

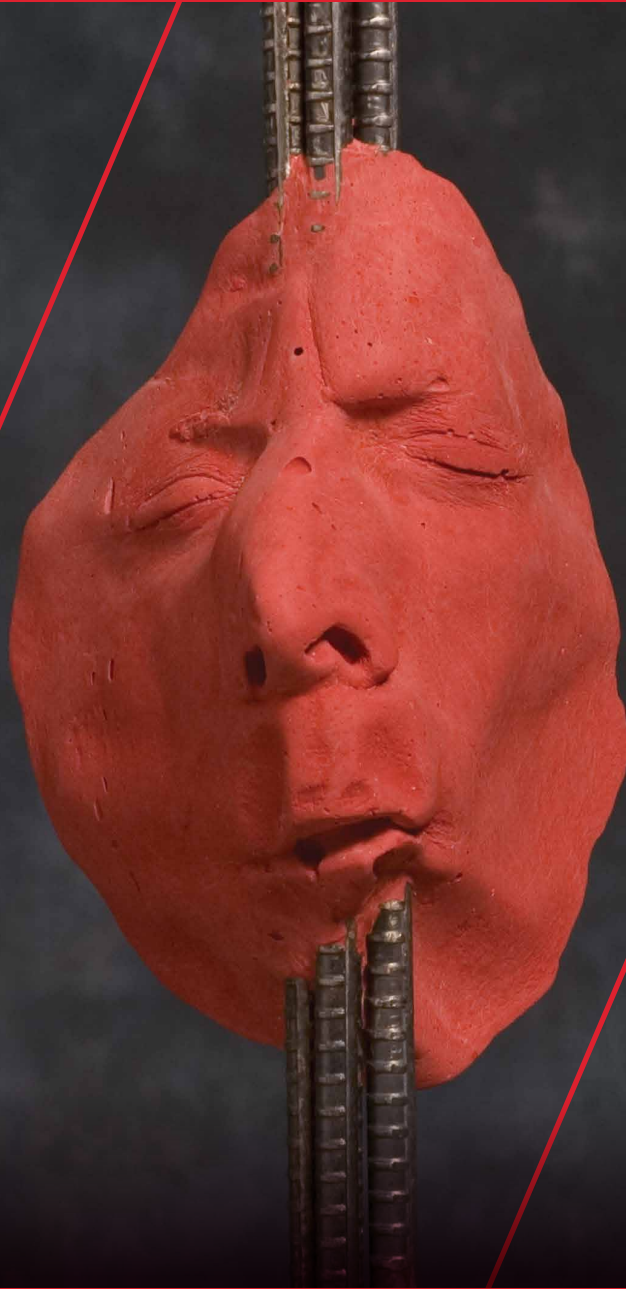
# PAINS

PROJECT

*TRANSFORMING THE WAY PAIN IS PERCEIVED, JUDGED AND TREATED*

## EDUCATIONAL BRIEF

Issue 6



**WHAT IS BIOPSYCHOSOCIAL PAIN CARE?  
WHY SHOULD YOU CARE?**



# WHAT IS BIOPSYCHOSOCIAL PAIN CARE AND WHY SHOULD YOU CARE?

## BACKGROUND:

In 2011, the Institute of Medicine (IOM) published *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education and Research*.<sup>1</sup> The report called for a “cultural transformation in the way pain is perceived, judged and treated” and determined that the most immediately important of its sixteen recommendations (Recommendation 2.2) was for the Department of Health and Human Services (HHS) to develop a “comprehensive, population health-level strategy for pain.”

In March 2015, HHS published *The National Pain Strategy (NPS) Report* in the Federal Register.<sup>2</sup> The Executive Summary includes a set of “fundamental conclusions and implications drawn from the IOM report.” Among those is the statement that:

*“Chronic pain is a biopsychosocial condition that often requires integrated, multi-modal, and interdisciplinary treatment, all components of which should be evidence-based.”*

For some time, the International Association for the Study of Pain (IASP) has defined pain as a “biopsychosocial” phenomenon, and references to pain as a “biopsychosocial condition” are peppered throughout the IOM report. These efforts are meant to designate pain not simply as a physical sensation or a symptom, but rather as a phenomenon that is experienced by a thinking, feeling person, impacted by a variety of factors which requires a new model: a multi-modal approach. The “biopsychosocial model” of care is defined in *Relieving Pain’s* glossary as:

