Clinical Pharmacist Chronic Pain Services: Implementing Interprofessional Care for Complex Patients and Improving Outcomes

MICHELE L. MATTHEWS, PHARM D, CPE, BCACP
EDGAR ROSS, MD
LORI TISHLER, MD
Objectives

- Describe the clinical pharmacist service and how such services can be established.
- Describe the interprofessional collaboration and benefits to medical staff in effective and efficient management of their patients.
- Describe the opportunities organizations can realize in improved patient outcomes, including proactively addressing substance abuse issues that can arise in patient populations served.
Scope of the Problem: Chronic Pain

Paradigm

- Recognition of chronic pain as a disease
  - Resource-intensive population
- Lack of providers with expertise/interest
  - “Pass the buck” mentality
- More opinions than evidence
- Opioids at the center of a public health crisis
  - Regulatory changes
  - Increasing emphasis on abuse liability
- Limited armamentarium
The Advancing Role of the Pharmacist

1960s
A pharmacist at the Indian Hospital in Montana started filling patients’ prescriptions based on medical record information.

1970s
Interdisciplinary task force created to develop standards for pharmacists’ clinical practice.
ASHP and AACP conference on “clinical aspects of pharmaceutical practice”.
Iowa family practice-based clinical pharmacy program developed.

1980s
Clinical pharmacy services established within the Department of Veterans Affairs.

1990s
HCFA report found that clinical pharmacy services added value to patient care.
Asheville Project
Standards for residency training developed by ASHP and APhA.

2000s
Specialty certification for pharmacists expanded for ambulatory care.
Increase in clinical pharmacy services throughout the majority of health care settings.
Pain Management Competencies for Pharmacists

- Chronic pain syndromes
- Pain pharmacotherapy
- Interventional therapies
- Risk assessment and management
- Toxicology and urine drug screening evaluation
- Responsible opioid prescribing/universal precautions
- Behavioral interventions
- Addiction medicine
- Inter-professional communication and collaboration

Pharmacy Services for Chronic Pain Management

- Medication history review and reconciliation
- Recommendations for initiation, modification, or discontinuation of medication regimen
- Assessment of adherence to medications
- Behavior modification techniques and follow-up services for nonadherence
- Pharmacokinetic and clinical monitoring of medications
Pharmacy Services for Chronic Pain Management (cont’d)

- Patient education regarding self-administration and monitoring of medications
- Monitoring for therapeutic effects, drug interactions, and adverse drug events through drug regimen review, laboratory data/vital sign assessment and patient interview
- Identification of and monitoring for behaviors of medication misuse, abuse, and/or addiction
Pharmacy Services for Chronic Pain Management (cont’d)

- Facilitating communication between care team members and pharmacies
- Implementing strategies for opioid overdose prevention, including access to naloxone
- Assist with the development of clinical protocols to encourage the systematic approach to and use of various analgesic therapies
Pharmacy Services for Chronic Pain Management (cont’d)

- Conduct academic-detailing and/or drug use evaluations
- Assist with quality improvement projects to improve processes related to patient care
Interprofessional Team-Based Care

Sample practice models

- Pharmacist as team member
- Pharmacist as provider extender
  - Collaborative drug therapy management (CDTM)
- Students as pharmacist extender

What is CDTM?

Team approach to healthcare delivery whereby a pharmacist and prescriber establish written guidelines or protocols authorizing the pharmacist to initiate, modify or continue drug therapy for a specific patient.
Benefits of CDTM

- Maximizes the expertise of pharmacists and physicians or other prescribers to achieve optimal patient care outcomes through appropriate medication use and enhanced patient care services.

- Reduces delays in modifying drug regimens and unnecessary physician office visits, and increases patient compliance and adherence to drug therapy plans.

Alliance for Pharmaceutical Care. Collaborative Drug Therapy Management: A Coordinated Approach to Patient Care. Available at: www.allianceforpharmcare.com
Envisioning Change

- Ensuring pharmacists have adequate training
- Obtaining stakeholder buy-in
- Leveraging academic partners
Envisioning Change (cont’d)

- BWH Pain Management Center
  - Importance of pharmacy integration

- Processes involved with development of clinical pharmacy services
Envisioning Change (cont’d)

- BWH Phyllis Jen Center for Primary Care
  - Importance of pharmacy integration

- Processes involved with development of clinical pharmacy services
Pharmacist Involvement at Brigham and Women’s Hospital

- BWH Pain Management Center
  - Team-based care
- BWH Phyllis Jen Center for Primary Care
  - Pharmacist-directed chronic pain management clinic
  - Collaborative care program for opiate dependence
Pharmacist Involvement at Brigham and Women’s Hospital (cont’d)

- Advanced Pharmacist Practitioner credentialing and privileging
  - Prescriptive authority under CDTM protocols
    - Chronic low back pain
    - Neuropathic pain
    - Fibromyalgia
Reasons for Referral

- Medication reconciliation
- Assessment of adherence to therapy
- Counseling on analgesic regimen
- Recommendations for modifications to regimen
- Medication monitoring

- Polypharmacy, especially combination use of high-risk medications
- High-dose opioid use
- High risk for opioid misuse
- Need for opioid discontinuation strategies
- Need for coordination of care
Patients are referred to the Chronic Pain Management Program by their primary care provider (PCP) or by a BWH pain specialist.

