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Primary Care Edition

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The NEW ENGLAND JOURNAL of MEDICINE

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One such example is our popular Clinical Practice articles that offer evidence-based reviews of topics relevant to practicing physicians. This edition includes the May 5, 2022, Clinical Practice article, "Nonspecific Low Back Pain." You also might want to listen to Intention to Treat, a new podcast from NEJM, that draws on the world-class expertise of NEJM editors and specialists to offer patients and clinicians critical context and insights into complex research, medical interventions, and urgent health policy debates.

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On behalf of the entire New England Journal of Medicine staff, please accept my wishes for a rewarding career.

Sincerely,

Eric J. Rubin, MD, PhD



Supporting Physician Wellness: Health Care **Organizations Seeking** — and Piloting — **Programs to Help Physicians Manage Their Work-Life Stressors**

By Bonnie Darves

Just when organizations were formally recognizing that many of their physicians were seriously struggling with burnout and had started to seek remedies to address the endemic problem, the pandemic hit. The timing could not have been worse, many experts on physician burnout agree, and yet, for the most part, the physician workforce navigated the added stressors of COVID-19 both admirably and competently. Physicians worked in highly functioning teams to save lives, mitigate the virus' impact on patients, and offer the highest standard of care possible under the circumstances. Many physicians also helped their organizations chart a "survival path" to navigate the operational crises the pandemic unleashed.

Organizations that employ physicians, having witnessed the steep toll that the pandemic on top of burnout took, are understandably concerned about the state of their workforce. Many organizations are actively seeking, developing, and trying out wellbeing improvement programs to help bolster physicians and other clinicians. Health care leaders are recognizing, too, that physicians are hardly exempt from "the great resignation" our country is experiencing among workers.

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Numerous approaches are being piloted or implemented, with varying degrees of success. These range from informal offerings such as hospital "wellness wagons" delivering a combination of snacks and cheering-up support and wellbeing days off for residents and fellows, to more structured programs. Examples of formal offerings include buddy systems mimicking military-type "battle buddy" practices, mental-health check-in offerings, and physician coaching resources.

The latter, when provided with anonymity guaranteed, appear to be somewhat effective for those who access them, according to Eileen Barrett, MD, MPH, a hospitalist and educator who formerly directed graduate wellness initiatives at the University of New Mexico (UNM). "Many physicians who have received coaching have benefited, and some organizations have been able to demonstrate real outcomes," said Dr. Barrett, who now practices with the Indian Health Service and has published on advocated for national clinician wellbeing improvement strategies. She said that UNM's mental health check-ins, a "renewable" offering, were also relatively well received — 78 of the 109 physicians who booked appointments when the program launched kept those appointments.

Some organizations, such as Intermountain Healthcare in Salt Lake City, Utah, are trying several approaches simultaneously — developing a physician and advanced practice provider (APP) wellbeing center and dedicated portal and scheduling wellness-focused grand rounds and separate leadership rounds to celebrate successes and learn what clinicians are struggling with in their work. Intermountain also provides a range of peer-support forums and options for connecting caregivers, aimed at offering a confidential forum for sharing emotions.

"My task is to develop resources and learn from others around the country and at Intermountain, we're all working on this together to determine what works and what's not helpful," said Anne Pendo, MD, an internist who is senior medical director of Provider Experience and Wellbeing at Intermountain. "What we all recognize, I think, is that we as a profession weren't well before the pandemic," she said, and that the pandemic further eroded physician resiliency. "Now we have an opportunity to try to discover ways to improve wellbeing and then implement them."

Peer-support programs taking hold

At Intermountain, of the initiatives piloted to date, the peer-support offerings have been among the most successful in terms of uptake. Peer supporters

have trained nearly 100 physicians to serve in the role and approximately 300 physicians and clinicians have participated. "I think it's important to position this as 'I can be a helper' if you want physicians to get involved, and to ensure you offer a safe space for sharing feelings — something physicians have historically struggled with," she said, because of fear they'll be perceived as weak.

Researchers and physicians involved in developing wellness-support programs and resources are finding that although it's challenging to figure out exactly what physicians do need in support, there's growing consensus on what physicians don't want: Tips and recommendations for improving their personal resilience. In other words, Dr. Barrett said, "Physicians don't want to hear about another yoga class or meditation practice."

Heather Farley, MD, chief wellness officer at ChristianaCare in Delaware, which rolled out the "wellbeing wagon" described earlier and created a Center for Worklife Wellbeing, concurred with Dr. Barrett. "What doesn't work is focusing too much on the personal minutiae, such as sleep hygiene. Whatever you offer has to support physicians "in their work environment," said Dr. Farley, an emergency medicine physician. Like Intermountain, ChristianaCare has seen a gradual but steady utilization uptake of peersupport offerings. "We're shifting away from the culture of 'shame and blame' to one that says, 'It's OK not to be OK,' and to reach out if you need help," she said.

At the University of Minnesota, which created the buddy system a few months into the pandemic and rolled out the program in a matter of weeks, the model was predicated on the recognition that Dr. Farley cites: everyone needs help sometimes and it's important to know that someone has your back and is willing to help. In the university's program, modeled in part on both the military-battlefield scenario and observations an anesthesiologist made in the operating room during the early weeks of the pandemic, when staff members were becoming more nervous, buddies are "paired" somewhat strategically. Ideally, they're close in age and career length and experience, so that they can both recognize and understand the stressors their buddy is experiencing — and identify when that buddy needs some extra support.

"We decided that the battle-buddy system was a brilliant idea and decided to give it a decent trial," said Cristina Sophia Albott, MD, who heads the university's division of adult mental health. "We wrote the protocol in one week, started the program in two weeks, and rolled it out across the entire medical school." By July 2020, more than 3,000 health care personal, primarily physicians and nurses, had adopted and established the model.

Around the same time, the University of Minnesota implemented "listening groups" and established mental-health consultation services in each clinical department. The latter offering, however, despite the appointments being structured a confidential, wasn't as well received as the buddy program. "Unfortunately, few physicians availed themselves of that offers," she said.

On a positive note, even though the worst of the pandemic crises appear to have largely receded at the university, some departments have decided to continue with the buddy program, Dr. Albott reported. Although there's been considerable variation in how individual departments set up or later retooled their buddy programs, the initiative's early and ongoing success is a clear indicator of the offering's value, she added.

Desperately seeking on-the-ground support and remedies

What physicians do want in the way of support from their organizations, Dr. Barrett and others interviewed for this article agreed, is operational load-lightening, however that can be achieved and institutionalized. Offerings such as onsite childcare and schedule flexibility to address family needs rank high on the wish list for many physicians, and there's a growing consensus that the electronic health record (EHR) persists as a chief source of physician frustration and stress, despite years of organizations' attempts to ameliorate the problem.

"What does appear to work is providing physicians protected time for EHR training or having dedicated information technology (IT) support for dealing with EHR-related issues," Dr. Barrett said, or adding scribes to offload the bulk of EHR-data entry processes. In similar fashion, physicians would appreciate their institutions removing the burden of treatment prior-authorization management. And she noted that the incredibly complex and inordinately inefficient processes related to physician credentialing are ripe for fixing, as they're unnecessarily burdensome for physicians. "If credentialing were centralized, at least for Medicare, that would go a long way in reducing the burden. Most people think that the system, as it stands, doesn't really make anyone safer," Dr. Barrett said.