*A framework that accounts for the biological, psychological, and social dimensions of illness and disease. The biopsychosocial model provides a basis for the understanding and treatment of disease, taking into account the patient, his/her social context, and the impact of illness on that individual from a societal perspective. The model states that ill health and disease are the result of interaction among biological, psychological and social factors.*

Elsewhere in the IOM report are related references to comprehensive, rehabilitative, interdisciplinary, multi-modal, comprehensive-rehabilitative, individualized, patient-centered, integrated and integrative pain care models. These terms are used synonymously with biopsychosocial. In the NPS Draft Report (Box 1, pg. 8), biopsychosocial is defined much more succinctly as “a medical problem or intervention that combines biological and social elements or aspects,” and elsewhere descriptors and synonyms similar to those in the IOM report are also included.

### **So, specifically, what is this new approach being promulgated? And what should it be called?**

The discussion and debate around these two questions are reminiscent of a famous *Saturday Night Live* skit from *SNL’s* early years. Dressed like tourists in plaid sport coats and hunting caps with ear flaps, comedians Steve Martin and Bill Murray would wander on to the stage and come upon some interesting object unknown to them. Martin would ask Murray, “What is it; what the hell is it?” in a loud and exclamatory voice. Murray would offer up

some ridiculous response which Martin would reject, and the original question would be asked again. After several repetitions of the Q&A, one of them one say, “I don’t know what the hell it is but take my picture with it.”

Like the SNL skit, the current discussion about “biopsychosocial” pain care points to the importance of language and nomenclature and a clear understanding of what it is.

## **PAINS’ Journey to Find the “Right” Name for a New Approach to Chronic Pain Care**

Names and labels matter. The ancient Romans had a saying, “nomen est omen”, i.e., “name is destiny.” Modern psychologists refer to this phenomenon as “implicit egotism” – that is, we are drawn to things, people and places that sound like our own name. Most people know someone whose name is ironically similar to their profession. Surely, it can’t be coincidence that two of the nineteen members of the National Institutes of Health’s Interagency Pain Research Coordinating Committee members, Dr. Richard Payne (Duke University and the Center for Practical Bioethics) and Dr. Sharon Hertz (Center for Drug Evaluation and Research at the FDA) are both credentialed in pain medicine. What something or someone is called is also important in business and clinical situations. According to researchers from the Department of Psychology at the University of Michigan, when we don’t know what a name means, we often fear it. We are uncomfortable with what we don’t understand.

In 2011, PAINS contracted with an outside consultant to do an environmental scan of work being done to improve chronic pain care to determine whether or not there was a need for the work we had envisioned. Based on that report, we decided to move forward with PAINS. Developing a statement of need was the first tangible step in organizing the alliance. A group of well-known leaders in pain management was asked to participate in that task. For many reasons, it was a tedious process; people were concerned about a new entity possibly competing with their own mission and for resources. Another factor was the “Tower of Babel problem.” Although all were focused on the same problem – chronic pain – and agreed on the importance of a new clinical model, language and terminology were often used differently and had special nuances and connotations.

With reservations about competition overcome, there was quick consensus that the “biomedical model” should

be replaced with a more comprehensive approach. The biomedical model is defined as:

*“...the dominant, modern way that health care professionals diagnose and treat a condition in most Western countries. According to this model, good health is the freedom from pain, disease, or defect. It focuses on physical processes that affect health, such as the biochemistry, physiology, and pathology of a condition. It does not account for social or psychological factors that have a role in the illness. The focus is on objective laboratory tests rather than the subjective feelings or history of the patient.”<sup>3</sup>*

There is little disagreement about the need for a new approach to pain care. Following the publication of the IOM report, The Health Management Academy, an organization that provides leadership development, independent research and policy analysis services to executives of the top 100 health systems, did in-depth interviews with 16 chief medical officers and other executives in three large health systems and one rehabilitation institute and administered a quantitative survey with executives in 87 large health systems to document perceived effectiveness of chronic pain management in the largest health delivery systems in the U.S.

Results in their 2011 report, *Profiling Best Practices: Chronic Pain Management in the Leading Health Systems*, clearly demonstrate an awareness that there is a need for change.

