

# American Society for Pain Management Nursing Position Statement with Clinical Practice Guidelines: Authorized Agent Controlled Analgesia

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## ■ ABSTRACT:

The American Society for Pain Management Nursing (ASPMN) has updated its 2007 position statement on the use of authorized agent controlled analgesia (AACA) for patients who are unable to independently utilize patient-controlled analgesia (PCA). ASPMN continues to support the use of AACA to provide timely and effective pain management while promoting equitable care for vulnerable patient populations who are unable to utilize PCA. ASPMN does not support the use of “PCA by Proxy” in which unauthorized individuals activate PCA for a patient. The background of the development of the position statement, definitions related to AACA, and application of ethical principles to the use of AACA are presented in the document. This position statement includes an updated review of the evidence related to AACA and a call for further research. Clinical practice recommendations for authorized agents, nurses, prescribers, and organizations are provided with an emphasis on the importance of appropriate authorized agent selection, education, diligent patient assessment and medication management.

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## POSITION STATEMENT

The American Society for Pain Management Nursing (ASPMN) continues to support the use of authorized agent controlled analgesia (AACA) (Wuhrman et al., 2007) to provide timely and effective pain management as well as to promote equitable care for vulnerable patients who are unable to independently operate patient-controlled analgesia (PCA). This support is contingent upon organizations having procedures with clearly defined patient selection criteria, assessment requirements, and essential caregiver education. Furthermore, ASPMN does not support the practice of PCA by proxy, in which unauthorized caregivers activate PCA for patients who are able to operate PCA themselves.

## BACKGROUND

Patient-controlled analgesia (PCA) allows patients to self-administer small doses of an analgesic within a prescribed time interval by activating the dosing button of an infusion pump. This method of analgesic administration affords patients the ability to treat pain safely, in a timely, individualized manner, while finding an acceptable balance between analgesia and side effects. PCA has become a common pain management technique in today's health care arena as a result of its demonstrated safety, efficacy (Allegretta, 2005; Angheliescu, Burgoyne, Oakes, & Wallace, 2005; Hudcova, McNichol, Quah, Lau, & Carr, 2006), and patient preference (Hudcova et al., 2006). Inherent in the use of PCA is the recognition that patients must understand the "cause and effect" relationship between the presence of pain, activation of the dosing button, and subsequent pain relief (Pasero, Quinn, Portenoy, McCaffery, & Rizos, 2011). Therefore, patients who have developmental or cognitive limitations are not appropriate candidates for PCA therapy and are at risk to be undertreated with potentially less effective methods of analgesic administration.

Authorized agent controlled analgesia (AACA) has evolved as a means to provide the same advantages of PCA (safe, timely, individualized, effective pain relief) for those patients who are unable to use PCA independently. Sometimes referred to as nurse, family, caregiver, or parent/nurse-controlled analgesia, AACA denotes a modality in which a consistently available and competent individual is authorized by a prescriber and appropriately educated to activate the dosing button in response to pain. AACA does not refer to situations in which someone other than the patient activates the dosing button without having been authorized and educated (PCA by proxy<sup>®</sup>). Reports in the literature (Pasero & McCaffery, 2005; The Joint

Commission, 2004; Nurse Advise, 2005a; Nurse Advise, 2005b) have clearly warned of the danger of this unauthorized practice. Although deeply concerned about the danger cited in these reports, ASPMN also is concerned that some organizations responded to these reports by banning AACA even when caregivers are authorized and educated (Nelson, Yaster, Kost-Byerly, & Monitto, 2010).

In 2006, ASPMN formed a task force of expert clinicians from across the nation to examine the concerns regarding the use of AACA that were raised by the sentinel event alerts (The Joint Commission, 2004; Nurse Advise, 2005a; Nurse Advise, 2005b) as well as the practices of health care organizations across the nation. After extensive review, a position statement including clinical practice recommendations was published (Wuhrman et al., 2007), and readers are encouraged to reference this original manuscript. The original statement clearly indicates support for the use of AACA in a variety of settings and outlines criteria for the use of AACA, including guidelines for authorized agent selection and education, and recommendations for assessment. Quality improvement opportunities to promote safe and effective implementation are also incorporated. In 2011, the ASPMN reconvened the task force to examine the most recent literature and clinical developments since publication of the original position statement. Based on the findings, ASPMN continues to support AACA and expands on the recommendations found in the original position paper.

