours worked in typical week (median = 36 hours)
- Shifts: 7am – 3pm (35%), 3pm – 11pm (26%)
- Required to be CNA before becoming Med Aide (68%)
Training & Education Results
Training location
- 1% reported having no training
- 43% obtained education from employer
- 32% obtained education from community or junior college

- Median # of classroom training hours = 40 hours
- Median # of clinical training hours = 14 hours
- Median # of total training hours = 56 hours
• 71% indicated nurse delegation was covered

• 83% indicated nurse supervision was covered

• 46% indicated Med Aide training needed to be more challenging.
Supervision Results
8% reported having no supervision
- By work setting:
  - 6% in assisted living
  - 3% in nursing homes
  - 21% in other long-term care
  - 10% in other facilities
- By regulatory agency:
  - 8% regulated by BON
  - 3% regulated by another state agency
  - 15% regulated by combination

Of those with supervision, 19% indicated supervisor was never on site, where
- By regulatory agency:
  - 22% regulated by BON
  - 13% regulated by another state agency
  - 25% regulated by combination
- Of those with supervision,
  - 10% interacted with their supervisor during a typical shift “zero/none” times
  - 27% “1 – 2 times”

- However, 42% “agreed”, and 41% “strongly agreed” that their supervisor was available whenever they needed assistance or help
Communication Results
Respondents were asked to report how frequently breakdowns in communication regarding medication administration occurred between them and a licensed nurse.

- 39% reported “never”
- 26% reported “a few times a year”
- 35% reported “about once a month” to “every day”

Similar percentages were evident for:
- Patient monitoring
- Changes in a patient’s status condition

In terms of a patient refusing to take medication...

- 49% reported “never”
- 19% reported “a few times a year”
- 33% reported “about once a month” to “every day”

Similar percentages were evident for:
- Knowing when to obtain additional information about a patient’s status and then conveying that status information
Authorized Duties Results
21% were not given a written job description that addressed the scope of their medication-related responsibilities

33% indicted there needed to be more information about their authorized duties

21% indicated they thought some of the tasks they performed were beyond what they should be doing in their job role

- 514 (15%) specified some of the tasks...
1. Performing multiple tasks when administering meds / performing multiple roles (62 responses)
2. Assessment (20 responses)
3. Overworked / role issues (28 responses)
4. Meds, treatments, procedures / wounds / insulin / breathing / narcotics / pain (119 responses)
5. Doctor, pharmacy, family communications / change or reorder medications / initial meds / documentation (59 responses)
6. Issues related to patient care (19 responses)
7. Other issues related to patient care (including CNA duties) (103 responses)
8. Multiple issues & other (74 responses)
1. Performing multiple tasks when administering meds / performing multiple roles (62 responses)

- “I feel like I do a nurse’s job.”
- “Having more patients – this needs to be regulated by the state and enforced with RN there. Forcing the MA to do things that are to be done by RNs.”
- “No nurse in building. There is a nurse in other buildings. Facility makes us do IPPB treatments and other treatments that a nurse should do, or else we get terminated.”
- “Answer call while you are giving meds. Take out garbage. Care for residents. Too many things when you are giving meds.
- “When short of staff they want us to do CNA‘s job.”
- “When I first started it was uninterrupted medication passes – now you take care of high fall risk res./alarm on bed and chair. The med pass is constantly being interrupted.”
2. Assessment (20 responses)

- “Assessing patients when giving PRN medications. Assessing a patient’s pain levels.”
- “Assessing residents when falls occur. No nurse on duty, only available 9 to 5 or via phone, but never answers.”
- “Delegation of CNA duties. No licensed nurse in building requires “assessment of residents in some instances.””
3. Overworked / role issues (28 responses)

- “Giving medication on 2 separate floors at the same time.”
- “The number of patients I administer medications to (55 patients) is too much.”
4. Meds, treatments, procedures / wounds / insulin / breathing / narcotics / pain (119 responses)

- “Giving meds I’m not familiar with. Observing effect of med changes. Giving PRN meds with little info as to why.”