Health care organizations, concerned about both their physicians' wellbeing and their facilities' ability to maintain adequate staffing levels in a time when many physicians are deciding to leave jobs where they don't feel well enough supported, are taking note. They're actively trying to figure out what physicians want and need to care for patients with fewer frustrations.

Physician professional organizations are also stepping in to identify what's needed now in institutional supports to help physicians mitigate burnout and regain resiliency. The American College of Physicians' Patients Before Paperwork initiative, for example, has identified the most burdensome tasks and regulatory requirements that internists face and offered policy recommendations for reducing associated workload. The American Medical Association has also developed a multifaceted initiative to provide guidance and targeted solutions to health care organizations for many of the problems that threaten physician wellbeing.

In an article published in the Annals of Internal Medicine in September 2021, Dr. Barrett and her co-authors proposed a series of steps that organizations might take to reduce clinician burnout, keep physicians in the workforce as the health system continues to navigate COVID-19, and simply make physicians' practice lives more tolerable. In addition to the COVIDrelated recommendations for improving physician safety and providing practical support as needed to address system-capacity constraints, the authors urged organizations to do the following:¹

- · Help ensure more flexible scheduling for physicians who are parents or care for aging parents.
- · Reduce, eradicate, or reassign administrative tasks and meetings that aren't mission critical and haven't delivered improved patient outcomes.
- Provide no-cost and truly confidential mental-health support services and also truly encourage physicians to use their available vacation and professional development time to nurture a healthier workplace. At the same time, organizations should update credentialing and employment applications to remove unnecessary questions related to mental and physical health diagnoses, to reduce the associated stigma.

Dr. Barrett offers another recommendation to employer organizations. "If you offer resources that might support or improve physician wellbeing, make sure your physicians know about them. Physicians are so stretched and busy that they might not know what's available," she said.

Tips for structuring physician-wellness support offerings

All sources who participated in this article offered guidance for organizations trying to provide resources that might help improve physician wellbeing. Here are a few:

- Understand that each environment is different, which means that the problems and needs might vary widely from one health care organization to another. To develop appropriate solutions and resources, ensure that physicians are directly involved in creating them.
- · Avoid focusing resources on individual-physician resilience and instead focus on system approaches that might have the added benefit of helping physicians support one another and reduce unnecessary workload. Keep in mind that some physicians have an innate distrust of "corporatesponsored" initiatives that appear to be focused on the bottom line.
- · Provide a safe forum for physicians to recommend institutional approaches that mitigate the burdens that contribute to burnout and also make their overall work lives more realistically manageable.
- If you try a wellness initiative and it doesn't produce results that are valuable to physicians, be ready and willing to abandon it. Then be prepared pilot something else — quickly.

¹Barrett E, Hingle ST, Smith CD, Moyer DV. Getting Through COVID-19: Keeping Clinicians in the Workforce. Ann Intern Med. 2021 Nov;174(11):1614-1615. doi: 10.7326/M21-3381. Epub 2021 Sep 28. PMID: 34570597; PMCID: PMC8500335.

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When is It Time to Change Jobs?

By Nisha Mehta, MD, a physician leader whose work focuses on physician empowerment, community building, and career longevity in medicine

Statistically, the majority of physicians will change jobs within their first five years out of training. Additionally - even at later stages of physician careers — an increasing percentage of the physician population considering changes in their career. Physician turnover is an often talked about issue amongst hospital administrators and practice owners.

Why is this? Well, part of it has to do with the challenges associated with being a physician in the current health care landscape. My father, a cardiologist, spent four decades of his career with the same group. Many of his friends can say the same. On the other hand, I know a far lower percentage of colleagues who could say with confidence that they see themselves with the same group for the remainder of their careers. Aside from practical drivers of physician turnover, such as a desire to be closer to family or a change in the job of a significant other, many are finding their workplaces increasingly challenging. As consolidation within the health care space increases, physician demographics change, and the pressure to do more with less increases, more physicians find themselves asking if their situation is sustainable.

We all have aspects of our jobs that are pain points, and the expectation that any job will be perfect is unrealistic. How do you know you're not just trading one set of pain points for another — which in a worst case scenario, is potentially worse elsewhere?



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When considering a job change, I always recommend writing down the pain points at your current job, delineating which ones are dealbreakers, and which ones could potentially be changed if discussed openly with the employer. If you are planning on leaving anyways, it's advisable to first see if the current situation can be fixed. Although these conversations can be uncomfortable, ultimately if you're planning on leaving regardless, it may be that there's little to lose in trying. Similarly, ensuring that these same pain points are not present at the new job is prudent.

Factors such as salary, flexibility in work hours, opportunities for growth or promotion, dissatisfaction with the current job environment and the direction a company is going in, burnout, or other non-salary aspects of the compensation package are all examples of things that lead to job turnover that could potentially be negotiated with the current employer.

There are other factors which many see as writing on the wall that a change is inevitable. Sometimes these can be related to changes in ownership or management structure of a group, a confirmed trend towards cutting physician compensation or hiring patterns which suggest the physician's time at the job is limited, or administrative mandates that have been challenged and upheld which leave the physician with the conclusion that they can't practice medicine in a way that they enjoy or feel is best for the patient.

Many people stay with jobs out of comfort or fear of change. Unfortunately, this leads to burnout, and ultimately is a threat to career longevity. If you're feeling unhappy with your job, it's time to either advocate for change within your current position, or consider other options.

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The NEW ENGLAND **JOURNAL** of MEDICINE

CLINICAL PRACTICE

Caren G. Solomon, M.D., M.P.H., Editor

Nonspecific Low Back Pain

Alessandro Chiarotto, P.T., Ph.D., and Bart W. Koes, Ph.D.

This Journal feature begins with a case vignette highlighting a common clinical problem. Evidence supporting various strategies is then presented, followed by a review of formal guidelines, when they exist. The article ends with the authors' clinical recommendations.

A 37-year-old man reports he has had pain in his lower back for the past month. The

pain is worse when he gets up in the morning, when it is associated with stiffness in

the lower back. The patient has a history of episodes of low back pain that have typi-

cally occurred after vigorous sports activities. His medical history is otherwise unre-

markable; he has not previously sought medical care for the pain. Physical examina-

tion shows that the patient's range of motion is limited on lumbar forward bending,

and there is tenderness on palpation of the lower back. There are no neurologic defi-

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THE CLINICAL PROBLEM

cits. How would you evaluate and treat this patient?

OW BACK PAIN, TYPICALLY DEFINED AS PAIN BELOW THE COSTAL MARGIN and above the inferior gluteal folds, with or without leg pain,¹ is worldwide the most prevalent and most disabling of the conditions that are considered to benefit from rehabilitation.² In a systematic review that included 165 studies from 54 countries, the mean point prevalence of low back pain in the general adult population was approximately 12%, with a higher prevalence among persons 40 years of age or older and among women; the lifetime prevalence was approximately 40%.³

Low back pain is classified as specific (pain and other symptoms that are caused by specific pathophysiological mechanisms of nonspinal or spinal origin) or nonspecific (back pain, with or without leg pain, without a clear nociceptivespecific cause).⁴ Nonspinal causes of specific low back pain include hip conditions, diseases of the pelvic organs (e.g., prostatitis and endometriosis), and vascular (e.g., aortic aneurysm) or systemic disorders; spinal causes include herniated disk, spinal stenosis, fracture, tumor, infection, and axial spondyloarthritis. Lumbar disorders with radicular pain due to nerve-root involvement have a higher prevalence (5 to 10%) than other spinal causes; the two most frequent causes of such back pain are herniated disk and spinal stenosis.⁵ The overall prevalence of the other spinal disorders is low among patients with acute low back pain. For example, among 1172 patients who presented to primary care clinicians in Australia with acute low back pain, only 11 (0.9%) were found to have serious spinal conditions (mostly fractures) during 1 year of follow-up.⁶ The authors of a Dutch study that involved primary care patients reported axial spondyloarthritis in almost one quarter of adults 20 to 45 years of age who presented with chronic low back pain,⁷ although these findings have not been replicated.

