



How Intermountain Healthcare Developed Its Pain Management Strategy

The CDC estimates that nearly 80 people die of opioid overdose each day in the United States. Opioid overuse is a critical issue, and the need for interventions is becoming an urgent priority for many health systems.

Utah-based Intermountain Healthcare has made preventing prescription opioid misuse a top community health priority. Utah ranks eighth in the nation for opioid overdose deaths. In 2016, Intermountain helped create an Opioid Community Collaborative, partnering with public health organizations, behavioral health providers and law enforcement agencies to address the problem, which is causing nearly one death in Utah every day.

In addition, Intermountain caregivers made developing a comprehensive pain management strategy a top priority. Intermountain sought to develop an end-to-end strategy to tackle the opioid over-prescription problem head-on, while maintaining quality pain management for patients. The organization selected global strategy firm L.E.K. Consulting to assist it in this endeavor. In fact, Intermountain was the first among L.E.K.'s healthcare clients to take the initiative to develop a comprehensive pain management strategy.

Intermountain looked within its own system to ensure that a new pain management strategy would build on the capabilities and strengths already in place. For example, Intermountain's notable Mental Health Integration Model links mental health

screenings and resources with patient visits at Intermountain primary care clinics. Likewise, Intermountain sought to learn from best practices of established pain management programs across the United States. L.E.K. assisted Intermountain in inventorying existing pain management capabilities across its system, as well as surveying the leading pain management programs developed at leading health systems and academic medical centers, to inform the design of Intermountain Healthcare's comprehensive pain management program design. Nationwide, there were elements of successful pain management programs, but no one had yet developed a comprehensive solution.

Intermountain sought to achieve two objectives: the avoidance of opioid dependence and escalation for acute pain patients, and improved outcomes and management of pain symptoms for chronic pain patients.

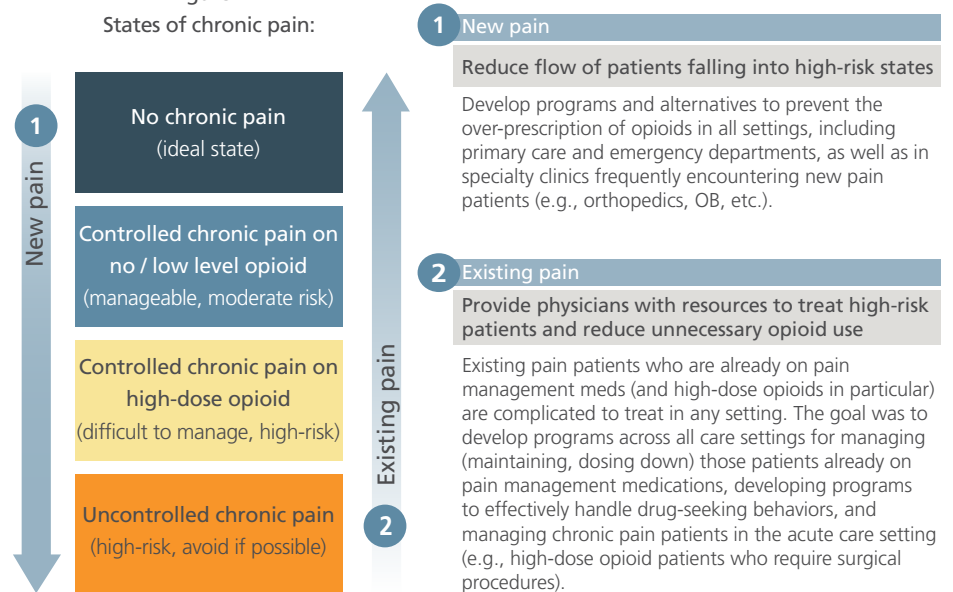
Intermountain also recognized that pain management issues are present in every care setting, indicating the need to develop program elements to address patients' pain issues across the care continuum (see Figure 1). The resulting comprehensive strategy includes solutions for primary care and the physician's office, outpatient clinics and facilities, and inpatient care. Intermountain's Mental Health Integration Model will be integrated further into the patient management strategy, both in a primary care management model and with specialty pain care.

Primary care: The goal is to enable primary care physicians (PCPs) — to whom patients most often present first with pain symptoms, and who manage chronic pain patients on an ongoing

basis, long after any acute procedure or injury — with the support and resources that allow them to offer alternative ways to manage their patients' pain symptoms. The focus in this setting is to support PCPs with the behavioral health, midlevel clinician and administrative staff to offer patients conservative alternatives to opioids and surgical interventions.

Other outpatient settings: A multidisciplinary approach to managing pain is also an important aspect of Intermountain's pain management strategy beyond the PCP's office. Pain management specialty clinics serve a dual purpose, as the source for specialty consults for other clinicians dealing with pain patients and as the lead on the management of chronic and complex pain patients during their most difficult episodes. Intermountain's approach to outpatient pain management clinics is different from most current prevailing models — which too often rely on interventional procedures such as nerve blocks. Rather, Intermountain takes a multimodal, multidisciplinary approach that integrates the critical behavioral elements of pain and pain perception while also incorporating