- “administer inhalant, oxygen treatments, nebulizer, and intermittent positive pressure. Give initial dose of medication, perform blood glucose test. Assist the nurse instill irrigation fluids. Colostomy, urinary catheter, enema.”

- “Drawing up insulin. Taking care of sliding scale insulin.”

- “Nebulizer treatment – not in my scope but charge nurses expect me to do it.”

- “Giving breathing treatments. Skin treatments. Wounds, etc. Initial doses.”

- Dressing, decubitus ulcers stages III – IV.

5. Doctor, pharmacy, family communications / change or reorder medications / initial meds / documentation (59 responses)

- “Calling doctor. Faxing orders to the pharmacy. Taking phone orders from doctors.”
- “Talk to pharmacy, doctors, and family members about all residents’ care and concerns.”
- “Deal with family members because nurse doesn’t want to.”
- “Writing in nurse’s notes. Writing on all PRN meds and behaviors.”
- “Excessive paperwork – most that should be supervisor’s responsibility.”
6. Issues related to patient care (19 responses)

- “When we have an emergency we are sometimes expected to take full control of the situation because we cannot get a hold of nurse on call – this happens a lot.”

- “Taking vital signs – this is not taught in medication technician training.”

- “Evaluating the resident.”
7. Other issues related to patient care (including CNA duties) (103 responses)

- “Cleaning rooms and serving meals.”
- “Washing kitchen linens. I don’t think you should be doing caregiver tasks if you are hired to do medication administration.”
- “Setting tables. Bussing tables. Food server. Patient care. Laundry. Med Techs can’t focus on medication if they have too many other tasks to do.”
- “Fixing things that brake. Shoveling snow. Yard work.”
8. Multiple issues & other (74 responses)


- “Doing what a nurse or doctor should be doing. Cleaning wounds. Looking for signs that a doctor or nurse should do.”

- “Supervising role of caregivers (CNAs) in absence of nurse. Wounds.”

- “Initial dose of meds. Clarifying med orders. Performing duties that a nurse is supposed to do, such as when you obtain an abnormal b/p and you notify the nurse and they do nothing but (not legible).”

Respondents were asked to indicate which, if any, of the six rights of medication administration was a priority for them to improve on.

- Right time (27%)
- Right documentation (31%)
- Right patient (14%)
- Right medication (17%)
- Right route (14%)
- Right dose (17%)

32% indicated they were afraid of getting discipline for administering late medications.
Medication Administration Results
Inhalants

- Allowed to administer:
  - Inhalant medications (79%)
  - Metered dose inhaler (68%)
  - Medication used for intermittent positive pressure breathing (IPPB treatments) (23%)
  - Medications or treatments via nebulizer (66%)
  - Oxygen (69%)
Injectables

Percentage allowed to administer medications by injection

<table>
<thead>
<tr>
<th>Work Setting</th>
<th>Regulatory Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>29%</td>
</tr>
<tr>
<td>Assisted living</td>
<td>52%</td>
</tr>
<tr>
<td>Nursing home</td>
<td>55%</td>
</tr>
<tr>
<td>Other long-term care</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
</tr>
<tr>
<td>Board of nursing</td>
<td>4%</td>
</tr>
<tr>
<td>Other state agency</td>
<td>3%</td>
</tr>
<tr>
<td>Combination</td>
<td>1%</td>
</tr>
</tbody>
</table>

Yes
Don’t know
Injectables  continued

- Of respondents that indicated they were allowed to administer medications by injection:
  - Intramuscular route (27%)
  - Intravenous route (7%)
  - Subcutaneous route (62%)
  - Intradermal route (19%)
  - Hypodermoclysis route (7%)
  - Pre-drawn insulin (70%)
  - Insulin that was not pre-drawn (57%)
  - Epinephrine (34%)
  - Anticoagulants (6%)
Topicals

- 94% allowed to administer topical medications
- Of Med Aides allowed to administer topical medications:
  - Topical patches (93%)
  - Nitroglycerin paste (46%)
  - Treatments that involve advanced skin conditions, including stage III and IV decubitus ulcers (19%)
  - Topical medications requiring a sterile dressing (43%)
  - Topical medications requiring an assessment of skin condition (34%)
  - Debridement (8%)
  - Duoderm application (40%)
Orals