In contrast to low back pain caused by specific identifiable causes, nonspecific

KEY CLINICAL POINTS

NONSPECIFIC LOW BACK PAIN

- Nonspecific low back pain is diagnosed on the basis of the exclusion of specific causes, usually by means of history taking and physical examination.
- Imaging is not routinely indicated in patients with nonspecific low back pain.
- Most patients with an acute episode of nonspecific low back pain will recover in a short period of time.
- Education and advice to remain active are recommended for patients with acute or chronic low back pain.
- For chronic low back pain, exercise therapy and behavioral therapy represent first-line options, with medications considered to be second-line options.

low back pain probably develops from the inter- the year after presentation and apply to both action of biologic, psychological, and social fac- acute and chronic low back pain: a recovery trators,⁴ and it accounts for approximately 80 to jectory in which the patient's condition improves 90% of all cases of low back pain.¹ Low back rapidly or gradually toward a state of no or little pain is usually classified according to pain dura- pain, an ongoing trajectory in which the patient tion as acute (<6 weeks), subacute (6 to 12 weeks), has moderate or fluctuating pain, and a persisor chronic (>12 weeks).⁸

RISK FACTORS

Risk factors for an episode of nonspecific low mately 70%) have a pain trajectory that is progback pain include physical risk factors (e.g., nostic for recovery, whereas this trajectory is less prolonged standing or walking and lifting heavy frequent in patients with chronic low back pain weights), an unhealthy lifestyle (e.g., obesity), (approximately 30%), a population in which psychological factors (e.g., depression and job many patients (40 to 50%) have an ongoing pain dissatisfaction), and previous episodes of low trajectory. back pain.9 In a case-crossover study that inof pain.¹⁰

NATURAL HISTORY AND PROGNOSIS

and by 12 months the average reported pain (range of relative risk ratio per unit increase, main pain-trajectory subgroups that emerge in unit increase, 1.90; 95% CI, 1.17 to 3.08).¹⁴

According to a review of observational studcluded 999 patients with sudden-onset acute ies, factors that are consistently associated with low back pain, performance of manual tasks poor outcomes (i.e., ongoing pain, disability, or (e.g., those involving heavy loads or awkward both) in patients with low back pain included postures) and distraction during an activity or the presence of widespread pain, poor physical task were identified as triggers of a new episode functioning, somatization, high pain intensity, long pain duration, high levels of depression or anxiety (or both), previous episodes of low back pain, and poor coping strategies.¹³ An observa-Low back pain is increasingly understood to be tional study with 5 years of follow-up that ina long-lasting condition with a variable course volved 281 patients with nonspecific low back rather than isolated, unrelated episodes. Accord- pain showed higher risks of a persistent pain ing to a systematic review of prospective incep- trajectory among patients with high pain intention cohort studies (33 cohorts and 11,166 pa- sity (relative risk ratio per unit increase, 1.87; tients) that were conducted mainly in primary 95% CI, 1.33 to 2.64), low socioeconomic status care and involved a variety of approaches to (relative risk ratio, 5.39; 95% CI, 1.80 to 16.2), treatment,¹¹ new-onset episodes of low back pain negative illness perceptions (negative cognitive generally abated substantially within 6 weeks, and emotional responses to low back pain) levels were low (6 [95% confidence interval {CI}, 0.83 [95% CI, 0.71 to 0.97] to 1.19 [95% CI, 1.06 3 to 10] on a scale of 0 to 100, with lower scores to 1.34]), and passive coping behaviors (helplessindicating less pain). Research on the course of ness and reliance on others with regard to copnonspecific low back pain has identified three ing with low back pain) (relative risk ratio per

tent trajectory in which the patient perceives constant and severe pain (Fig. 1).¹² The majority of patients with acute low back pain (approxi-



Figure 1. Simplified Principal Trajectories of Pain Intensity among Patients with Low Back Pain. Adapted from Kongsted et al.¹²

STRATEGIES AND EVIDENCE

DIAGNOSIS AND EVALUATION

after specific disorders of spinal and nonspinal back pain on the basis of five measures (i.e., origin are ruled out. A detailed history taking disability compensation, presence of leg pain, and physical examination can point to spinal pain intensity, depressive symptoms, and perconditions or nonspinal conditions that may ceived risk of persistent pain) among patients lead to specific intervention. The history should who have an initial episode of low back pain.¹⁹ include attention to red flags (e.g., history of A meta-analysis of studies that assessed other cancer or trauma, parenteral drug use, long-term screening questionnaires showed that the Subglucocorticoid use, immunocompromise, fever, groups for Targeted Treatment (STarT) Back and unexplained weight loss), since their pres- screening tool and the Örebro Musculoskeletal ence warrants consideration of an occult serious Pain Questionnaire, although not informative diagnosis (e.g., cancer, infection, or inflamma- predictors of chronic pain, are predictive of subtory disease) and close follow-up, although only sequent disability; the latter was also highly some of these historical features have been predictive of work absenteeism.²⁰ The use of shown to be useful predictors of such serious these screening tools in practice allows for the diagnoses. For example, in systematic reviews, a early identification of patients who are at risk for strong clinical suspicion for cancer¹⁵ or a history persistent low back pain-related disorders and of cancer^{15,16} has been associated with an in- may guide treatment.²¹ creased likelihood of a malignant condition. whereas other classic red flags (e.g., unexplained IMAGING weight loss or fever) did not substantially affect Routine imaging is not recommended in patients the post-test probability of cancer.¹⁵ Older age with nonspecific low back pain. Systematic re-(>70 years), trauma, and the prolonged use of views of observational studies have shown inglucocorticoids have been associated with a high consistent findings with regard to the associaspecificity for and considerable increased proba- tion between abnormal imaging findings and bility of spinal fracture, with the highest prob- low back pain (Table S1 in the Supplementary ability of fracture seen when multiple features Appendix, available with the full text of this arare present.¹⁶ History taking should also elicit ticle at NEJM.org).^{22,23} In a study that included whether pain is limited to the lower back or is patients 65 years of age or older who presented

more widespread; the latter may point to other conditions, such as fibromyalgia.

If a herniated disk is suspected, a positive ipsilateral straight-leg-raising test (in which pain results when the leg on the side of the back or leg pain is raised) is highly sensitive (in 92% of patients), and a positive contralateral straightleg-raising test (in which pain is produced when the leg opposite the side of the back or leg pain is raised) is highly specific (in 90% of patients).⁵ In the case of radiculopathy, a neurologic evaluation can rule out weakness, loss of sensation, or decreased reflexes; if any of these features are present, referral to a specialist may be indicated. Other maneuvers on physical examination have generally low diagnostic accuracy for the identification of other sources of low back pain (i.e., facet joints, sacroiliac joints, and disks).^{17,18}

Screening tools can be used to estimate the risk that acute nonspecific low back pain will become chronic. The Predicting the Inception of Chronic Pain (PICKUP) tool is a validated predic-Diagnosis of nonspecific low back pain is made tion model that estimates the risk of chronic low

when persistent low back pain with or without servative care.

