

Pain Management in Home Care

Pain management is a significant therapy in the home infusion market. The number of patients treated at home with severe pain requiring parenteral pain medications has increased over the past decade.

Pain is nearly a universal phenomenon and is a primary reason for seeking healthcare. About one-third of all Americans will experience severe pain at some point in their lives.¹ Each year, about 25 million Americans experience acute pain and 50 million suffer from chronic pain.

In 1992, the Agency for Health Care Policy and Research (AHCPR) developed a clinical practice guideline for pain management after several studies reported inadequate postoperative pain control. The treatment of pain has become a focus of accreditation

organizations, such as the Joint Commission for Accreditation of Healthcare Organizations (JCAHO). The organization deemed pain management so important that it became one of the patient rights that must be discussed with patients upon admission to a home care organization for any service. In addition, specific standards for the clinical management of pain have been added to the JCAHO standards since the publication of the organization's 2000–2001 manuals.

In part, the renewed focus on pain management resulted from rather abysmal accounts of adequate pain relief. In a 1999 survey, only one in four individuals who were experiencing pain received appropriate therapy.²

The philosophy underlying pain management has changed dramatically over the past two decades. Out of concern over the perceived addictive properties of pain medications, before the 1990s, pain medications were largely given "as needed," pharmacological properties of the drugs were not given adequate consideration, and limited drugs given on rigid schedules were considered the normal course of therapy.

The new emphasis on pain assessment is best summed up with the slogan: *"Pain is the fifth vital sign."*

What is Pain?

Today, pain is recognized as a subjective experience that requires an individualized approach to treatment. Perhaps the most well known definition of pain is Margo McCaffery's: "Pain is whatever the experiencing person says it is, existing whenever he or she says it does."³ The International Association for the Study of Pain (IASP) defines pain as "An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."⁴ Regardless of which definition is used, the perception of pain and its severity is a subjective experience. Healthcare personnel may observe signs and symptoms that indicate pain or discomfort such as grimacing, restlessness, diaphoresis and moaning, but the severity can only be reported by the patient.

Pain Mechanisms, Pathways and Nociception

The medical term for pain is nociception. Nociception is defined as the detection of tissue damage or injury by peripheral nerve fibers.

Nociceptors are sensory receptors that detect chemical, thermal or mechanical damage to tissues. Generally, pain is

Table 1

Factors Impacting Growth in the Pain Management Market

- Advances in the understanding of pain mechanisms and management
- Increased populations suffering from cancer, HIV/AIDS and other chronic diseases
- Rising prevalence of repetitive stress injuries
- Rising incidence of stress/anxiety levels in an increasingly aged population
- Increased awareness and availability of alternate site healthcare and pain management programs
- Increased technological advances in pain management products and devices

described in terms of four processes:

- Transduction
- Transmission
- Perception
- Modulation

Transduction is conversion of the energy from a chemical, thermal or mechanical damage to tissues into electrical energy by sensory receptors called nociceptors.

Upon activation, signals from the nociceptors travel along two major types of fibers: slow conducting, unmyelinated C-fibers, and rapid conducting myelinated A-delta fibers. When injury occurs at the tissue level, inflammatory mediators, such as prostaglandins, bradykinin, histamine, serotonin and cytokines are released. These substances can also trigger nociceptors.

Transmission occurs when nerve impulses from the periphery are transmitted to the spinal cord and brain. The majority of nerve impulses travel from the periphery via the axons of primary afferent neurons and arrive at the dorsal horn of the spinal cord. From there, nociceptive impulses travel to the thalamus and other areas of the brain.

Perception occurs when the person becomes aware of the unpleasant sensation or negative emotion and perceives it as a threat. This sensation or perception involves both cortical and limbic structure. The perception of pain

Table 2

Pain Management Can Target Specific Stages of Nociception	
Transduction	Local anesthetics, NSAIDS
Transmission	Opiates, Baclofen
Perception	Social, environmental factors
Modulation	Antidepressants

can be mediated by the social and environmental context in which it occurs and is very individualized.