- Allowed to administer:
  - Sublingual medications (82%)
  - Maintenance doses of oral anticoagulants (e.g., Coumadin) (78%)
Tubes

- Allowed to administer medication inserted into:
  - Nasogastric tube (8%)
  - Gastric tube (17%)
  - Jejunostomy tube (9%)
Classes of Drugs

- 90% allowed to administer controlled substances
  - Of these, 82% were allowed to administer schedule II narcotics

- 27% allowed to administer chemotherapeutic agents
  - Of these, 39% indicated oral maintenance chemotherapy was the only chemotherapeutic agent they were allowed to administer
  - While, 22% indicated Tamoxifen was the only oral chemotherapeutic agent they were allowed to administer
 Allowed to administer:

- **The first dose of a new medication (80%)**
- The first dose of a changed medication (87%)
- PRN or “as needed” medications (only after an assessment of the patient by a licensed nurse) (89%)
- **PRN or “as needed” medications (assessment of the patient by a licensed nurse not required) (67%)**
- Medications administered when the patient’s condition is unstable or the patient has changing nursing needs (49%)
- Medications administered when the supervising nurse is unavailable to monitor the progress and/or the effect of the medication on the patient (46%)
- **Medications administered without the task having been delegated by a nurse (67%)**
- Medications that require a mathematical conversion between units of measurement to determine the correct dose (35%)
- Medications being administered as part of clinical research (12%)
Allowed to perform the following tasks/activities:

- Regulating of intravenous fluids (4%)
- Programming insulin pumps (4%)
- Complete documentation for medication administration (82%)
- Complete medication error reports (67%)
- Take telephone or verbal orders for medication (18%)
- Receive written orders for medication (37%)
- Transcribe medication and treatment orders (23%)
- Order initial medications from pharmacy (36%)
- Reorder medications from pharmacy (74%)
- **Account for controlled substances (perform a narcotic count), if assisted by a licensed nurse (85%)**
- **Account for controlled substances (perform a narcotic count), if assisted by another Medication Aide (76%)**
- Receive and count medications (86%)
Allowed to perform the following tasks/activities:

- Instill irrigation fluids of any type (including, but not limited to: colostomy, urinary catheter, and enema) (22%)
- Perform any sterile procedure or medication administration that involves sterile technique (28%)
- **Conduct patient assessments or evaluations (23%)**
- Engage in patient teaching activities related to medications (49%)
- Take vital signs prior to or after administering medications (93%)
- Administer medications that are in a unit dose package or a pre-filled medication holder (86%)
- Assume responsibility for medication pumps including patient-controlled analgesia (8%)
- Perform oral, nasal, or tracheal suctioning (12%)
- Perform blood glucose testing (62%)
- **Crush medications (authorization by a licensed nurse not required (59%))**
- Crush medications (authorization by a licensed nurse is required) (74%)
- Destroy medications (36%)
- Calculate drug dosages (26%)
Expected to do the following:

- Recognize normal and abnormal conditions for the patient (i.e., identify a change in condition) (94%)
- Recognize changes in patients’ conditions or behaviors (98%)
- Recognize side effects (94%)
- Recognize toxic effects (80%)
- Recognize allergic reactions (92%)
- Recognize immediate desired effects (85%)
- Recognize unusual and unexpected effects (90%)
- Recognize changes in client’s condition that contraindicates continued administration of the medication (81%)
- Anticipate effects which may rapidly endanger a client’s life or well-being and make judgments and decisions concerning actions to take (51%)
- Review the patient’s plan-of-care (61%)
- Collect and document patient conditions (63%)
Finally…

- 33% indicated that a licensed nurse never assesses a patient within 30 minutes prior to or after a patient’s medication administration.
Discussion
Implications & Conclusions

- Help make decisions about the implementation or development of safe and effective Med Aide programs
- Variations by work setting and regulatory agency
- Implications for
  - Regulators
  - Educators
  - Long-term care administrators
  - Nurses that supervise and delegate to medications aides
  - Medication Aides