TREATMENT

pharmacologic treatment is prescribed.⁴⁶

Acute Low Back Pain

acute low back pain.⁴⁶ Education may address tients.⁴⁶ the benign, nonspecific nature and favorable course of low back pain, and patients should be Chronic Low Back Pain encouraged to continue with regular activities. A In patients with chronic low back pain, educameta-analysis of randomized trials showed (with tion should play a key role, with supervised exmoderate-certainty evidence) that individual pa- ercise and behavioral therapy as other first-line tient education, as compared with usual care or therapeutic options. Head-to-head randomized, other control, although not effective for pain, was controlled trials that compared these approaches effective in reassuring patients and reduced pri- have shown similar beneficial effects on pain in mary care visits due to low back pain at 1 year.⁴⁷ the short term (with low-to-moderate-certainty Meta-analyses of randomized trials support the evidence).³⁹ although the effects of exercise and use of a few sessions of spinal manipulative behavioral interventions over longer follow-up therapy or acupuncture for the reduction of pain, are unclear as compared with the effects of although the certainty of evidence for spinal usual care or other conservative interventions.^{38,39} manipulative therapy is moderate and that for A recent systematic review with network metaacupuncture is low.^{30,33} Heat and massage ther- analysis that included more than 200 randomapy are without risks and are reasonable to try, ized trials of 11 different types of exercise although the benefit of these therapies is sup- showed that most types of exercise had benefiported only by limited data.^{31,32} Exercise therapy cial effects on alleviating pain and improving that is prescribed or planned by a health profes- functioning, as compared with minimal treat-

with acute low back pain without radiculopathy, sional has not been shown to be effective in the use of early imaging (e.g., radiography, mag- patients with acute low back pain (Table 1),²⁹ but netic resonance imaging, or computed tomogra- may be considered in patients at risk for poor phy) was not associated with improved patient recovery, given evidence from randomized trials outcomes at 1 year.²⁴ Nevertheless, imaging may of the effectiveness of exercise therapy in allevibe performed when informative red flags are ating chronic low back pain⁴⁶ (Table 2) and in present, when there is a neurologic deficit, or reducing the risk of episodes of low back pain.⁴⁸ Among pharmacologic interventions, acetnerve-root involvement does not abate with con- aminophen was not shown to be effective in a large clinical trial (Table 1),³⁴ whereas nonsteroidal antiinflammatory drugs (NSAIDs) have shown benefit.³⁵ However, caution is advised in Numerous randomized, controlled trials and the use of NSAIDs in older adults and in patients systematic reviews have assessed the effective- with coexisting conditions such as renal disease. ness of interventions for nonspecific low back Topical NSAIDs (e.g., topical diclofenac) have pain. Tables 1 and 2 summarize the pooled ef- been shown to have fewer adverse events than fects on acute and chronic low back pain, re- oral NSAIDs, but their efficacy has not been spectively, and the Grading of Recommenda- rigorously studied in patients with low back tions, Assessment, Development, and Evaluation pain. Results of a meta-analysis of the effects of (GRADE) approach to the certainty of evidence muscle relaxants suggested that the use of nonobtained from systematic reviews of randomized benzodiazepine antispasmodics begun within trials that assessed the interventions that have the first 2 weeks of the onset of pain had posimost frequently been evaluated by practice guide- tive effects, but the analysis was based on verylines.²⁷⁻⁴⁵ Overall, first-line treatments are cur- low-certainty evidence.³⁶ These and other muscle rently represented by nonpharmacologic inter- relaxant agents had no significant effect on pain ventions, which should be prioritized before or disability during longer follow-up and were associated with a higher risk of adverse events.³⁶ Given the lack of data and the associated risk of addiction, the use of opioids should be mini-Patient education and advice to remain active mized; weak opioids (e.g., tramadol) may be should represent routine care for patients with considered for use in carefully selected pa-

Table 1. Effectiveness of Interventions on Pain Intensity and Physical Functioning Outcomes at Immediate-Term Follow-up (0-4 Weeks) in Patients with Acute Nonspecific Low Back Pain.*

In Patients with Acute Nonspecific Low	Dack Faill.						
Intervention vs. Control	Pain Intensity				Physical Functioning		
	No. of Studies	Pooled Effect (95% CI)†	Evidence Certainty	No. of Studies	Pooled Effect (95% CI)†	Evidence Certainty	
Conservative intervention							
Advice to stay active vs. bed \ensuremath{rest}^{27}	3	-0.4 (-4.0 to 3.2)	Low	2	-3.5 (-1.1 to -5.9)	Moderate	
Individual patient education vs. no intervention ²⁸	3	NS	Moderate <u>‡</u>	3	NS	Very low <u>‡</u>	
Individual patient education vs. non- educational interventions ²⁸	6	NS	Low‡	6	NS	Very low‡	
Exercise therapy vs. no intervention or sham ²⁹	3	0.6 (-11.5 to 12.7)	Low‡	3	-2.8 (-15.3 to 9.7)	Low‡	
Exercise therapy vs. other conserva- tive interventions ²⁹	7	-0.3 (-0.7 to 0.1)	Low‡	6	-1.3 (-5.5 to 2.8)	Low‡	
Spinal manipulative therapy vs. sham or other interventions ³⁰	NK	-9.8 (-17.0 to -2.5)	Moderate	NK	-2.9 (-6.6 to 1.0)	Moderate	
Superficial heat vs. sham or non- heated wrap ³¹	1	-32.2 (-38.7 to -25.7)	Very low‡	2	-8.8 (-12.8 to -1.2)	Very low‡	
Massage therapy vs. inactive interventions $^{\rm 32}$	1	-24.8 (-37.0 to -12.8)	Very low	1	-6.0 (-12.7 to 0.7)	Very low	
Acupuncture vs. sham ³³	2	-9.4 (-17.0 to -1.8)	Low‡	3	NS	Moderate‡	
Pharmacologic intervention							
Acetaminophen vs. placebo ³⁴	1	1.5 (-1.3 to 4.3)	High	1	-1.9 (-4.8 to 1.0)	High	
NSAID vs. placebo ³⁵	4	-7.3 (-11.0 to -3.6)	Moderate	2	-8.4 (-12.1 to -4.8)	High	
Muscle relaxant vs. placebo							
Nonbenzodiazepine antispas- modic agent ³⁶	16	-7.7 (-12.1 to -3.3)	Very low	7	-3.3 (-7.3 to 0.7)	Very low	
Antispastic agent ³⁶	1	-1.6 (-15.3 to 12.1)	Low	1	2.0 (-15.6 to 19.6)	Low	
Benzodiazepine ³⁶	1	2.0 (-9.8 to 13.8)	Moderate	1	0 (-13.2 to 13.2)	Low	
Opioid vs. placebo³7∬	0	_	Very low <u>‡</u>	0	_	Very low <u>‡</u>	

* If data for more than one follow-up between 0 and 4 weeks were present, the follow-up closer to 1 week was used. NK denotes number of studies not known, NS no significant between-group differences reported in the individual trials and no pooled effect, and NSAID nonsteroidal antiinflammatory drug.