Modulation of pain occurs at peripheral, spinal and brain levels. Perhaps best known is Melzack and Wall's Gate Control Theory which viewed pain modulation as descending inhibitory input.⁵ Current models of pain modulation now include both inhibitory and facilitory pathways.⁶

Knowledge of the mechanism of pain is important in treatment because pain medications can target pain at each of the stages of nociception. The table below illustrates the types of pain medications or therapy approach that might be selected to target specific stages of pain:

Nociceptive pain is often further classified as:

1. Superficial Somatic — arises from skin, mucous membranes and subcutaneous tissue
2. Deep Somatic — arises from muscles, tendons, joints and bones
3. Visceral — arises from visceral organs

Types of Pain

In a monograph developed by the National Pharmaceutical Council, Inc. and the Joint Commission on Accreditation of Healthcare Organizations entitled Pain: Current Understanding of Assessment, Management, and Treatments, four major classifications of pain were identified:⁷

- Acute Pain — which is now defined not just in terms of tissue injury, but also is protective
- Chronic Pain — disrupts sleep and activities of daily living and ceases to have a protective function
- Cancer Pain — pain caused by the disease itself

- Chronic Noncancer Pain — persistent pain not associated with cancer

Chronic noncancer pain is a subtype of chronic pain and is characterized by a weak correlation to tissue pathology and/or responds poorly to standard treatments. Examples of chronic noncancer pain are listed below:

- Osteoarthritis
- Low back pain
- Myofascial pain
- Fibromyalgia
- Headaches (migraine, tension, cluster)
- Central pain (spinal cord injury, stroke, MS)
- Chronic abdominal pain (chronic pancreatitis, chronic PUD, IBS)
- Sickle cell disease
- Complex regional pain syndrome
- Phantom limb pain
- Peripheral neuropathy
- Neuralgia (post-herpetic, trigeminal)

When symptoms of chronic noncancer pain “consume the attention of and incapacitate the patient he or she may be suffering from “chronic pain syndrome.”⁸ These patients are very difficult to manage and may require referral to an interdisciplinary pain management team.

Management of the Patient with Pain in the Home Setting

Patients identified for parenteral pain management at home must be thoroughly assessed to determine their current level of acuity to ensure they are proper candidates for a home care referral. The following factors must be considered to determine the appropriateness and safety of care at home:

- Conventional therapies with oral, transdermal, I.M. and rectal medication have been utilized at the highest dose without relief of pain.
- Conventional therapies are not a reasonable choice based on patient-specific conditions, i.e., chronic emesis, loss of absorptive bowel surface, etc.
- A patient has a reliable caregiver/family member who understands the potential problems associated with parenteral opioid therapy.
- The patient/caregiver is willing to maintain the vascular access device and pump as instructed by a nurse.
- The patient/caregiver or immediate family members are not at risk for drug abuse/misuse.
- The physician treating the patient will work reliably with the home care staff and will:
 - Respond to monitoring problems and/or ongoing assessments
 - Fulfill legal requirements for narcotic prescriptions
- The home setting is appropriate and safe for administration of pain management therapy.

Nursing Considerations

The home care nurse is a valuable resource for the family and physician to ensure that pain management therapy is effectively and safely administered. Nurses use a holistic approach to the patient who is receiving home parenteral pain management including the physical, emotional, social and psychological aspects of this therapy.

Pain assessment is an integral part of a generalized body system assessment that occurs during each home visit. Pain assessment

typically involves a number of areas that include:

- Pain characteristics — the onset, duration, location, quality, intensity, associated symptoms and factors that help to alleviate or exacerbate pain.
- Management strategies — a history of how the patient has managed pain including all medications (prescribed and over-the-counter), non-pharmacological treatments, coping strategies and family and/or community support utilization.
- Relevant medical history — any illnesses, medical diagnoses, injuries, surgical procedures, psychiatric illnesses or accidents.
- Relevant family history — general health and availability of family members, family history of pain and pain management.
- Psychosocial history — marital or vocational problems, stressors or depression.
- Impact of pain on the patient's life — impact on work, daily activities, personal relationships, sleep and appetite.
- Patient's expectations and goals — goals for pain management and acceptable level of pain intensity, effect of pain management on ADLs, social and emotional well-being.

During pain management therapy in the home, nurses routinely assess the level of the patient's pain. A variety of tools are available to assess pain; these include numerical rating scales (0 to 10 or 0 to 5), visual analog scales (asking the patient to rate the level of pain along a 10 cm line), categorical scales (such as the Wong-Baker faces) and multidimensional tools such as the McGill Pain Questionnaire or the Brief Pain Inventory. Most important is that these tools are consistently used

so that an accurate assessment of pain management effectiveness over time can be determined.