The PCP or pain specialist communicates the official diagnosis and associated patient-specific therapeutic goals to the pharmacist upon referral.
The clinical pharmacist evaluates the need for drug therapy or appropriateness of current therapy, and if deemed appropriate, will initiate, modify, or discontinue drug therapy. Assessment describing the rationale for initiating or modifying drug therapy will be based on clinical and patient information including:

- Adverse drug reactions
- Allergies/intolerances
- Medication duplication
- Medication interactions including: drug-drug, drug-food, drug-herbal, and drug-lab
- Nonadherence to medication therapy
A pharmaceutical care plan is developed based on the following goals of therapy:

- **Chronic low back pain**
  - Improvement in pain (Brief Pain Inventory)
  - Improvement in function (Pain Disability Index)

- **Neuropathic pain**
  - Improvement in pain (McGill Questionnaire - Short Form)
  - Improvement in function (Pain Disability Index)

- **Fibromyalgia**
  - Improvement in pain (Brief Pain Inventory)
  - Improvement in function (Fibromyalgia Impact Questionnaire)
Specific Treatment Recommendations

- Drug class selection
  - Guided by disease-specific algorithm
- Specific drug selection
  - Hospital-approved pain management tables and guidelines
Monitoring and Follow-Up

- Visits
  - Patients return to clinic at monthly intervals to assess pain and function using standardized pain assessment questionnaires and for adjustment of medication therapy.
  - More frequent visits are required for patients with multiple, complex comorbidities and/or risk factors for medication misuse.
  - Once drug therapy management is stabilized, patients return to clinic at 3 to 6 month intervals.
Drug therapy monitoring

The following parameters will be assessed at each visit:

- Analgesia
- Adverse effects
- Function including ability to perform activities of daily living
- Presence of aberrant drug-related behaviors
- Affect
- Use of adjuvant analgesics
- Cost / access to therapy
Sample Protocol: Chronic Low Back Pain

Diagnosis of CLBP AND Provider Referral

- Evaluate current analgesic regimen;
- Continue or initiate nonopioid analgesics
- Encourage nonpharmacologic interventions

Have all nonopioid analgesic options been tried?

Yes

- Initiate trial of 2nd-line or 3rd-line nonopioid analgesics
- Encourage nonpharmacologic interventions

No

Return to clinic every 1 to 3 months to reassess pain, function, adverse effects, and proper use of therapy; Consider use of long-acting preparations if achieving goals

Are opioid analgesics appropriate based on comorbidities, current medications, allergies, and mental health status (PHQ-9, MDI)?

Yes

- Obtain baseline urine drug screen;
- Conduct assessment of opioid misuse risk;
- Obtain data from prescription drug monitoring program (PDMP)

Consult with PCP and pain attending to discuss appropriateness of therapy; if opioids are prescribed, patient will agree to:
- Frequent office visits (e.g., every 2-4 weeks)
- Frequent urine drug testing
- Completion of opioid misuse risk assessment tools at each visit
- Routine monitoring of PDMP data

No

Is patient at high risk for opioid misuse?

Yes

Opioids not appropriate

Use of opioids deemed appropriate

No

Discontinue opioid therapy (Appendix D)

Return to clinic every 2 to 4 weeks to reassess pain, function, adverse effects, and proper use of therapy

- Is the patient displaying aberrant drug-related behavior?
- Has the patient violated the terms of the treatment agreement?
- Has the patient achieved treatment goals?
- Is the patient experiencing significant adverse effects?

Consider a trial of short-acting opioids
- Establish goals of therapy and treatment endpoints
- Educate patient on proper use and risks
- Implement a treatment agreement

Continue nonopioid and nonpharmacologic interventions

Return to clinic every 3 to 6 months for re-evaluation
Successes – Improvement in Patient Outcomes

Percent Change in Average Daily Pain Scores after Referral
- Chronic low back pain = -30%
- Neuropathic pain = -40%
- Fibromyalgia = -5%

Percent Change in Pain Disability Index Scores after Referral
- Chronic low back pain = -5%
- Neuropathic pain = -7%
Successes & Challenges – Physician Perspective

- BWH Pain Management Center
  - Strengths
  - Areas for improvement
  - Opportunities
Successes & Challenges – Physician Perspective (cont’d)

- BWH Phyllis Jen Center for Primary Care
  - Strengths
  - Areas for improvement
  - Opportunities
Reimbursement for Clinical Pharmacy Services

- Facility fees & CPT codes
  - Medicare stipulations for “incident-to” billing
- Negotiated payment structures with private insurers

1. ASHP. Pharmacist Billing for Ambulatory Pharmacy Patient Care Services in a Physician-Based Clinic and Other Non-Hospital-Based Environments – FAQ. Available at: www.ashp.org
Future Directions

- Personalized medicine
  - Pharmacogenetics testing
- Integration of new technologies
  - Mobile applications
  - Drug therapy monitoring
- Transitional care management

Recommendations for Increasing Patient Access to Pharmacist Clinical Services

- Optimize CDTM and medication therapy management (MTM) statutes and regulations in order to enable pharmacists to better serve patients
- Support efforts to ensure sufficient infrastructure for pharmacist education and advancement
- Ensure that pharmacists have access to new technologies that improve pharmacy efficiency, patient safety, and patient care

Alliance for Pharmaceutical Care. Collaborative Drug Therapy Management: A Coordinated Approach to Patient Care. Available at: www.allianceforpharmcare.com
The changing landscape for chronic pain management warrants an interprofessional approach.

Successful Integration of clinical pharmacy services for chronic pain management can be associated with:

- Improved patient outcomes
- Improved provider and patient satisfaction
- Opportunities for reimbursement
Professional pharmacy organizations

- American Society of Health-System Pharmacists
  - http://www.ashp.org/menu/Ambulatory-Care
- American Pharmacists Association
  - www.pharmacist.com
- American College of Clinical Pharmacy
  - www.accp.com
Thank You!

Michele Matthews, PharmD, CPE, BCACP
michele.Matthews@mcphs.edu

Edgar Ross, MD
elross@partners.org

Lori Tishler, MD
ltishler@partners.org