A limited number of studies have been published since the release of the 2007 ASPMN position statement, all coming from pediatric patient populations (Angheliescu et al., 2011; Czarnecki et al., 2008; Czarnecki et al., 2011; Howard et al., 2010; Morton & Errera, 2010; Voepel-Lewis, Marinkovic, Kostrzewa, Tait, & Malviya, 2008). Angheliescu et al. (2011) found no significant difference in outcomes when comparing complications associated with AACA to those associated with PCA in pediatric oncology patients. The authors also found the use of AACA had dramatically increased in their institution, from 11.6% to 49.7%, since their 2005 study (Angheliescu et al., 2005). The complication rates in the AACA groups were similar and consistently low in both of their studies (Angheliescu et al., 2005; Angheliescu et al., 2011). Voepel-Lewis et al. (2008) reported a low occurrence of events requiring intervention between AACA and PCA, although the events in the AACA group required more intense interventions (i.e., airway management, naloxone, or transfer to a higher level of care) than the events in the PCA group. Czarnecki and colleagues retrospectively studied outcomes associated with

AACA used in children with developmental delay (Czarnecki et al., 2008) and with infants and preschool children (Czarnecki et al., 2011). A low rate of serious adverse events was reported, and the authors suggested AACA may be safe and effective when coupled with diligent patient assessment (including vital signs, sedation level, electronic monitoring as indicated, and hourly documentation of injections and attempts), medication management, and caregiver education.

On the international front, a prospective study of 10,726 pediatric inpatients in the United Kingdom and Ireland examined the safety of PCA, AACA, and continuous infusions in children (Morton & Errera, 2010). The overall incidence of respiratory depression was low, with most events occurring among the AACA group. Howard et al. (2010) prospectively studied AACA in 10,000 pediatric patients and found the frequency of serious life-threatening events to be low, concluding that AACA may be safe and effective in managing postoperative pain. It must be noted that, in studies of AACA, patients receiving AACA often have a higher prevalence of underlying comorbidities that can increase the risk for complications associated with opioids, irrespective of the chosen administration technique (Krane, 2008).

In terms of national trends and sentinel events, correspondence from The Joint Commission (TJC) and the Institute for Safe Medication Practices (ISMP) disclosed that neither agency had received reports of adverse events related to the use of PCA by proxy or AACA since 2005 (Stacy Carson, ISMP, personal e-mail, September 13, 2011; Gerard Castro, TJC, personal e-mail, January 18, 2012). Cumulatively, recent evidence continues to report low rates of adverse events and supports the use of AACA.

## DEFINITIONS

### Patient-Controlled Analgesia (PCA)

A method of analgesic administration designed to allow a patient to administer preset doses of an analgesic on demand (American Pain Society, 2008). Although the medications may be delivered by any route, for the purpose of this position statement, the term refers to opioids administered intravenously, using an infusion pump with or without a background/basal infusion.

### PCA by Proxy

Activation of the dosing button by anyone other than the patient (this term has been used to describe both authorized and unauthorized activation). For the purpose of this position statement, the term refers to only unauthorized activation of the dosing button by

someone other than the patient (when the prescriber intended activation only by the patient).

### Authorized Agent Controlled Analgesia (AACA)

A method of analgesic administration (with or without a background/basal infusion) by a consistently available and competent individual who has been authorized by a prescriber and properly educated to activate the dosing button in response to pain when a patient is unable to operate an analgesic infusion pump. Variations of AACA may include (1) nurse-controlled analgesia in which the authorized agent is a nurse, (2) caregiver-controlled analgesia in which the authorized agent is a nonprofessional individual (e.g., adult family member, significant other), or (3) A combination of nurse and caregiver-controlled administration.