† A negative value indicates a pooled effect in favor of the intervention. When the pooled effect was calculated as a standardized mean difference, it was converted to a scale of 0 to 100 by multiplying the standardized mean difference by 20 for pain intensity and by 12 for physical functioning. These values approximately represent the standard deviations of the most-used instruments (i.e., numerical rating scale for pain intensity and Oswestry Disability Index²⁵ for physical functioning) for these constructs. When the pooled effect was calculated on a scale of 0 to 24 (Roland-Morris Disability Questionnaire²⁶), it was converted to a scale of 0 to 100 by multiplying the effect by 4.17.

‡ Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) scores were calculated by the authors, not reported by pooled-study investigators.

No trials of opioids for the treatment of acute nonspecific low back pain are available.

therapy (which is focused on isometric contrac- functioning.

tions of the core muscles, attention to body

ment.⁴⁹ As compared with other exercises, Pilates pain) resulted in reduced pain and improved

Behavioral therapies include respondent thermovement, and improved posture) and McKen- apy (which involves relaxation techniques to rezie therapy (which involves repeated movement duce the physiologic response to pain), operant directional exercises, postural training, and therapy (which is aimed at ceasing positive reineducation about patients' self-management of forcement of pain behaviors and promoting

Table 2. Effectiveness of	Interventions on	ı Pain Intensi	ty and Pl	hysical	Functioning
in Patients with Chronic	Nonspecific Low	/ Back Pain.*			

Intervention vs. Control	ervention vs. Control Pain Inter			Physical Functioning			
	No. of Studies	Pooled Effect (95% Cl)†	Evidence Certainty	No. of Studies	Pooled Effect (95% CI)†	Evidence Certainty	
Conservative intervention							
Individual patient education vs. non- educational interventions ²⁸	1	NS	Moderate <u>‡</u>	2	NS	Moderate	
Exercise therapy vs. no intervention or usual care ³⁸	26	-16.4 (-20.3 to -12.4)	Moderate	30	-7.4 (-9.2 to -5.6)	Moderate	
Exercise therapy vs. other conserva- tive interventions ³⁸	47	-8.6 (-13.1 to -4.1)	Moderate	44	-4.0 (-6.0 to -1.9)	Moderate	
Behavioral therapy vs. waiting list ³⁹	5	-12.0 (-19.4 to -4.4)	Low	4	-4.4 (-10.4 to 1.6)	Low	
Behavioral therapy vs. usual care ³⁹	2	–5.2 (–9.8 to –0.6)	Moderate	2	-2.4 (-4.9 to 0.2)	Moderate	
Spinal manipulative therapy vs. sham ⁴⁰	8	-7.5 (-19.9 to 4.8)	Low	6	-8.8 (-16.2 to -1.3)	Low	
Spinal manipulative therapy vs. guideline-recommended interventions ⁴⁰	17	-3.2 (-7.8 to 1.5)	Moderate	16	-3.0 (-4.9 to -1.1)	Moderate	
Massage therapy vs. inactive inter- ventions ³²	7	-15.0 (-18.0 to -12.0)	Low	6	-8.6 (-12.6 to -4.7)	Low	
Massage therapy vs. active interven- tions ³²	12	-7.4 (-12.4 to -2.6)	Very low	6	-2.9 (-7.4 to 1.6)	Very low	
Acupuncture vs. sham41	5	-10.0 (-17.2 to -2.8)	Low	3	-4.6 (-8.3 to -0.8)	Moderate	
Acupuncture vs. no intervention ⁴¹	3	-10.1 (-16.8 to -3.4)	Moderate	3	-4.7 (-8.6 to -0.7)	Moderate	
Yoga vs. nonexercise intervention ⁴²	5	-4.5 (-7.0 to -2.1)	Moderate	7	-9.1 (-15.0 to -3.2)	Low	
Yoga vs. exercise intervention ⁴²	1	-15.0 (-19.9 to -10.1)	Very low	2	-4.1 (-12.0 to 3.8)	Very low	
Multidisciplinary rehabilitation vs. usual care43	9	-11.0 (-16.6 to -5.6)	Low	9	-4.9 (-7.4 to -3.8)	Moderate	
Multidisciplinary rehabilitation vs. physical intervention43	12	-6.0 (-10.8 to -1.2)	Low	13	-4.7 (-8.2 to -1.2)	Low	
Pharmacologic intervention							
Acetaminophen vs. placebo³⁴∫	0	—	Very low <u>†</u>	0	—	Very low:	
NSAID vs. placebo44	6	-7.0 (-10.7 to -3.2)	Low	4	-3.5 (-5.4 to -1.7)	Low	
Muscle relaxant vs. placebo							
Antispastic agent ³⁶	1	-5.4 (-13.7 to 2.9)	Very low	1	-3.2 (-8.3 to 1.8)	Very low	
Other ³⁶	1	-19.9 (-31.5 to -8.3)	Moderate	1	-5.6 (-20.6 to 9.4)	Low	
Antidepressant vs. placebo							
Serotonin–noradrenaline reup- take inhibitor⁴⁵	4	-5.3 (-7.3 to -3.3)	Moderate	4	-3.5 (-5.2 to -1.9)	Moderat	
Selective serotonin-reuptake inhibitor ⁴⁵	3	1.5 (-5.4 to 8.4)	Low	1	-2.2 (-8.1 to 3.7)	Low	
Tricyclic antidepressant ⁴⁵	7	-10.0 (-21.5 to 1.6)	Very low	4	-12.9 (-26.5 to 0.6)	Very low	
Opioid vs. placebo ³⁷ ¶	13	-9.0 (-11.7 to -6.2)	Very low	0	NA	NA	

* If data for more than one follow-up between 1 and 4 months were present, the follow-up closer to 3 months was used. † A negative value indicates a pooled effect in favor of the intervention. When the pooled effect was calculated as standardized mean difference, it was converted to a scale of 0 to 100 by multiplying the standardized mean difference by 20 for pain intensity and by 12 for physical functioning. These values represent approximately the standard deviations of the most-used instruments (i.e., numerical rating scale for pain intensity and Oswestry Disability Index²⁵ for physical functioning) for these constructs. When the pooled effect was calculated on a scale of 0 to 24 (Roland-Morris Disability Questionnaire²⁶), it was converted to a scale of 0 to 100 by multiplying the effect by 4.17. # GRADE scores were calculated by the authors, not reported by pooled-study investigators. No trials of acetaminophen for the treatment of chronic nonspecific low back pain are available. ¶ In this study cited for opioid versus placebo, physical functioning was not a specified outcome, so pooled effect and evidence certainty for that outcome are not applicable (NA)

ng Outcomes at Short-Term Follow-up (1–4 Months)

healthy behaviors, including exercise), and cog- nonspecific low back pain may have symptomnitive therapy (which focuses on identifying and atic spinal osteoarthritis; in contrast to osteomodifying negative thoughts with regard to pain arthritis of the peripheral joints, there are no and disability); randomized, controlled trials diagnostic criteria for spinal osteoarthritis, and comparing these therapies have shown they have data are needed to guide its diagnosis and mansimilar effects on pain and functioning.³⁹ The agement. choice of therapy from among conservative interventions should take into consideration the assess the effects on pain and function of sevpatient's preferences and other factors, such as eral interventions, including heat, massage therout-of-pocket costs.