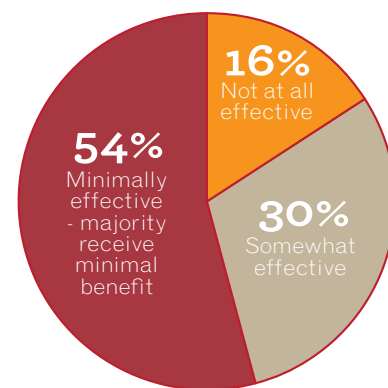
There will be many challenges in transitioning from a biomedical model

to a more comprehensive model. One will be what to call it. All the “labels” mentioned above, i.e., *biopsychosocial, interdisciplinary, multi-model, comprehensive, integrated pain management, integrative, and holistic*, were considered and defined in PAINS’ case statement and glossary of terms. At that time, PAINS settled on using the term “integrated pain management (IPM)” and defined it *functionally* as:

- Informed by evidence;
- Patient-centered and reaffirms the importance

### **Perceived Effectiveness of Chronic Pain Management in the U.S.**

How effectively do you believe the US healthcare system treats patients with chronic pain?



- of the healing, covenantal partnership between practitioner and patient;
- Focused on the whole person – mind, body, and spirit in the context of the individual’s community/ environment;
- Inclusive of all appropriate therapeutic approaches and healthcare professionals to reduce pain, improve function, achieve optimal health and healing, and to provide physical and emotional rehabilitation; and
- Individualized, recognizing that no single treatment or paradigm may be perfectly suited for every patient, especially those in chronic pain.

It was also agreed that those organizations participating in PAINS would NOT have to embrace its use exclusively; however, it was encouraged that they incorporate it into their publications.

One of the major considerations/concerns in this discussion about the new model and what to call it was the reservation many physicians hold about “complementary and alternative medicine” (CAM). Frequently, questions were raised about the evidence base for this approach.

## The Paucity of Data Problem

The reality is that there is little data about every aspect of chronic pain, including what it is and how it should be treated, including data about the efficacy of pharmacotherapy and interventional procedures.

In October 2014, the NIH held a *Pathways to Prevention Workshop on the Long-term Use of Opioids in the Treatment of Chronic Pain*; this problem was highlighted in its final report.<sup>4</sup>

People living in pain are often denied the most effective treatments; conversely, many patients are inappropriately prescribed medications and undergo interventional procedures and surgeries that may be ineffective and potentially harmful. At the root of the problem is inadequate knowledge about the best approaches to treat various types of pain, balancing effectiveness with risks, as well as a dysfunctional health care delivery system that encourages clinicians to prescribe the easiest rather than the most efficacious treatment.

The Evidence-based Practice Center, hired by NIH to assess the current knowledge base for the Prevention Workshop, identified few studies that were able to answer

the key questions, suggesting the dire need for research on the effectiveness and safety of opioids as well as optimal management and risk mitigation strategies. Particularly striking was the realization that *there is insufficient evidence for every clinical decision that a provider needs to make regarding the use of opioids for chronic pain, leaving the provider to rely on his or her own clinical experience* (emphasis added). On the other hand, there is evidence of the effectiveness of multidisciplinary, rehabilitation-focused pain clinics that coordinate pharmacological, behavioral, anesthetic and physical modalities of chronic pain treatment.

## Comprehensive Pain Care: What it is, where it originated and how it is provided

In the February-March 2014 issue of *American Psychologist*, an article titled “Interdisciplinary Chronic Pain Management: Past, Present and Future” was published.<sup>5</sup> Much of what follows in this section is based on this article. For further information, readers of this brief are encouraged to read the entire article.

John Bonica graduated from Marquette Medical School in 1942. During World War II, he served as Chief of Anesthesiology at Madigan Army Hospital. His treatment of so many veterans who had been maimed and injured during the war led him to recognize the complexity of pain, acute or chronic, and ultimately to devote his career to the study of pain and in search of a better way to treat it. He was the first to argue for a multi-disciplinary approach to pain care.