In addition to assessment of the patient's pain, the home care nurse also teaches the patient how to use the infusion pump or administer the parenteral pain medication, how to care for the vascular access device, signs and symptoms to report to the nurse and physician, and how to safely store the equipment and supplies associated with this therapy. The nurse also assesses the effectiveness of the plan of care and the effect of the therapy upon the family or household.

Pharmacy Considerations

Pharmacists have a primary responsibility to prepare the pain medication, assure that the medication, equipment and supplies are delivered, used and stored appropriately, and for monitoring the patient's response to the therapy. Pharmacists take into consideration the type of medication prescribed in order to develop the appropriate dilution and volume for the type of delivery method selected. Working collaboratively with nurses and the physician, the pharmacist develops a care plan that considers the most appropriate and safe infusion device, drug dilution, administration rate and supplies.

The type of infusion device, mechanical or electronic infusion pump, affects the formulation of the pain medication. Some devices have flow rate limitations or dose setting increments that affect concentrations of the final mixture. The rate of infusion is another important consideration. An appropriate infusion rate for a subcutaneous infusion is much different from that of an epidural infusion or a central venous infusion, for example. The type of vascular access device dictates the types of supplies, flush solutions and dressing frequency.

Table 3

Analgesics and Anesthetics Administered by Parenteral Routes in the Home			
Medication	Subcutaneous	Intravenous	Epidural
Morphine (Generic)	✓	✓	✓
Hydromorphone (Dilaudid®)	✓	✓	✓
Fentanyl (Sublimaze®)	✓	✓	✓
Sufentanil (Sufenta®)	✓	✓	✓
Ketoralac (Toradol®)	✓	✓	N/A
Lidocaine (Xylocaine®)	✓	✓	✓
Bupivacaine (Marcaine®)	✓	✓	✓

The amount of medication dispensed at one time is influenced by several factors: the medication prescribed, the dosage regimen/rate of infusion, the medication stability at room and refrigerator temperature, stability of the patient's pain control, and distance from the patient's residence to the home infusion pharmacy.

Throughout the length of therapy, the pharmacist carefully monitors the patient for side effects related to the pain medication and co-existing diseases, reviews lab work for electrolyte disturbances, metabolic abnormalities and for appropriate drug levels. The pharmacist also assesses the patient regularly for adequate pain relief.

Parenteral Routes of Administration

Pain management in the home is administered most often through venous and intraspinal parenteral routes. Parenteral routes include: subcutaneous, peripheral, peripherally inserted central catheter (PICC), midline catheter, tunneled catheter and implanted port. Intraspinal catheters include epidural and intrathecal.

Subcutaneous

This route is often used for short-term administration, less than a few weeks. A 27 gauge or smaller

butterfly-type needle is placed into the subcutaneous tissue, usually in the abdomen, but the upper arm or thigh can also be used. This method is suitable for short-term pain management, such as that required for post-operative pain management. The subcutaneous needle can be placed readily and no flush is required. The needle is removed and replaced in another site every 48–72 hours.

Limitations to the subcutaneous route include volume restriction. The maximum volume for subcutaneous administration is approximately 3 ml/hour. Tissue irritation is common, and the sites must be changed and rotated frequently. Subcutaneous tissue can be limited in patients whose illnesses cause cachexia. This route of administration is of limited use.

Peripheral Cannula

Standard short peripheral cannulas are commonly used for short-term pain medication administration, less than about two to four weeks depending upon the status of the patient's venous access. A 24 to 20 gauge cannula placed in the hand or forearm is commonly used. This type of device is removed and reinserted every three to seven days.

Generally, there are relatively few restrictions on the volume of medication which can be delivered

via this route. Eventual or pre-existing lack of venous access is the typical limiting factor for this route, although phlebitis at the site of insertion and occlusion of the device are other problems that may occur.

Peripherally Inserted Central Catheters (PICC) and Midline Catheters

Midline catheters are a bridge between peripheral and central venous catheters; midlines are inserted above or below the antecubital area and threaded to a mid-arm location (below the shoulder). The midline location offers a slightly larger diameter vein, more stability and longer duration than a peripheral cannula.

PICCs are centrally located catheters typically placed in a controlled outpatient setting such as a day surgery clinic, or in the inpatient setting before the patient is discharged. They can, in some instances, be inserted in the home. The PICC catheter is a true central venous access device but originates in a peripheral vein of the arm. Placement of the tip in a central location must be verified by x-ray prior to using the line. PICC lines can remain in place for up to one year and thus are ideal for more extended therapy while avoiding the surgical placement required of tunneled catheters or implanted ports.

