

**Lehigh Valley Health Network – Cedar Crest  
Ambulatory Care Center**

<i>Facility Background/Data</i>	Year established/historical background	Lehigh Valley Hospital (LVH) is part of the Lehigh Valley Health Network (LVHN), a group of Pennsylvania hospitals with its origins dating back to the Allentown Hospital, which opened in 1899.	
	Ownership/type/focus	LVHN is a non-profit organization whose mission states, "We heal, comfort and care for the people of our community by providing advanced and compassionate health care of superior quality and value supported by education and clinical research."	
	Location <ul style="list-style-type: none"> <li>• Geographic region, urban/rural</li> <li>• Metro area population</li> </ul>	LVHN-Cedar Crest campus is located in Allentown, PA. Allentown is a metropolitan city (pop. 118,032) combined with Allentown-Bethlehem-Easton known as Lehigh Valley (combined pop. 821,623).	
	Leadership structure/composition		
	Size <ul style="list-style-type: none"> <li>• Beds/catchment/enrollees</li> <li>• Departments/employees</li> </ul>	LVHN is composed of 3 full-service hospitals with ERs, a children's hospital, 3 community hospitals and 1 specialty hospital, numerous community clinics, labs and community health centers. LVHN includes a total of 1838 licensed acute beds, over 2800 physicians and Advanced Practice Clinicians providing care in 95 clinical specialties.	
	Revenue sources (private, Medicare, Medicaid)	LVHN accepts a mixture of cases including private insurance, Medicare, and Medicaid, as well as self-payment.	

	<p>Notable current initiatives/changes</p> <ul style="list-style-type: none"> <li>• CAM, spine, pain/opiate</li> <li>• Patient experience</li> </ul>	<p>LVHN is a regional clinical campus of University of South Florida's College of Medicine and member of the Council of Teaching Hospitals.</p>	
<p><i>Implementation of chiropractic services</i></p>	<p>Impetus/climate/background</p>	<p>The Division Chief of Neurological Surgery felt that the system could use additional resources and more cohesive care, including the ability to capture more patients by developing a comprehensive, non-operative program.</p> <p>Prior to the chiropractic practice acquisition, there may have been mixed reviews, but there was very strong backing from many of the hospital-affiliated orthopedic, pain management, and physical medicine, and a significant enough utilization by at least a quarter of primary practitioners who would regularly utilize chiropractic services for patients' skeletal problems.</p> <p>The lead chiropractor had an excellent reputation and strong working relationship with many of the physicians within the network.</p>	<p>"the acceptance of chiropractic in the Lehigh Valley here is probably as good as it gets...over the years, were able to establish an element of trust among a large percentage of medical providers in the community, both spine care specialists and primary care providers". (Provider)</p>
	<p>Planning process/timeline</p>	<p>The strategic decisions and formal planning were made at the executive team level while formalizing the Neurosciences service line. Lehigh Valley wanted to develop a multidisciplinary spine center.</p> <p>The integration process began about 10 years ago through the Division Chief of Spinal Surgery's initiative, and working with</p>	

		<p>the Chief of Neurosurgery and the Head of Pain Management, who were strong advocates for the lead DC. For the first year, there were monthly meetings, which included consultants on the team. The Division Chief eventually became less involved and the hospital network took over and slowly went ahead with the planning. The lead DC was part of the team to create a multi-specialty spine program.</p> <p>The facility purchased a well-established private practice with a lead DC who was widely recognized for strong leadership. The practice had transitioned to the location several years before becoming part of the Lehigh Valley Network.</p> <p>The chiropractors were regarded as peers of the medical osteopathic physicians in network, although Pennsylvania state regulations did not define DCs as physicians, but as advanced practice clinicians. The hospital was able to develop contracts with the DCs based on the role played in the network</p> <p>In 2012, the lead DC let his private practice staff know of the intentions to join the Lehigh Valley Health Network. The staff adapted well to orientation and new training into the health systems.</p>	
	Year clinical services established	The private practice moved to its current location in 2006, primarily to be part of the Spine Program. The practice was acquired	