In 1947, Bonica left the Army and became Chief of Anesthesia at Tacoma General Hospital, and it was there that he first attempted to set up a multi-disciplinary group to treat pain. In 1953, he and his colleagues published an article titled “The Management of Pain” which articulated the need and benefit for this approach; it has been described as a classic text. In 1963 he joined the faculty at the University of Washington and tried to establish a multi-disciplinary pain clinic there. His efforts did not achieve what he had hoped for. According to Robert Gatchel and the other authors of the aforementioned article in *American Psychologist*, “It was not until he became aware of the multidisciplinary pain service established by Bill Fordyce and John Loeser at the University of Washington’s Hospital Department of Physical Medicine and Rehabilitation that Bonica truly embraced the pain clinical model he helped invent (Meldrum 2007).” Interestingly, the model Fordyce and



Loeser developed was codified in the late 1980s by the International Association for the Study of Pain (IASP) – an organization founded by John Bonica in 1974. More than thirty years later, this model is still considered “cutting edge” and is what PAINS is referring to by the term “comprehensive pain management.”

A report published by the Office of the Army Surgeon General in May 2010 titled *Providing a Standardized DoD and VHA Vision and Approach to Pain Management to Optimize the Care for Warriors and their Families* has convinced PAINS about the importance of a comprehensive approach, including complementary and alternative medicine.<sup>6</sup>

Recommendation 4.2 of that report was to *“Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain, Based on a Foundation of Best Available Evidence.”* The report went further to say, “This can be accomplished through the adoption of an integrative and interdisciplinary approach to managing pain,” and it incorporated complementary and alternative approaches in treatment modalities, including:

Tier I Treatment Modalities	Tier II Treatment Modalities
Acupuncture	Movement Therapy
Yoga	(Qi Gong, Tai Chi, and Martial Arts)
Therapeutic Medical Massage	Art Therapy
Biofeedback	Music Therapy
Mind-body Therapies (Meditation and Mindfulness)	Aroma Therapy
	Cold Laser
	Monochromatic Near Infrared Energy (MIRE) Treatment
	Cranial Electric Stimulation

The report justified this decision by saying, “The etiology of pain is multi-modal and complicated, affecting every aspect of the individual: physical, emotional, and spiritual, as well the family and community. There is no simple solution to this complex problem. Thus, the treatment needs to be interdisciplinary and multi-modal in its approach. But more than that, it needs to incorporate all the aspects of the individual, family, and community and not just focus on the etiology itself.”

The current biomedical pain care model is a unilateral provider-to-patient relationship where the decision maker is the healthcare professional. In the case of pain management, the patient presents a complaint of pain to the provider, and the provider determines the plan of care. This model is often one of “doing something to or for the

patient” instead of having the patient actively participate in his or her own care.

Many times the *plan of care* is a prescription and, sometimes, a brief set of cautions about the medication. Rarely does the physician expect the patient to do anything other than take the medication and return for a refill. Patients become passive participants in their care which leads to poor outcomes and also fuels the common misperception that a “magic pill” will “fix” their problem. Ultimately, patients become disillusioned with the medical system, and many simply give up.

The DoD report highlights that “stress is a significant contributor to pain conditions. In fact, by definition, pain has an emotional component. Furthermore, chronic pain leads to increased stress which leads to a vicious cycle. Therefore, pain cannot be managed without addressing its relationship to stress. Increasingly research shows that our thoughts and perceptions influence our ability to heal. Mindfulness or the ability to be in the moment brings a greater awareness to the unconscious and its effect on emotional, physical, and spiritual health. Mindfulness focuses the mind’s ability to heal the body. This interaction is often missed in the disease based treatment model.”

Lack of reimbursement is often the reason given by providers for not including these therapies. It is important to note that Section 2706 of the Patient Protection/Affordable Care Act (ACA), known as the Nondiscrimination in Health Care Clause, requires that insurers include and reimburse all licensed health care providers acting within the scope of their license in health insurance plans.<sup>7</sup> Senator Tom Harkin (D-Iowa) advocated for the inclusion of this clause in the ACA. Specifically, it states, *“A group health plan and a health insurance issuer offering group or individual health insurance coverage shall not discriminate with respect to participation under the plan or coverage against any health care provider who is acting within the scope of that provider’s license or certification under applicable state law.”* To date, this clause has been largely ignored, and CAM services are rarely funded by third party payers.