Most often, PICC care is performed by a nurse on a weekly or more frequent basis.

Tunneled Catheters and Implanted Ports

Tunneled catheters, such as the Hickman®, Broviac® and Groshong® and implanted ports are commonly used for anticipated long-term therapy of multiple years and thus would generally be considered for chronic pain management. The choice of a tunneled catheter versus

an implanted port is generally made between the patient and surgeon with multiple factors considered including the patient's dexterity, lifestyle, body image and level of assistance.

Central venous systems offer the advantage of long-term venous access, however, additional labor is required to maintain these devices. Patients and/or caregivers must learn how to access and maintain these devices. Catheter infection, displacement, occlusion and malfunction are problems that can occur.

Epidural and Intrathecal Catheters

The use of epidural analgesic and anesthetic medications for pain management has increased dramatically over the past decade. These routes are especially useful in the treatment of terminal cancer pain, bone metastases and chronic pain unresponsive to other types of parenteral infusion. Temporary, short-term epidural catheters are limited in use in the home care setting because of their tendency to become displaced and the increased incidence of inflammation and infection associated with their use. Intrathecal catheters have also emerged in home care for administration of opioids and local anesthetics. Most often, epidural and intrathecal pain management is administered via implanted pumps. The advantages of epidural and intrathecal routes of administration is a more intense analgesia at lower doses of medication and site specific analgesia. The combination of anesthetic and analgesic medications improves analgesia while decreasing the risk of side effects from higher analgesic dosing.

Patient Controlled Analgesia

Patient controlled analgesia (PCA) is a pain management system that allows the patient to self administer small doses of analgesia and is typically combined with a low-dose continuous infusion of pain medication. An ambulatory pump with PCA capabilities is programmed to infuse a steady continuous dosage and a fixed number of bolus doses at fixed intervals. The patient uses the bolus doses at fixed intervals. The patient uses the boluses "as needed" but cannot exceed the preset dosage or interval. PCA is available for intravenous, epidural and intrathecal routes. The goal of pain management is to use the smallest dosage to provide adequate pain relief with minimal side effects. Patient controlled analgesia is particularly effective in meeting this goal.

Complications and Monitoring Parameters

The most common complications associated with parenteral pain management in the home care setting are related to medication effects, route of administration, problems with access device or equipment malfunction.

Drug-Related Complications and Monitoring

Systemic side effects and adverse reaction of parenteral pain medications are generally dose related. The higher the dose, the greater the likelihood of side effects.

Gastrointestinal side effects include nausea, vomiting and constipation. Respiratory depression is always a concern. Central nervous system side effects include confusion and mental clouding. Pruritus can be a vexing problem. Patients must be cautioned about the possibility of orthostatic hypotension when

changing position or rising after being supine. General strategies to manage problematic side effects include:

1. Changing the dose or route of administration.
2. Trying a different drug within the same class.
3. Using a drug to minimize the side effect, such as an antihistamine for pruritus or a stool softener/laxative for constipation.

Table 4

Organizations that Have Published Practice Guidelines for Pain Management
Agency for Healthcare Research and Quality www.ahrq.gov
American Pain Society www.ampainsoc.org
American Academy of Family Physicians www.aafp.org
American Medical Directors Association www.amda.com
American Society of Anesthesiologists www.asahq.org
Institute for Clinical Systems Improvement www.icsi.org
American Geriatrics Society www.americangeriatrics.org

Table 5

Summary of the JCAHO Standards that Relate to Pain Management
<ul style="list-style-type: none"> • R1.2.160: Patients have the right to pain management. • PC.8.10: Pain is assessed in all patients (home health, clinical and consultative pharmacy, ambulatory infusion). • PC.6.10: The patient receives education and training specific to the patient's needs and as appropriate to the care, treatment and services provided.

Patients who are debilitated or malnourished are at greater risk of side effects. Adequate hydration, nutrition and a high fiber diet can help to reduce gastrointestinal side effects.

Access Device-Related Complications and Monitoring

Access devices always carry the risks of infection, occlusion and breakage. During nursing visits, the access device and insertion site are carefully inspected for potential complications. In addition, patients/caregivers are taught to report any access device problem, such as pain, tenderness, redness or drainage around the site; difficulty or the inability to infuse the medication or flush the device; leakage from the device or site; or symptoms which can indicate an infection, such as fever, rigors, malaise or diaphoresis.