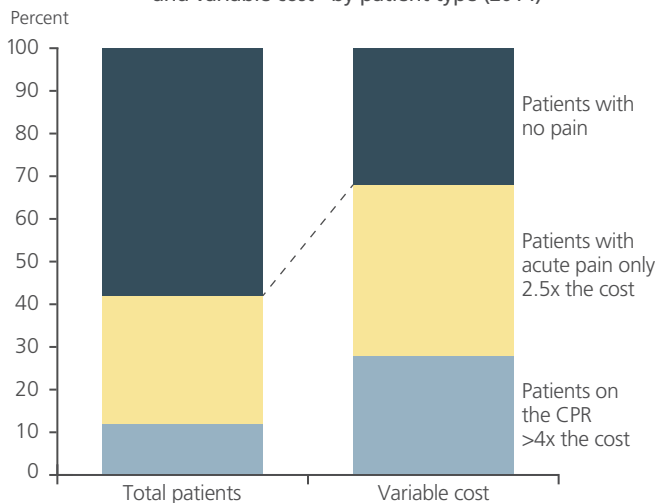
Figure 1
States of chronic pain:



Source: L.E.K. research, interviews and analysis

physical therapy and occupational therapy, neurology, anesthesiology, and physical medicine and rehabilitation (PM&R) specialists. The objective is to manage chronic patients better, to prevent escalation of opioid doses for those already on an opioid regimen, and to stabilize acute pain episodes for patients to enable their return to the PCP for ongoing maintenance. Resources will be provided in person and through TeleHealth services.

Figure 2
Intermountain total patients by type and variable cost* by patient type (2014)



Note: *Variable cost for facility-based encounters (data on variable costs for other encounter types were not available)

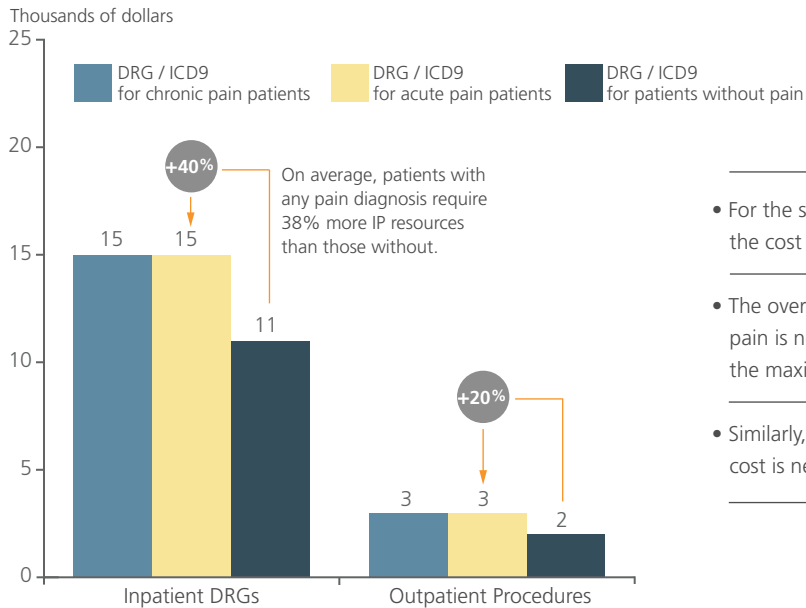
Source: Intermountain encounter dataset, Intermountain Chronic Pain Registry, L.E.K. research and analysis

Hospital inpatient setting: A pain specialist consult within the hospital is also an important resource. These consults are for acute pain patients presenting in the emergency room, acute pain perioperative patients, and chronic pain patients who may require tapering from their opioid levels before they can undergo surgical procedures. When effectively deployed, this clinical service can improve outcomes in managing chronic pain patients in the hospital setting while offering alternatives to opioids for patients experiencing procedure- or trauma-related pain. Pain-trained specialist consults are not common within acute care hospitals; each specialty typically addresses the pain management aspects of its patients without a pain-trained consult available.

Beyond the public health crisis that opioid overdose deaths represent, poorly managed pain results in higher costs of care and strains healthcare resources. Intermountain found that patients experiencing pain complications represented disproportionately higher costs of care when compared with patients without pain (see Figure 2).

Figure 3

Average total costs incurred* for pain vs. no-pain patients among DRG** and ICD9^ procedure codes (2014)



- For the same procedures, the cost for pain patients was compared with the cost for patients without pain
- The overall differential between average total cost for no pain and acute pain is nearly +40%; however, among the top 25 DRGs by encounters the maximum difference is as high as +70%
- Similarly, for outpatient procedures, the overall average differential in total cost is nearly +20%, but the maximum difference is as high as +50%

Note: *Average total cost includes fixed and variable costs; **DRG codes with at least one encounter in each pain type; ^ ICD9 codes with at least one encounter in each pain type. Source: Intermountain internal data – representative 20% sample of all patients within the Intermountain system, L.E.K. analysis.

In fact, when comparing inpatient cases on a like-for-like basis by DRG (diagnosis-related group) and diagnosis, patients with pain incurred nearly 40% higher costs per inpatient stay and nearly 20% higher costs per outpatient procedure (see Figure 3). The numbers are compelling and provide the impetus for investing in and developing a comprehensive pain management strategy.

Implementing such a strategy is not without challenges. The current healthcare environment in the nation and from state to state includes disparities in both health service priorities and how payers incentivize for or against these services. Success will require a considered approach to stakeholder alignment and a thoughtful cadence for tactical rollout.

As an integrated system, Intermountain is uniquely positioned to measure the impact of pain complications on its patient/member

population. It can also realize the benefits of improved pain management in both resources utilized in care delivery and total cost of care on the health plan side.

Improved pain management has great potential to yield a wide swath of benefits, whether for a hospital system, a health plan or even a large (especially risk-sharing) physician group making the investment. A coordinated effort across stakeholders clearly optimizes the impact and enhances the chances of success in improving outcomes for patients experiencing pain.

To learn more about Intermountain Healthcare's pain management strategy, visit <https://intermountainhealthcare.org/services/pain-management/>

To learn about how L.E.K. can assist with pain management program and strategy development, contact healthcare@lek.com.

About L.E.K. Consulting

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