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Recommendations for Medication Administration

Prepared by the NCWS Policy & Practice Committee

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Executive Summary

As the nursing workforce crisis unfolds, it becomes imperative to recognize the crucial role that supportive personnel, particularly unlicensed assistive personnel (UAP), play in patient care and nurse retention. Across various care settings, a significant portion of patient care responsibilities falls on nursing personnel, specifically licensed practical nurses (LPNs) and registered nurses (RNs). These professionals frequently contend with the challenge of juggling multiple patient care duties while striving to practice at the top of their licensure. Leveraging the support of UAP can alleviate LPNs' and RNs' burden of routine, often time-consuming patient care tasks, enabling them to dedicate more time and focus to delivering elevated levels of patient care.

Navigating the utilization of UAP can be complex due to the multitude of roles with diverse levels of responsibility and training. Moreover, the lack of standardized guidance regarding the scope of patient care responsibilities allocated to UAP contributes to significant variation across different healthcare facilities.

The Policy and Practice Committee (PPC) of the Nursing Council on Workforce Sustainability (NCWS) was tasked with assessing a proposal aimed at standardizing the various roles and pathways of UAP. The plan not only proposes to establish a uniform entry pathway for UAP but also advocates for standardized training protocols. Under this proposal, all UAP would undergo level one training. Accumulated experience would then qualify a level one-trained UAP to pursue level two training, enabling them to assume a broader range of responsibilities. Notably, level two training would encompass the administration of specific medications to designated patient populations.

The PPC embarked on an extensive endeavor to gain insight into the administration of medications by UAP. Thorough research was conducted, focusing notably on Massachusetts regulations, with key input from the Board of Registration in Nursing (BORN) and the Department of Public Health. Additionally, industry stakeholders and nursing practice experts were consulted to comprehensively assess the potential impact of the proposal on patient safety and nursing care standards. Moreover, it was revealed that while this practice is currently utilized to a limited extent in Massachusetts, its widespread adoption across various healthcare settings throughout the United States provided substantial evidence for review and consideration.

Background

The healthcare sector has been extensively documented as facing workforce shortages in recent years. Particularly, the northeast region of the country is experiencing significant challenges, compounded by an aging population exiting the workforce precisely when a larger

segment of the population requires increased care.[1] As the RN workforce constricts, many healthcare organizations are seeking alternate care models of nursing such as those that utilize the full care team, including both licensed and UAP. Using a team model of care allows for better patient care, with fewer delays in meeting patient needs, and helps to alleviate burnout for nurses by reducing the number of time-consuming responsibilities and allowing them to instead work to the top of their licenses.[2, 3]

This is especially true in post-acute care settings such as nursing or rest homes, assisted living, and patients living at home who receive home care services. In these settings, the administration of medications, especially those deemed low-risk and that many, stable patients have been taking for significant periods, can take up a large percentage of a nurse's time.[3] In these instances, giving UAP training and authority to administer medications can free up time for nurses to spend reviewing care plans, consulting with patients and their loved ones, and performing other services that require their level of education and training.

Utilizing UAP to administer low-risk medications to stable patients is a model that has been used for decades, including in Massachusetts[3] under the auspices of the Medication Administration Program (MAP).

Massachusetts Medication Administration Program

Assisting RNs with medication administration has been ongoing in Massachusetts in some care settings since 1993 when the Departments of Public Health, Mental Health, and Developmental Services established the MAP through joint regulations (105 CMR 700.003 (E)). Over time, these regulations have been amended, first in 2013 to include the Department of Children and Families and again in 2020 to include the Massachusetts Rehabilitation Commission in the definition of Community Programs within the MAP.[4]

The program was established to provide safeguards and standards that would ensure the safety of patients in certain settings (primarily community residential programs) in providing medications under the direction of an authorized prescriber and dispensed by pharmacists. Licensed healthcare providers, including nurses, pharmacists, and physicians, are available to assist with any administration questions or issues that MAP-certified direct care staff encounter.