Equipment Malfunctions

Problems associated with pump malfunction can occur at any time during the delivery of pain management therapy. All of the pumps used in home infusion therapy are inspected between patient use and undergo maintenance and certification at the interval recommended by the manufacturer. Nurses and pharmacists monitor the pumps carefully for malfunction and check function during visits. Patients/caregivers are taught pump use, troubleshooting techniques and learn when to contact the home care provider for pump questions.

Standards and Guidelines for Pain Management

A number of organizations have developed practice guidelines for pain management as indicated on Table 4. These practice guidelines provide important information for clinicians about the most effective ways to treat pain. Unfortunately, clinical practice guidelines are inconsistently implemented and pain management continues to be generally inadequate. The Joint Commission continues to play a major role in ensuring that organizations have a plan to provide comprehensive and effective clinical services related to pain management. A summary of areas that the JCAHO standards address are listed on Table 5.⁹

Conclusion

Over the past decade, the management of pain has been the focus of accreditation organizations, national healthcare organizations and clinicians. Advances in technology and the understanding of the physiological and psychosocial aspects of pain have led to enhanced strategies to manage pain more effectively. Several agencies have published clinical guidelines in an effort to disseminate research findings and improve pain management. Parenteral pain management therapy is a growing area of the home infusion market. ♦

References

1. Brookoff D. Chronic pain: 1. A new disease? Hospital practice. Available at: <http://www.hosppract.com/>
2. Chronic Pain in America Survey. Conducted for American Pain Society, the American Academy of Pain Medicine, and Janssen Pharmaceutica, 1999.
3. McCaffery M. Nursing practice theories related to cognition, bodily pain, and man-environmental interactions. Los Angeles, CA; 1968. Available from: UCLA students' store.
4. Merskey H, Bugduk N. Classification of chronic pain syndromes and definitions of pain terms. 2nd ed. Seattle: IASP Press; 1994.
5. Melzak R, Wall PD. Pain mechanisms: a new theory. *Science* 1965; 150:971-79.
6. Terman GW, Bonica JJ. Spinal mechanisms and their modulation. In: Loeser JD, Butler SH, Chapman CR, Turk DC, editors. *Bonica's management of pain*. 3rd ed. Baltimore: Lippincott Williams & Wilkins; 2001. p 73-152.
7. Pain: current understanding of assessment, management, and treatments. A monograph developed by the National Pharmaceutical Council, Inc. and the Joint Commission on Accreditation of Healthcare Organizations, December 2001.
8. Dunajcik L. Chronic nonmalignant pain. In: McCaffery M, Pasero C, editors. *Pain clinical manual*, 2nd ed. St. Louis: Mosby; 1999. p 467-521.
9. Joint Commission on Accreditation of Healthcare Organizations. *Comprehensive accreditation manual for home care (CAMHC)*; 2004. Available from: JCAHO, One Renaissance Blvd., Oakbrook Terrace, IL 60181.

Self-Assessment Quiz: Pain Management in Home Care

LEARNING GOAL

Have a general understanding of home pain management including the demographics of the chronic pain population, types of pain, assessment of pain, primary and adjuvant medications used to treat pain, and medication delivery methods.

LEARNING OBJECTIVES

At the end of this program, the reader will be able to:

1. Describe the demographics of the acute and chronic pain population.
2. Define the types of pain.
3. Describe the assessment of pain.
4. Identify common tools used to assess pain.
5. Identify medications commonly used for pain management in home care.
6. Discuss pain medication delivery methods.

SELF-ASSESSMENT QUESTIONS

In the Quiz Answers section on the next page, fill in the correct answer for each question. To obtain two (2.0) contact hours toward CE credit, the passing score is 100%. Return your Self-Assessment Quiz to Coram via email or fax. See the next page for details on how to return to your quiz. Please allow approximately seven days to process your test and receive your certificate upon achieving a passing score.