## ELABORATED POSITION STATEMENT

In response to concerns raised by the Joint Commission regarding the unauthorized use of PCA by caregivers, ASPMN convened a task force of nurses with expertise in the area of AACA to examine the evidence, determine whether AACA is an effective option for patients unable to operate PCA, and if so, develop guidelines to promote safe practice. AACA allows authorized and educated caregivers to administer analgesia for patients who are unable to do so themselves. Since the original position statement (Wuhrman et al., 2007), studies continue to support AACA as an effective method of pain management and highlight the importance of meticulous patient assessment, caregiver education, medication management, and organizational procedures to improve safety (see clinical practice recommendations below).

To encourage timely and effective pain management as well as promote equitable care for vulnerable patients, it is ASPMN's position that AACA be considered for those patients who are unable to self-administer PCA.

## LEGAL AND ETHICAL CONSIDERATIONS

The ethical principles of beneficence (the duty to benefit another) and nonmaleficence (the duty to do no harm) oblige health care professionals to provide pain management and comfort to all patients, including those individuals who are vulnerable to the undertreatment of pain, unable to speak for themselves, and lack the ability to self-administer medications. In situations in which a person is unable to self-administer analgesics because of cognitive or physical limitations, a consistent care provider can be educated to assist or to administer analgesics.

Providing quality and comparable pain management to individuals who cannot self-administer analgesics is directed by the principle of justice (the equal or comparative treatment of individuals). Respect for human dignity, the first principle in the *American Nurses Association (ANA) Code of Ethics for Nurses (2001)*, directs nurses to provide and advocate for humane and appropriate care whether that care is for restoration of health, alleviation of suffering, or supportive care at the end of life. When analgesics are administered to alleviate suffering and to provide comfort at the end of life, the principle of “double effect” may occur. Double effect occurs when treatment may have the effect of both relieving suffering and hastening death (double effect). If an action such as AACA were to cause death in a patient at the end of life, the action is ethically and legally correct when the primary intention of the action is to relieve pain, not cause death (even though the possibility of death could have been foreseen).

Patient safety and rights are considered in the third principle (ANA, 2001). The development of practice standards, policies, and guidelines that promote safety emphasizes this principle as well as the principle of nonmaleficence. Based on the principle of justice, care is given with compassion and unrestricted by consideration of personal attributes, economic status, or the nature of the health problem.

## RECOMMENDATIONS FOR PRACTICE

When providing and advocating for humane and supportive care along the entire health care continuum, the prescription and delivery of AACA must be individualized to address the unique needs of each patient.

In addition to the standard practices for safe and effective PCA utilization, the following evidence-based recommendations are strongly encouraged for AACA. The comprehensive recommendations listed in the original position statement (Wuhrman et al., 2007) were reviewed and revised for this document.

### Nursing Practice

Nurses involved with AACA will:

- Educate patients (as able), family members, and other visitors regarding the purpose and proper use of AACA, including pump safety features and the dangers of unauthorized activation of the dosing button
- Participate in the selection of authorized agents by assessing the willingness and ability of a caregiver to understand AACA and follow instructions
- Provide instruction and document that the authorized agent has received, reviewed, and applied verbal and/

or written instructions, which include but are not limited to:

- How to recognize patient-specific behaviors that may indicate pain (and subsequent need for analgesia), sedation, respiratory compromise or medical emergency
- How and when to activate the analgesic dosing button:
  - Only if the patient is awake and the patient’s words and/or behaviors indicate that the patient is in pain, when pain is anticipated (incidental pain), or when otherwise specified by the prescriber, such as in the case of the unresponsive patient who is at end-of-life
- When not to activate the analgesic dosing button:
  - For purposes other than pain relief, e.g., not for the purposes of promoting patient sleep or decreasing anxiety
  - While the patient is sleeping
  - If the patient is having abnormal breathing as defined by prescriber, e.g., shallow, slow, or noisy
- Appropriate actions to take in the event of unrelieved pain, excessive side effects, other conditions specified by the health care agency and/or prescriber, or pump malfunction
- What to do in an emergency, e.g., stimulate the patient, notify nurse, or call 911 in the home setting. Include emergency numbers as appropriate.
- Assess the ability of the caregiver to provide AACA at regular intervals.
- Intervene if there are concerns regarding a caregiver’s ability to administer AACA by discontinuing AACA, informing the prescriber of the situation, and if necessary, obtaining an order for an alternative means of analgesic administration.
- Assess for adequate pain management, unintended opioid-related sedation, and respiratory compromise:
  - Necessary with increased frequency for patients with specific risk factors such as extremes of age, use of concurrent adjuvant medications (sedatives, anxiolytics, hypnotics), neurodevelopmental, respiratory, or cardiac comorbidities
- Provide a complete report when the care of the patient is being transferred to another nurse AACA (e.g., patient’s response, the authorized agent’s performance)
- Communicate that the patient is receiving AACA to all other health care providers (e.g., chart, bed, or analgesic infusion pump/button label or sign)
- Document the amount of opioid administered via AACA