Direct care staff must complete specific training and pass a test to receive certification to administer medication. Recertification must be acquired every two years to continue to be eligible to administer medication. The scope of direct care staff is limited to specific sites that have registered to utilize the MAP program and they do not have the authority to administer medications in any other setting.[4]

In 2022, a consulting firm was tasked by the Massachusetts Drug Control Program and the Bureau of Health Professions Licensure with evaluating the MAP and providing recommendations for improvement. Among their research, they noted consistent and growing

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[1] Source: https://pubmed.ncbi.nlm.nih.gov/27502764/
[2] Source: https://pubmed.ncbi.nlm.nih.gov/16294618/
[3] Source: https://www.sciencedirect.com/science/article/abs/pii/S2155825615302829
[4] Source: https://www.mass.gov/info-details/map-information-for-the-general-public

evidence that using UAP for medication administration is generally safe, with similar error rates to those of RNs.[5]

Legislation Relevant to Medication Aides

Legislation to create medication administration techs (or similar titles) has been introduced in Massachusetts since at least 2011. This is a position that has long been supported by advocates in long-term care facilities. Under existing regulations, the Drug Control Program possesses the authority to expand the roles of individuals in administering medications (see regulation 105 CMR 700.00: Implementation of M.G.L. c.94C).

There are currently three bills moving through the legislature that have broad support in the healthcare community and have been favorably reviewed by legislators:

- An Act to improve quality and oversight of long-term care (Bill H.4193 was passed House in November 2023 and is currently in review by the Senate Ways & Means Committee)
- An Act relative to certified medication aides (reported favorably by the Joint Committee on Public Health)
    - House version (Bill H.2243)
    - Senate version (Bill S.1468)

Medication Administration Policies in Other States

The concept of a medication administration aide is not novel. Apart from Mississippi, every state and Washington D.C. authorize UAP to administer certain medications in specific settings, although the regulations governing this practice differ from state to state. Some states (26%) require that UAP be certified nursing assistants (CNAs) to administer medications, while most (63%), including Massachusetts, do not. Requirements for the other 10% of states were not clear.[5]

The length and amount of training varies considerably from state to state, especially between those who do and do not require UAP to first have CNA status. In Massachusetts, training is a minimum of 16 hours and must be taught by a state-certified MAP trainer. Trainees must then complete and pass a formal examination to attain certification.[5]

Oversight of medication administration is primarily done by departments of public health, mental health, or health and human services. To a lesser extent, oversight is done by boards of nursing and pharmacy.[5]

Though formal terms/titles, education and training requirements, and oversight vary across states, one consistent finding in the research is that medication by UAP is generally safe and has very low rates of errors and harm, in line with those of RNs.[5] It is noteworthy that among states that implemented a MAP for UAP, none have rescinded the program.

Impact on Nursing Practice

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[5] Source: https://www.mass.gov/doc/map-evaluation-report-2022-pdf/download

A significant consideration in UAP administering medications is the impact on nursing practice and the question of what responsibility the RN or LPN retains when a UAP administers a patient's medications. To better understand this challenge, it is important to delineate the two pathways that provide a framework for safe, effective patient care. These pathways not only dictate how the program is set up but also allow for the responsibility for patient safety and well-being to be clearly established.

Nurse Delegation Model

- Definition: Delegation is the authorization by a licensed nurse to an UAP to provide selected nursing activities. Neither LPNs nor RNs delegate nursing activities to other licensed nurses.
- Responsibility: The licensed nurse retains responsibility and accountability for these delegated activities.
- Criteria:
    - Right Task: The qualified nurse assesses patient-specific goals and care needs before delegating.
    - Right Circumstances: Individual patient assessment guides delegation decisions.
    - Right Person: The delegate (another licensed nurse) has additional training and competence.
    - Right Communication: Clear communication between the delegating nurse and the delegate.
    - Right Supervision: The delegating nurse oversees the delegated tasks.
    - Legal Framework: Guided by both state regulations and organizational policies and is setting-specific.