include spinal manipulative therapy, massage muscle relaxants, and antidepressants for chronic therapy, yoga, and multidisciplinary rehabilita- low back pain. Also, data are needed to inform tion.^{32,42,43} A systematic review with moderate- whether the effects of these or other intervencertainty evidence showed no clinically relevant tions vary according to patient characteristics. differences in effects on pain and functioning A meta-analysis of individual patient data from with spinal manipulative therapy as compared 27 trials did not show clinically relevant modiwith recommended first-line options (Table 2).⁴⁰ fiers of the effect of exercise on chronic low Multidisciplinary interventions that combine back pain.⁵⁰ In a trial involving patients with low physical and psychological components may be back pain that compared usual care with care especially suited for patients with low levels of stratified according to prognosis (estimated with functioning and with psychosocial risk factors the use of the STarT Back tool; patients at low for poor outcomes, although data showing su- risk received minimal intervention, those at meperior effectiveness for this patient group are dium risk received physical therapy, and those at lacking.43

Muscle relaxants and antidepressants (e.g., sero- in the United States.^{51,52} tonin and norepinephrine reuptake inhibitors) may be used as adjuvant therapy in some patients, although they have had limited effectiveness (with evidence of moderate to very low A previously published overview summarized the certainty) (Table 2) and have potential risks.^{36,45} for nonspecific low back pain.46

AREAS OF UNCERTAINTY

There is some controversy regarding the term "nonspecific" low back pain, since structures such as muscles, joints, or disks (or a combination of these) may be causing the pain but are not readily identified by means of history taking The patient described in the vignette is experi-

High-quality randomized trials are needed to apy, NSAIDs (oral and topical), muscle relaxants, Other therapies for chronic low back pain and opioids for acute low back pain and NSAIDs, high risk received "psychologically informed" There is at best moderate-certainty evidence physical therapy), patients in the stratified-care to support various pharmacologic options for the groups had greater reduction of disability and management of chronic low back pain (Table 2). low back pain-related health care costs than NSAIDs can be considered in patients at low those who received usual care.²¹ However, these risk, although the effects appear to be modest positive findings were not confirmed by subseand are supported by low-certainty evidence.⁴⁴ quent trials conducted in primary care settings

GUIDELINES

recommendations of 15 clinical practice guide-The use of opioids should be limited to very lines for the management of nonspecific low carefully selected patients and only for short back pain in primary care.⁵³ More recent guideperiods of time with appropriate monitoring.⁴⁶ lines (e.g., those of the American College of Invasive therapies, such as epidural glucocorti- Physicians) have moved away from pharmacocoid injections and surgery, are rarely indicated therapy (owing to limited efficacy and risk of adverse effects) in favor of initial nonpharmacologic care for both acute and chronic low back pain.⁵⁴ The recommendations presented here are generally consistent with those guidelines.

CONCLUSIONS AND RECOMMENDATIONS

and physical examination. Some patients with encing an acute episode of recurrent low back

them. We would suggest considering the use of ed by his preferences and priorities. a heating pad (although this recommendation is based on limited data³¹); short-term use of the full text of this article at NEJM.org.

pain. In the absence of worrisome findings on NSAIDs may be helpful in the absence of contrathe history and physical examination, imaging indications. If the low back pain does not abate would not be recommended. The PICK-UP tool within 2 months after the first visit, we would or the Örebro Musculoskeletal Pain Ouestion- recommend referral to a specialist for supervised naire may be used to evaluate the patient for risk exercise or behavioral therapy. We would conof the episode becoming chronic. The patient sider referral for exercise therapy earlier if there should be reassured of the very high likelihood is concern about a risk of the condition becomthat there is no serious condition causing his ing chronic, given the evidence of the benefit of low back pain and of the anticipated favorable exercise in alleviating chronic low back pain and prognosis of the current episode. He should be minimizing the risk of recurrent low back pain. encouraged to continue his regular activities, We would engage in shared decision making even if he has some pain when engaging in with the patient, with treatment decisions guid-

Disclosure forms provided by the authors are available with

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E-mail: ads@nejmcareercenter.org Fax: 1-781-895-1045 Fax: 1-781-893-5003 Phone: 1-800-635-6991 Phone: 1-781-893-3800 Website: nejmcareercenter.org

How to Calculate the Cost of Your Ad

We define a word as one or more letters bound by spaces. Following are some typical examples:

Bradley S. Smith III, MD	=	5	V
Send CV	=	2	V
December 10, 2007	=	3	V
617-555-1234	=	1	V
Obstetrician/Gynecologist	=	1	V
A	=	1	V
Dalton, MD 01622	=	3	V

As a further example, here is a typical ad and how the pricing for each insertion is calculated:

MEDICAL DIRECTOR — A dynamic, growthoriented home health care company is looking for a full-time Medical Director in greater New York. Ideal candidate should be board certified in internal

icine	Urology
	Chiefs/Directors/
	Department Heads
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ase	Graduate Training/Fellowships/
ology	Residency Programs
	Courses, Symposia,
al	Seminars
vascular/	For Sale/For Rent/Wanted
	Locum Tenens
ogical	Miscellaneous
pedic	Multiple Specialties/
ic Orthopedic	Group Practice
ric	Part-Time Positions/Other
	Physician Assistant
lant	Physician Services
ır	Positions Sought
	Practices for Sale

words words words word word word words

medicine with subspecialties in oncology or gastroenterology. Willing to visit patients at home. Good verbal and written skills required. Attractive salary and benefits. Send CV to: E-mail address

This advertisement is 56 words. At \$10.55 per word, it equals \$590.80. This ad would be placed under the Chiefs/Directors/ Department Heads classification.

Classified Ads Online

Advertisers may choose to have their classified line and display advertisements placed on NEJM CareerCenter for a fee. The web fee for line ads is \$130.00 per issue per advertisement and \$220.00 per issue per advertisement for display ads. The ads will run online two weeks prior to their appearance in print and one week after. For online-only recruitment advertising, please visit nejmcareercenter.org for more information, or call 1-800-635-6991.

Policy on Recruitment Ads

All advertisements for employment must be non-discriminatory and comply with all applicable laws and regulations. Ads that discriminate against applicants based on sex, age, race, religion, marital status or physical handicap will not be accepted. Although the New England Journal of Medicine believes the classified advertisements published within these pages to be from reputable sources, NEJM does not investigate the offers made and assumes no responsibility concerning them. NEJM strives for complete accuracy when entering classified advertisements; however, NEJM cannot accept responsibility for typographical errors should they occur.