### Prescriber Practice

Health care professionals who prescribe AACA will:

- Collaborate with the nursing staff regarding the need for AACA considering:
  - The anticipated course of illness and associated pain requiring the need for opioid analgesia
  - The risks and benefits of AACA, including understanding of principle of “double effect” at end of life

- The need for prompt management of incident-related pain (e.g., dressing changes, repositioning in bed, ambulation)
- Caregivers' ability
- AACA dosing effectiveness
- Determine appropriate medication, mode, dosage, lock-outs, and monitoring based on the patient's history, medical condition, and concomitant medications
- Reinforce the education that the caregiver has received
- Discontinue AACA and prescribe PCA, if and as soon as the patient is able to self-administer analgesia.

### Organizational Responsibilities

Health care organizations will provide the necessary infrastructure (i.e., policies and procedures, clinical practice guidelines, education for staff and prescribers, equipment, etc.) for the safe administration of AACA and will:

- Permit the use of AACA only for patients who, because of cognitive or physical limitations, cannot safely self-administer PCA
- Stipulate that any authorized agent(s) shall be an adult(s) who is:
  - Consistently with the patient
  - Willing and able to learn to provide AACA
  - Able to perform the responsibilities as detailed in the "Authorized Agent Responsibilities" section below
- Provide the mechanisms necessary to:
  - Readily communicate that the patient is receiving AACA
  - Prescribe AACA (via unique AACA orders), including assessment and monitoring requirements, such as paper or electronic AACA order sets
  - Distribute written educational materials regarding AACA for each authorized agent
  - Document information regarding AACA:
    - The identity of authorized agent(s)
    - Authorized agent education and evidence of learning
    - Amount of medication given over a specified period of time
    - Patient assessment including AACA effectiveness
  - Conduct ongoing evaluation of outcomes including, but not limited to:

- Appropriateness of AACA orders
- Documentation of caregiver education
- Adverse events related to AACA
- Interventions in response to the above

### Authorized Agent Responsibilities

Adult caregivers who accept the role of authorized agent will:

- Actively participate in learning; verbalize an understanding and willingness to comply with all of the principles described above in the "Nursing Practice" section
- Notify staff of any concerns regarding AACA or their ability to fulfill the role of authorized agent
- Reinforce with other family members and visitors who are not designated as authorized agents that they cannot activate the dosing button even in the absence of the authorized agent
- Agree not to attempt any reprogramming of the analgesic infusion pump or otherwise violate the infusion system's integrity.

### SUMMARY

The existing evidence suggests that AACA can be safely and effectively used with patients who are unable to self-activate an analgesic infusion pump when diligent patient assessment and medication management are in place. In light of this evidence, AACA offers an alternative to PCA and facilitates the delivery of equitable and optimal care. The ASPMN supports the use of AACA when appropriate safety measures are in place (see above "Recommendations for Practice") and does not support the use of PCA by proxy in which unauthorized individuals activate the dosing button. Additional studies, including randomized controlled trials, are needed in which AACA is examined in all patient populations. Lastly, establishment of a universal vocabulary, such as that proposed in this position statement, is recommended to diminish inaccuracies and inconsistencies in the use of terms such as "PCA by proxy".

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