Currently in Massachusetts, the nurse delegation model as it pertains to medication administration is only allowed in the setting of school nurses and correctional facilities. RNs and LPNs are prohibited from delegating the administration of medication to unlicensed individuals except as noted above.[6]

Non-nurse Delegation Model

- Definition: Non-nurse delegation involves allowing a UAP or other non-nurse personnel to perform specific nursing activities or tasks under the direct authorization of the individual's health care provider in a MAP registered with the Drug Control Program.
- Responsibility: Licensed nurses do not bear responsibility and accountability for the outcome of the medication administration practice of the MAP-certified unlicensed community program staff. Nurses are responsible and accountable for their nursing judgments, actions, and competence in the content taught to unlicensed staff.
- Criteria:
    - Right Task: The UAP must have documented competencies for the specific activity.
    - Right Circumstances: The nurse assesses the patient's health status and identifies collective care needs.
    - Right Person: The UAP's qualifications and role must align with the delegated task.
    - Right Communication: Clear communication between the individual's health care provider and UAP regarding the delegated activity

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[6] Source: https://www.mass.gov/doc/map-policy-manual-final/download (Page 46)

- Right Supervision: The Drug Control Program oversees the UAP's education and certifying exam.
- Legal Framework: Governed by the Massachusetts Drug Control Program Regulation 105 CMR 700.00: Implementation of M.G.L. c.94.

In addressing the role of nursing in the MAP, the Massachusetts BORN determined: "Licensed nurses, when providing training, consultation, or monitoring within the MAP do not bear responsibility and accountability for the outcome of the medication administration practice of the MAP. The MAP was set up utilizing a direct authorization model in which the unlicensed MAP-certified staff are trained and certified to administer medications under the direct orders of the individual's Health Care Provider(s). The Health Care Provider, not the MAP Certified staff, has the responsibility for ongoing assessment, development of an active treatment plan, and for periodic evaluation of that plan."[6]

Licensed Nurse Workload and Satisfaction

Virtually all healthcare settings in Massachusetts are reporting high vacancy rates for licensed nurses and difficulty in recruiting qualified individuals to fill these roles. Massachusetts Senior Care Association reports a 20% vacancy rate among RNs and LPNs in nursing facilities.[7] These vacancy rates result in heavier workloads and reduced job satisfaction among nurses with many opting to leave the field. A study on "The Impact of Medication Aide Use on Skilled Nursing Facility Quality" published in *The Gerontologist* found that, "using medication aides allows licensed nurses more freedom to engage in more critical nursing care and supervision of CNAs."[8] The use of MAs expands the caregiving team and can provide immediate relief to overburdened RNs and LPNs, freeing up the amount of time they spend on routine medication administration and resulting in higher nurse and patient satisfaction.

While some may be concerned there is a risk medication aides (MAs) will reduce and/or replace some licensed nurse hours, research demonstrates this has not occurred. *The Gerontologist* study reported, "There was no statistically significant reduction in RN or LPN hours in states that use MAs."[7] In addition, According to Budden, "MAs cannot replace the licensed nurse's role in the administration of medications, as nurses must still exercise their judgment regarding medication administration including PRN medications, assessing patients such as evaluating the need for or response to medications, educating the patient, and performing the conversions or calculations of drug dosages whenever necessary."

Provide Increased Mobility in Nursing Career Pathway

At this time, nursing career pathways usually focus on upskilling CNAs to LPNs, and upskilling LPNs to RNs. The bridge from CNA to LPN is significant, requiring at least 10 months of college-level education that is simply out of reach for many CNAs who are unable to afford to take the time off work to attend school and study. The MA role adds an important step between CNA and LPN, which allows for career and economic mobility for CNAs including increased training, responsibility, and higher wages. Individuals who have successfully passed competency evaluations to administer medications and have gained direct experience in the role enter practical nursing programs with a very strong foundation for success.

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[7] Source: Mass Senior Care Association Workforce Survey, January 2024
[8] Source: Impact of medication aide use on skilled nursing facility quality - PubMed (nih.gov)

Nursing Facility Survey Outcomes

The use of MAs has been shown to positively impact nursing facility survey outcomes. Per the Gerontologist report, usage of MAs reduced the probability that a nursing facility received a deficiency for unnecessary drug use or medication errors by 5%.[3]

Benefits vs. Potential Concerns

Nationally, the use of UAPs to administer medications provides decades of experience to inform benefits and risks associated with the MA role, particularly in the long-term care setting where 35 states allow skilled nursing facilities to employ MAs.[9] The impact of the MA role on patient safety and quality of care, licensed nurse workload and satisfaction, career advancement opportunities for CNAs, and survey results are critical considerations in evaluating potential benefits and risks inherent in the role. A review of available literature provides support for key benefits associated with the use of MAs and addresses potential risks.