Classified Advertising

Classified Ad Deadlines					
Issue	Closing Date				
April 27	April 7				
May 4	April 13				
May 11	April 21				
May 18	April 28				

Cardiology

NONINVASIVE CARDIOLOGIST NEEDED — Noninvasive cardiologist to join a large group of 20 cardiologists in northern New Jersey. Excellent salary and benefit package. Please e-mail CV to: terri.urgo@heartandvascularnj.com. We are a wellestablished multispecialty medical group that is rapidly expanding. www.hvamedicalgroup.com SEEKING A BC/BE INTERVENTIONAL OR NON-INVASIVE CARDIOLOGIST AROUND NEWPORT BEACH, CALIFORNIA — Proficiency in structural heart and vascular interventions a plus. Competitive salary, benefits, partnership track. E-mail CV to: drocheartandvascular@gmail.com

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NEJMCareerCenter.org

Hospitalist

HVA MEDICAL GROUP — Is seeking a boardeligible or board certified internal medicine physician to join our hospitalist team in north New Jersey. We welcome the opportunity to share more information with you and learn about what you seek in a position. Location: Northern New Jersey. Job Benefits: Schedule is 7x7, base salary with wRVU; Closed ICU; Flexible schedule; Codes and procedures NOT required; Comprehensive benefits include: fully paid professional liability insurance with tail coverage, health, dental, vision, 401(k), CME; Opportunity to increase salary as desired. Please e-mail resume to: vibuvarghese@ gmail.com

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EXPERIENCED GENE THERAPY SCIENTIST/ FACILITY — With access to US/overseas lab or start new lab, to prepare AAV mediated Calpainopathy gene product for trial (Methodology published) by private investor. md6099@gmail.com

PHYSICIAN RECRUITER

The physician you're seeking is one of our readers. Advertise in the next issue of the New England Journal of Medicine and reach physicians in all specialties nationwide. For more information, contact Classified Advertising Sales at (800) 635-6991. Advertise in the next *Career Guide*. For more information, contact: (800) 635-6991

Rheumatology RHEUMATOLOGIST PHYSICIAN — To join a

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Diane Forte Willis dfortewillis@emersonhosp.org phone: 978-287-3002 fax: 978-287-3600



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Located in Concord, Massachusetts Emerson is a

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emersonhospital.org



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All correspondence can be directed to:

Paige Livingston, *Provider Recruiter* • Paige.Livingston@baystatehealth.org Phone: 413-794-7874 • Fax: 413-794-5059

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We have opportunities in the following communities near Boston, Massachusetts, including

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Join a team of 450+ clinicians and medical professionals who are rethinking the way we deliver integrated Primary Care services. As a physician at NSPG, you'll have the opportunity to be part of an exciting physician-led culture that is focused on making the practice of medicine smarter, more efficient and more rewarding for patients and providers alike.

Discover the advantages of practicing medicine with NSPG, including

• Being a member of the Mass General Brigham health care system and being affiliated with Mass General Brigham Salem Hospital.

Lynn

- A team-based care model that helps to balance workloads and alleviate physician burnout.
- Practice innovations that help to streamline workflows and enhance the ways physicians interact with patients.
- Integrated EMR to more efficiently provide patient care and communications across our practices and affiliate locations.
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Submit your CV and letter of interest to Michele Gorham, Senior Physician Recruiter at mgorham@partners.org.

Applicants with relevant experience will be considered. Mass General Brigham is an affirmative action/equal opportunity employer Minorities and women are strongly encouraged to apply. Pre-employment drug screening is required.

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Kelsey-Seybold Clinic is Houston's premier multispecialty group practice where more than 700 physicians and allied health professionals practice at 40+ locations. Kelsey-Seybold offers quality medical care in 65 medical specialties

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The Tower Health system includes 66 primary care ambulatory physicians (47 family medicine, 19 internal medicine) and 27 APPs.

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To learn more about physician jobs, email physicianrecruiting@usoncology.com



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Cambridge Health Alliance (CHA), is a Harvard Medical School and Tufts University School of Medicine teaching affiliate and award winning, academic public healthcare system. CHA is recruiting a full-time primary care physician leader for the Medical Director opportunity

- Medical Director will practice clinically and have dedicated time devoted to leadership and management of the provider team
- Our site provides care to the local community including primary care for all ages, women's health and pregnancy care, mental health services, onsite pharmacy, lab services and more
- The site is NCOA certified, level 3 Patient Centered Medical Home and delivers team based care
- · Engage and participate in ambulatory strategy, primary care and specialty care integration, and site initiatives to assess and improve financial and operational performance
- · Lead and encourage innovation, community involvement, and primary care growth · Participate in ACO related initiatives including population health
- The position carries a Harvard Medical School (HMS) and/or Tufts University School of Medicine appointment of Instructor, Assistant or Associate Professor, available commensurate with appointment criteria, candidate qualifications, and commitment to teaching responsibilities.

CHA is inclusive of three hospital campuses, an established network of 15 primary care clinics and integrated outpatient medical specialty services. We are located throughout Cambridge, Somerville and Boston's metro-north area. CHA is clinically affiliated with **Beth Israel Deaconess Medical Center**

Qualified candidates will be Board Eligible/Certified in Family Medicine, Internal Medicine/Pediatrics and have demonstrated experience in leading physicians and care teams. Candidates should possess a strong desire to provide the highest quality care to our diverse patient population

Interested candidates please visit <u>www.CHAproviders.org</u> to apply through our secure and confidential portal. Alternately, candidates may apply via email to CHA Provider Recruitment at providerrecruitment@challiance.org and by phone at (617) 665-3555.

In keeping with federal, state and local laws, Cambridge Health Alliance (CHA) policy forbids employees and associates to discriminate against anyone based on race, religion, colos gender, age, marital status, national origin, sexual orientation, relationship identity or relationship structure, gender identity or expression, veteran status, disability or any other characteristic protected by law. We are committed to establishing and maintaining a workplace free of discrimination. We are fully committed to equal employment opportunity. We will not tolerate unlawful discrimination in the recruitment, hiring, termination, promotion, salary treatment or any other condition of employment or career development. Furthermore, we will not tolerate the use of discriminatory slurs, or other remarks, okes or conduct, that in the judgment of CHA, encourage or permit an offensive or hostile work



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Yale ASSISTANT PROFESSOR INFECTIOUS DISEASES. YALE UNIVERSITY SCHOOL OF MEDICINE

A full-time faculty position is available at the level of Assistant Professor in the Section of Infectious Disease in the Department of Internal Medicine at the Vale University School of Medicine. Applicants should have an M.D., completed fellowship training in infectious diseases, have interest and experience in addiction medicine and have exceptional potential for a career in academic medicine. Candidates are expected to (a) participate in extramurally funded research program with plans to develop own independent extramurally funded research program and (b) participate in the clinical and educational activities of the section including providing care on a mobile health unit in rural Connecticut providing infectious disease with specific emphasis on HIV prevention and treatment plus addiction medicine care. Review of applications will begin immediately and will continue until the position

Yale University is an affirmative action, equal opportunity employer. Applications from women, persons with disabilities, protected veterans, and members of minority groups are encouraged.

Review of applications will begin immediately and will continue until the position is filled. Please apply at: apply.interfolio.com/121821



The Department of Medicine at the University of Maryland School of Medicine is recruiting faculty to join our expanding programs in endocrinology, gastroenterology, general medicine, geriatrics, and pulmonary and critical care. Opportunities with descriptions and application instructions are at the following link: https://www.medschool.umaryland.edu/medicine/ Open-Faculty-Positions. Expected faculty rank for all positions will be Assistant Professor or higher. Final rank, tenure status and salary will be commensurate with candidates' qualifications and experience.

The Department of Medicine provides state-of-the-art patient care, and advances treatment by means of cutting-edge clinical research. We have trained high caliber physicians since 1807, including more than half the physicians practicing in Maryland. With more than 400 full and part-time faculty members, Medicine, the largest department in the School of Medicine, trains approximately 300 residents and fellows annually. Current active research funding exceeds \$180 million, over half from NIH and other federal agencies. With nearly 150 funded investigators, the department has an extensive research base in both the basic and clinical sciences, and our extensive research training programs include basic, clinical, and translational research training awards. Our faculty also conduct international research, with robust infrastructure in South America and Africa.