1. Pain is a primary reason for seeking healthcare.
 - a. True
 - b. False
2. Which of the following statements about pain is true:
 - a. Pain is usually effectively treated and few Americans receive inadequate treatment of pain.
 - b. About 25 million Americans experience chronic pain.
 - c. About one-third of Americans will experience severe pain at some point.
3. Which of the following definitions was proposed by Margo McCaffery, well-known expert in pain management?
 - a. Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.
 - b. Pain is whatever the experiencing person says it is, existing whenever he or she says it does.
 - c. Pain is a sensation that requires relief and prevents concentration on activities of daily living.
4. All of the following are part of pain sensation EXCEPT:
 - a. Induction
 - b. Transduction
 - c. Perception
 - d. Modulation
5. Which of the following statements about somatic pain is true:
 - a. Somatic pain arises from visceral organs.
 - b. Superficial somatic pain arises from muscles and joints.
 - c. Deep somatic pain arises from tendons and bones.
6. All of the following are examples of chronic noncancer pain EXCEPT:
 - a. Headaches
 - b. Low back pain
 - c. Neuralgia
 - d. Osteosarcoma pain
7. Which of the following statements best sums up the slogan "Pain is the fifth vital sign":
 - a. It is not necessary for a nurse to assess pain because unlicensed personnel can take other vital signs.
 - b. Vital signs have been ranked in order of importance and pain is number five.
 - c. The assessment of pain should be given equal attention as compared to the assessment of vital signs.
8. Which of the following statements about the assessment of pain is true:
 - a. A variety of pain assessment tools should be used with an individual patient because the response to pain is individualized.
 - b. There is a general lack of reliable tools for pain assessment.
 - c. Nurses should select the pain assessment tool that best fits each individual situation.
 - d. Pain assessment tools should be consistently used so that an accurate assessment of pain management effectiveness over time can be determined.
9. Which of the following access routes has emerged as especially useful when used in the treatment of terminal cancer pain/bone metastases and chronic pain unresponsive standard therapy:
 - a. Epidural
 - b. Central venous
 - c. Peripheral
 - d. Subcutaneous
10. All of the following are common side effects associated with parenteral pain medications EXCEPT:
 - a. Nausea, vomiting and diarrhea
 - b. Confusion and mental clouding
 - c. Renal insufficiency
 - d. Orthostatic hypotension

Healthline

VOLUME 24

Coram[®]* Continuing Education Program

Pain Management in Home Care

QUIZ ANSWERS

Fill in the key below with the correct answers to receive 2.0 Continuing Education credits.**

1. (a) (b)
2. (a) (b) (c)
3. (a) (b) (c)
4. (a) (b) (c) (d)
5. (a) (b) (c)
6. (a) (b) (c) (d)
7. (a) (b) (c)
8. (a) (b) (c) (d)
9. (a) (b) (c) (d)
10. (a) (b) (c) (d)

**Accreditation Information

- Provider approved by the California Board of Registered Nursing, Provider Number 15200 for 2.0 contact hours.
- Coram CVS Specialty[®] Infusion Services is approved by the Delaware Board of Nursing, Provider Number DE-14-010517.
- Coram CVS Specialty Infusion Services is approved by The Commission for Case Manager Certification to provide continuing education credit to CCM[®] board certified case managers.
- Coram CVS Specialty Infusion Services is a Continuing Professional Education (CPE) accredited provider with the Commission on Dietetic Registration (CDR). Registered Dietitians (RDs) and Dietetic Technicians Registered (DTRs) will receive 2.0 continuing professional education units (CPEU) for completion of this program/material. CDR Provider CO100.
- Provider approved by the National Association of Social Workers (Approval Number 886613245).
- Coram CVS Specialty Infusion Services is an approved provider for the American Board for Transplant Certification (ABTC). Coram CVS Specialty Infusion Services will grant one Continuing Education Point for Transplant Certification (CEPTC) for this offering. Provider Number 147.
- Coram CVS Specialty Infusion Services is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

To obtain Continuing Education credits, please complete this information in full. Please print clearly.

Name: _____

Address: _____

City: _____ State: _____ ZIP: _____

License Number (required to receive CEs): _____

RN LPN Certified Case Manager Social Worker

Employer: _____

Work Phone: _____

Coram Representative: _____ Date: _____

Was this material:

Useful in your practice? Yes No

Comprehensive enough? Yes No

Well organized? Yes No

Certificate delivery:

I would like my certificate mailed to the address provided above.

I would like my certificate emailed to me at: _____
(ex: john.smith@coramhc.com)

Fax this page to Coram at 949-462-8990, or

SUBMIT FORM VIA EMAIL: CEDept@coramhc.com

*Coram CVS Specialty Infusion Services
©2017 Coram CVS Specialty Infusion Services. All rights reserved.
COR16009-0415