Recently PAINS leaders and editors of this series, we again debated the correct moniker or label for this new approach to pain care, and it is unlikely that it will be the last time that we do so. We did, however, agree that, *for now*, PAINS will refer to this new model of chronic pain care simply as “comprehensive pain care.” There was a strong argument for expanding that to “comprehensive

rehabilitative pain care;” however, in reviewing the AMA Rules for Coining Names, it was decided that “comprehensive pain care” was the best option.<sup>8</sup>

The AMA rules for non-proprietary names are intended to ensure safety, consistency and logic. It is PAINS’ view that, among our options, “comprehensive pain care” best fits the AMA criteria, i.e., it is:

- Comprehensible and has pragmatic value for both healthcare professionals and those living with chronic pain and their families;
- Simple, brief and much easier to pronounce and/or incorporate into conversation;
- Free from conflict with other labels or names considered; and
- Already somewhat established in peer-reviewed literature.

## So, specifically, what is “comprehensive pain management?”

*Comprehensive pain management is a clinical approach that combines biomedical, psychosocial (some argue including spiritual care) and physical rehabilitation services, including some CAM therapies. It is evidence-based, with functional restoration providing the evidence base for this model. Its focus is not on pain scores; its focus is on functionality and wellness. It is individualistic and by definition must be consistent with the patient’s goals and values and accepted clinical practice. It is developed through a shared decision-making model. Formulaic, recipe-like approaches do not result in comprehensive pain management.*

Providers across the board can provide comprehensive pain care. While reimbursement and limited access to treatment beyond the biomedical approach make it very difficult for this model of care to be delivered by primary care providers, the emergence of primary-care medical homes has made it possible in some settings to provide care that can be properly referred to as “comprehensive pain management.” Together, a physician and patient receiving care in a primary care health home can develop a comprehensive management plan that may include:

- *Medication and medication assistance;*
- *Self-management training;*
- *Diet and nutrition counseling;*
- *Behavioral health, including counseling for addiction when necessary;*
- *Access to interventional therapies through organized*

*healthcare delivery networks;*

- *Chiropractic care; and*
- *Other complementary and alternative therapies.*

In some primary medical home settings, patient navigators are now working with patients with complex chronic diseases, including chronic pain.

The current reality, however, is that this scenario is rare in primary care. If it is available, comprehensive pain care is far more likely to be provided in academic pain care centers where care is organized by pain specialists in collaboration with other physicians, including primary care providers, nurses, psychologists, physical therapists, and occupational therapists.

Members of the IOM pain committee believed that a decade before the report was published in 2011 there were as many as 1,000 comprehensive pain management centers in the U.S. However, by the time the report was finalized, “the Commission on Accreditation of Rehabilitation Facilities only accredited 122 pain treatment facilities offering inter-disciplinary approaches.” (Pg. 123, IOM) The primary reason for the disappearance of these programs is believed to be a lack of reimbursement which is ironic in that there has been data since the mid-to-late 1990s demonstrating that this model not only produces better outcomes, it is also more cost effective than the current biomedical approach.

## Cost Effectiveness of Comprehensive Pain Management

Robert Gatchel (University of Texas at Arlington), Akiko Okifuji (University of Utah), and Dennis Turk (University of Washington) have done significant research evaluating the efficacy and financial feasibility of this model. In 2002, Turk issued a review of published studies and concluded that programs providing comprehensive pain management had significantly better outcomes for “medication use, healthcare utilization, functionality (including return to work), and importantly from a policy perspective, closure of disability claims and fewer unintended consequences and adverse events.”

In the November 2006 issue of *The Journal of Pain*, Gatchel and Okifuji published an article titled “Evidence-Based Scientific Data Documenting the Treatment and Cost-Effectiveness of Comprehensive Pain Programs for Chronic Non-Malignant Pain.”<sup>10</sup> It included Turk’s

work and that of others and should have put to rest the question about whether or not this approach is financially feasible in an economically stressed healthcare delivery system.

There are many ways to calculate costs. The IOM report, *Relieving Pain in America*, calculated the cost of chronic pain to our society by combining the cost of treatment with the cost of lost productivity. Gatchel and Okifuji engaged in a sophisticated and multi-factorial analysis examining disability and healthcare costs, including medications. Even though initial costs incurred in comprehensive pain programs may be more than the costs of traditional biomedical approaches, their findings were stunning, e.g., that surgical treatment for low back pain costs two times that of care provided at a comprehensive pain center with comparable outcomes after two years.