We are pleased to offer a competitive salary, medical/dental benefits, disability plans, retirement plans, and more!

The University of Maryland School of Medicine is part of the University of Maryland Baltimore campus ranked 13th in 'Forbes' 2021 America's Best Large Employers Survey and 6th by Forbes among educational institutions for Best Employers for Diversity in 2022.

UMB is an equal opportunity/affirmative action employer. All qualified applicants will receive consideration for employment without regard to sex, gender identity, sexual orientation, race, color, religion, national origin, disability, protected Veteran status, age, or any other characteristic protected by law or policy. We value diversity and how it enriches our academic and scientific community and strive toward cultivating an inclusive environment that supports all employees.



Join us. Learn more at chenmed.com/physicians-nejm or contact us at mdcareers@chenmed.com.

SIVIMED^{\$}

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Please take a look at our website (www .sivimedassociates.com) and our reviews on the Internet to find out what patients are saying about Sivimed.

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TAYLOR.JANUS@BLESSINGHEALTH.ORG

The Department of Medicine at the VA Northeast **Ohio Healthcare System** is seeking one full-time staff physician interested in a Nocturnist/SNF Hospitalist position. Principal clinical responsibilities will include 50% allocation to overnight patient care duties on the inpatient medical wards and Nursing Home Care Unit and participation in solo overnight coverage schedule for the Emergency Department, as well as 50% allocation to daytime rounding in our Community Living Center.

Qualified candidates will have prior clinical experience in Emergency Department settings and will have prior experience caring for the geriatric population with cognitive impairments. Candidates will be able to demonstrate strong interpersonal skills and be able to work in an interdisciplinary care model. Board Certification is preferred. Candidates will be eligible for faculty appointment at Case Western Reserve University School of Medicine commensurate with experience.

Competitive salary and comprehensive benefits package; EOE.

Applicants should submit their curriculum vitae via the VA Northeast Ohio Healthcare System **Resources Management Service**, ATTN: Jason Petrakos email: jason.petrakos@va.gov

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- Family Medicine
- Gastroenterology
- Hematology/Oncology
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Pulmonology, and Neurology



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Explore opportunities

Interested applicants should send their CV to Karen Fay at Karen_R.Fay@lvhn.org. Karen can be reached at 484-294-5651. See all opportunities at LVHN.org/careers.





PERMANENTE MEDICINE® Northwest Permanente

Primary Care Physicians, Urgent Care Physicians & Nocturnists

Opportunities available in Portland and Salem, Oregon, and Southwest Washington, including Longview

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Explore your opportunities at:

northwest.permanente.org

Please contact: Bridgitte Ngo Bridgitte.A.Ngo@kp.org

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KAISER PERMANENTE

Vital Roles in a Vibrant Community **Physician Opportunities**

BERKSHIRE HEALTH SYSTEMS IS SEEKING COMPASSIONATE, COMMUNITY-FOCUSED PHYSICIANS IN THE FOLLOWING DISCIPLINES:

ANESTHESIOLOGY • CARDIOLOGY DERMATOLOGY
 ENDOCRINOLOGY

- ENT FAMILY MEDICINE GASTROENTEROLOGY HEMATOLOGY/ONCOLOGY • NEUROLOGY
- NEPHROLOGY OB-GYN PSYCHIATRY
- PRIMARY CARE
 RHEUMATOLOGY
 UROLOGY

Berkshire Health Systems (BHS) is the leading provider of comprehensive healthcare services for residents and visitors to Berkshire County, in western Massachusetts. From inpatient surgery and cancer care to provider visits and imaging, BHS offers a continuum of programs and services that help patients to connect to the care they need, no matter where they are located in the rural Berkshire community. As the largest employer in Berkshire County, BHS supports more than 4,000 jobs in the region, and, as a 501(c)(3) nonprofit organization, BHS is committed to partnering with local municipalities and community organizations to help the county thrive. Working at BHS offers a unique opportunity to both practice and teach in a state-of-the art clinical environment at Berkshire Medical Center, the system's 298-bed community teaching hospital in Pittsfield, which is a major teaching affiliate of the University of Massachusetts Chan Medical School and the University of New England College of Osteopathic Medicine in Maine.

At BHS, we also understand the importance of balancing work with guality of life. The Berkshires, a 4-season resort community, offers world renowned music, art, theater, and museums, as well as year round recreational activities from skiing to kayaking. Excellent public and private schools make this an ideal family location. We are also only a 21/2 hours drive from both Boston and New York City.

Contact us to learn more about these exciting opportunities to practice in a beautiful and culturally rich region, as part of a sophisticated, award-winning, patient-centered healthcare team.

Interested candidates are invited to contact:

Michelle Maston or Cody Emond Provider Recruitment, Berkshire Health Systems (413) 447-2784 | mmaston@bhs1.org cemond@bhs1.org Apply online at: berkshirehealthsystems.org



A Berkshire Health Systems



Seeking Rheumatologist

- Seeking BC/BE rheumatologist committed to clinical excellence
- · Full-time opportunity (4-day work week, no weekends)
- Inpatient care provided by hospitalists
- 1:3 call schedule
- Hospital infusion within walking distance
- · Clinical research opportunity
- Competitive compensation package
- Year-round recreational location

Situated at the edge of Glacier National Park, Logan Health offers an opportunity like none other against the backdrop of one of the most beautiful places in the world. Enjoy world-class amenities alongside pristine nature, all while delivering much needed care to the people of Montana.

We are dedicated to investing in our staff and committed to providing you with the tools you need to care for our communities. Logan Health has a collection of services and specialists who are committed to excellence in education, treatment, and care of our patients.

Advancing Medicine. Enhancing Care.

logan.org/joinourteam

To learn more please contact: Jared Wilson, Physician Recruiter (406) 751-5318 · jwilson@logan.org

One team One mission

Many locations where you can do your life's best workSM

As a physician at Optum, you'll be part of the largest network of medical groups in the nation. Our progressive physician-led organization is transforming health care across the country by empowering physicians to lead care locally. Join our team of over 64,000 aligned physicians and advanced practitioners who are redefining how medicine should be practiced - focused on managing risk, higher-quality outcomes and driving change through collaboration and innovation.

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Purposeful Presence

Reconnect with what matters most in your medical career.

Being clinically driven inspires our physicians to pursue medical excellence. But it's our purpose that truly allows us to change lives.

When you practice medicine at SSM Health, a leading Catholic, not-for-profit integrated health system serving Illinois, Missouri, Oklahoma, and Wisconsin, you can practice medicine that is restoring health, invigorating hope, and transforming care when and where it's most needed. That's the kind of profound health care that comes from being purposefully present.

Our healing ministry offers opportunities in a variety of specialties with a diverse selection of settings that range from community practices to academic medical centers.

Discover the career benefits of practicing at SSM Health:

- Develop a practice that can make a true difference.
- Work in a collaborative and inclusive practice culture with a network of providers who are clinically driven and guided by purpose.
- Receive generous compensation, substantial benefits, and family friendly PTO to allow you to achieve work/life balance.

Reconnect with your purpose at SSM Health.

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