Impact on Patient Safety and Quality of Care

A study conducted by Jill S. Budden, PhD, at the request of the National Council of State Boards of Nursing (NCBSN), documented that "Medication aides are capable of safely administering medications and that there is no evidence that medication aides have higher error rates than licensed nurses."[3] An evaluation of UAPs was recently conducted by Deloitte and presented to the NCWS confirming that most states have aimed to manage risks through thoughtful selection of tasks allowed by MAs. Most states do not allow UAPs to administer intravenous, intramuscular, or subcutaneous injections. These states provide an example of how including lower-risk medications (routine oral meds, topical, inhalers, eye drops) and excluding higher-risk medications like injectables in the MA role promotes patient safety and minimizes risk.

Conclusion and Recommendations

The committee was asked to consider two issues: the development of a standardized pathway for UAPs and the expansion of medication administration by UAP into other care settings. **From the onset of the committee's evaluation, it was made clear that any expansion of the program would not be considered for acute, hospital-based care and only be examined for home care and skilled nursing facilities, including assisted living facilities.**

It should be noted that numerous government and regulatory agencies have oversight and are important stakeholders in patient care within these realms. The committee's recommendations do not consider each oversight agency or stakeholder independently; rather, these recommendations deal with the program and the practice as a whole. However, it should be noted that the committee strongly recommends that there is clear oversight of a primary regulatory agency that would oversee and administrate the program according to established standards.

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[9] Source: CMS Payroll Based Journal, Q2, 2023

Standardized Pathway: Direct Care Workers

Currently, UAP have multiple pathways to enter into patient care with a variety of training that is not standardized. Simplifying the pathways into a direct care worker role in two advancing parts offers multiple benefits. Simplifying the role allows for greater standardization in duties as well as training. Additionally, those entering healthcare as a UAP have the opportunity to more fully develop their skills and advance their training. This could promote clearer pathways to expanding roles in healthcare for these individuals. While nomenclature may be a topic of great discussion, the concept of narrowing the pathway can only promote greater career development, enhanced training, and, in the end, higher standards of patient safety. The committee does recommend that CNA training be incorporated into the direct care worker pathway as a prerequisite for any advancement into medication administration.

Medication Administration

The question of the expansion of medication administration by UAP was a more difficult issue to consider. In considering this question, the committee looked at two major aspects: patient safety and nursing practice.

In Massachusetts, the MAP has operated successfully since 1993. This operation includes robust policies and the approval and cooperation of multiple state oversight and regulatory agencies. Hence, the MAP provides a framework, but not the only method, for UAP to contribute to patient care through the administration of low-risk medications. **It should be noted that the committee did not evaluate every aspect of the MAP program. Rather, the committee considered the overall structure of the MAP as it relates to UAP administering medications.**

Patient Safety

The highest responsibility of any healthcare worker or organization is patient safety. At the onset of this review, the committee had to determine if such a model was a safe approach to patient care. Evidence from the national usage of UAP to administer medications demonstrates that it is a safe practice.

However, patient safety is not an automatic byproduct. Any program must have in place tight quality control checks, clear oversight, robust policy and procedures, and a system for continued education—and, in the setting of medication administration, a yearly competency is strongly recommended. Additionally, data must be tracked, trended, and reported to ensure patient safety and appropriate standards are maintained and to determine any opportunities for improvement.

The committee recommends that a robust quality assurance mechanism be developed for this program and reported publicly to the appropriate agencies. Finally, it must be clear as to which state agency maintains final oversight, responsibility, and governance of the program.

Nursing Practice

Since medication administration is primarily the function of RNs and LPNs, the issue of nursing practice was discussed, researched, and debated in detail. As previously noted, two models of nursing practice could be utilized: delegation and non-delegation (i.e., direct authorization).