Gatchel, Okifuji and Turk have all argued that collaboration with third party payers and pain care providers is essential; however, given the current reimbursement structure in the U.S. where those who are insured by a plan one year may change plans the next, third-party payers may be trying to mitigate their short terms risks. Unfortunately, in doing so, they are ignoring the fact that they will be receiving patients from other plans and sabotaging potential long-term benefits that may accrue to the entire system. The shifts in reimbursement mandated by the Affordable Care Act, e.g., bundled payment, risk sharing with providers and reimbursement based on value rather than volume, should have a positive impact and lead to greater appreciation of comprehensive pain management programs not only to those who provide care but also to those who pay for pain care.

The Draft National Pain Strategy Report calls for a shift from a “fragmented fee-for-service approach to one based on better incentives for prevention (primary, secondary, and tertiary) and for collaborative care along the continuum of the pain experience—from acute to chronic pain across the lifespan, including at the end of life—at all levels of care and in all settings.” It articulates three objectives to facilitate this shift:

1. Define and evaluate integrated, multi-modal, and interdisciplinary care for people with acute and chronic pain and end-of-life pain.
2. Enhance the evidence base for pain care and integrate it into clinical practice through defined incentives and reimbursement strategies to ensure that the delivery of treatments is based on the highest level of evidence, is population-based, and represents real-world experience.
3. Tailor reimbursement to promote and incentivize high-quality, coordinated pain care through an integrated biopsychosocial approach that is cost-effective, comprehensive and improves outcomes for people with pain.

“Their findings were stunning, e.g., that surgical treatment for low back pain costs two times that of care provided at a comprehensive pain center with comparable outcomes after two years.”

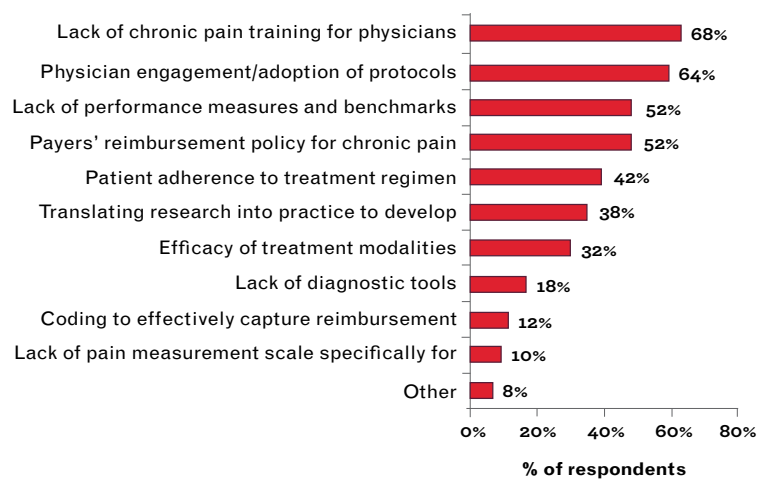
All three of these objectives are important and PAINS is supportive of each one of them. However, knowledge and perception will have to change. When asked how to improve pain management by The Health Management Academy, the thinking of the executives was still mired in the biomedical model.

## Conclusion

This brief is intended to bridge the gap between what we know about chronic pain and how we care for it today and to encourage decision makers to move toward a new model — comprehensive pain management. This will not be easy, as was demonstrated by the perception of barriers to change shown in the Healthcare Academy Report.

### Barriers to Better Care in CPM

What are the most significant barriers preventing progress in chronic pain management?



As more data are available, this model can be fine-tuned and refined, and as Steve Martin said to Bill Murray in that famous SNL skit, then we can “take our pictures with it,” but for now it is evolving.

The IOM report claimed that there is a “moral imperative” to address the problem of chronic pain in America. PAINS agrees, but it appears that there are other reasons for doing so as well, including economic ones. People who struggle to live with chronic pain, their families and those who struggle to care for them deserve better than the status quo.

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**“What is biopsychosocial pain?”** is the 6th in a series of briefs profiling policy and educational issues important to improving pain care.

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