The MAP utilizes the direct authorization model. Accordingly, neither an RN nor LPN is allowed to delegate or supervise the administration of medication by UAP. The program does create allowances for the licensed nurse to become, through additional training, a site supervisor. The site supervisor may oversee UAP administering medications. This model has worked to provide necessary oversight as well as maintain the integrity of the Nursing Practice Act.

Additionally, the BORN prohibits nurse delegation except in the setting of school nurses and correctional facilities. Given the current regulations as well as the success of the MAP model, the direct authorization model is the recommended structural approach for nursing practice and the administration of medications by UAP.

When contemplating the expansion of this program into home health, assisted living, and skilled nursing facilities (SNFs), it's essential to assess whether the direct authorization model or a nurse delegation model is more advantageous. Adopting a nurse delegation model would require legislative action and consultation with the Board of Registration in Nursing (BORN). Additionally, the above notations and concerns must also be considered.

When considering the expansion of the program into home health, assisted living, and SNFs, there was significant discussion regarding the acuity of the patient populations in these areas. It should be clear that the use of medication administration by UAP in a facility or organization does not assume that every patient and every medication would be administered by a UAP. The determination of use of UAP to administer medications would be determined by several factors and be included in the patient's plan of care.

Summary

Standardization of the direct care worker pathway is supported by the committee and has the potential to improve both patient safety and worker satisfaction. Additionally, the committee can support the expansion of medication administration, especially in the home and assisted living settings, with the previously highlighted considerations and concerns addressed appropriately. Expansion of the program into long-term care and rehabilitation facilities is not prohibitive; however, great consideration must be given to program structure, accountability, and nursing practice.

Resources

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(2) Quallich SA. Medical assistants: the future nurses? Urol Nurs. 2005 Oct;25(5):389-91. PMID: 16294618. https://pubmed.ncbi.nlm.nih.gov/16294618/
(3) Jill S. Budden. The Safety and Regulation of Medication Aides, Journal of Nursing Regulation, Volume 2, Issue 2, 2011, Pages 18-23, ISSN 2155-8256, https://doi.org/10.1016/S2155-8256(15)30282-9.
(4) MAP Information for the General Public available on Mass.gov offered by the Massachusetts Drug Control Program and the Bureau of Health Professions Licensure https://www.mass.gov/info-details/map-information-for-the-general-public
(5) MAP Regulations available on Mass.gov offered by the Massachusetts Drug Control Program and the Bureau of Health Professions Licensure Source: download (mass.gov)
(6) Analysis of the Medication Administration Program (MAP) and Current Practices in Community Settings Final Report submitted to the Massachusetts Department of Public Health, Drug Control Program, and the Bureau of Health Professions Licensure by the Eastern Research Group, Inc (2022) https://www.mass.gov/doc/map-policy-manual-final/download
(7) Source: CMS Payroll Based Journal, Q2, 2023.
(8) Source: Mass Senior Care Association Workforce Survey, January 2024
(9) Walsh JE, Lane SJ, Troyer JL. Impact of medication aide use on skilled nursing facility quality. Gerontologist. 2014 Dec;54(6):976-88. doi: 10.1093/geront/gnt085. Epub 2013 Aug 22. PMID: 23969257. Impact of medication aide use on skilled nursing facility quality - PubMed (nih.gov)

Additional References

Massachusetts Official Medication Administration Program (MAP) website
https://www.mass.gov/medication-administration-program-map

Department of Public Health Medication Administration Program (MAP) Policy Manual direct link
https://www.mass.gov/lists/map-policy-manual

American Nurses Association Medication Aids/Technicians Status by State (2015)
https://www.nursingworld.org/~4af4e6/globalassets/docs/ana/ethics/state-chart-medication-aide-status-09-15.pdf

Link to Massachusetts Regulation Chapter 94C: Controlled Substances Act
Chapter 94C (malegislature.gov)

Link to Massachusetts Regulation 105 CMR 700.00: Implementation of M.G.L. c.94C
105 CMR 700.00: Implementation of M.G.L. c.94C | Mass.gov