		by LVHN in 2012, growing from a two-provider practice to five.	
<i>Chiropractic Clinic Structures</i>	Administration <ul style="list-style-type: none"> <li>• Department/service line</li> <li>• Performance measures/benchmarks</li> </ul>	The chiropractic offices are a division of the Department of Medicine. The chair of the department of medicine supervises the chiropractic medicine division.	
	Location/space/equipment	Chiropractic clinics are located at 2 different main hospital campuses and one community hospital. The larger of the 2 locations has 7 exam/treatment rooms. The smaller office houses 2 exam/treatment rooms.	
	Chiropractors <ul style="list-style-type: none"> <li>• Number/FTE/appointment</li> <li>• Privileges/services</li> <li>• Non-clinical activities</li> <li>• Professional attributes</li> <li>• Interprofessional attributes</li> </ul>	<p>3 chiropractors are full-time at the main hospital campus, and 1 at the two other (newer) locations.</p> <p>The larger clinic averages around 35 new patient consults in a week with 350-400 follow-up patient visits. The smaller clinics see around 15 new patient consults a week with 60-70 follow-up patient consults.</p> <p>Both of the more recently hired chiropractors have trained in medical settings before being hired at Lehigh Valley.</p>	(I like being a part of) integrated care. In a way, it's good to know that you're taking care of a patient and at the same time, consulting with their primary care doctor... it's an overall system. I think that's the main thing that brought me into it (integrated care) and just knowing that again, (we are) just providing more. (Provider)
	Support staff <ul style="list-style-type: none"> <li>• Discipline/number</li> </ul>	7 Medical Assistants, Office Manager, Office Coordinator, and 1 Insurance specialist work in the chiropractic offices.	
	Patient access <ul style="list-style-type: none"> <li>• Referral, self-referral</li> <li>• Appointment availability/wait</li> <li>• Appointment length, number per week</li> </ul>	<p>Patients can self-refer or be referred by another provider through the network wide EHR system.</p> <p>Patient appointment number and course of care are determined by the chiropractor seeing the patient. It is individualized based</p>	

		on the patient's conditions, with an average of 6 visits per episode of care over a 2-4 week period.	
	Relevant partnerships <ul style="list-style-type: none"> <li>Academic, research</li> </ul>		
<i>Chiropractic Clinic Processes</i>	Patient characteristics <ul style="list-style-type: none"> <li>Population, conditions, complexity</li> <li>Access patterns seen</li> </ul>	The LVH chiropractic clinic serves a general adult ambulatory population, mainly presenting with musculoskeletal conditions of the spine and/or extremities. Approximately 40% of new cases are referred by primary care or other specialties at LVH. The remaining new cases seek care directly, often recommended by existing patients. The clinic is accommodating to provide expedited access for cases as needed.	
	Services provided <ul style="list-style-type: none"> <li>Diagnostic, therapeutic</li> </ul>	LVH chiropractors provide full scope diagnosis and management of musculoskeletal and neuromuscular conditions consistent with training and licensure. This includes manual joint manipulation and mobilization, soft tissue therapies, and active care approaches such as exercise and patient education.	
	Case management <ul style="list-style-type: none"> <li>CPGs/care pathways used</li> <li>Outcome assessment/reporting</li> <li>Communication/collaboration with other providers</li> </ul>	Bi-directional referral occurs with other departments. Generally, providers report informal processes of face-to-face communication for collaborative case management that they feel are very effective. Primary care providers engage in shared decision making with patients regarding available treatment options, and chiropractic is often the first choice for back pain cases.	

		Providers also communicate through the EMR as needed, and through formal team meetings. Generally, clinicians agree that time constraints pose a barrier to between-provider communication. Yet they also feel that this barrier is overcome through collegial cooperation, and referring providers find communication with the chiropractors to be appropriate and helpful.	
<i>Impacts/Outcomes</i>	<p>Clinic function</p> <ul style="list-style-type: none"> <li>• Use, utilization, performance benchmarks</li> </ul>	Cost and quality are the primary metrics that are measured by the hospital system. Along with office visits, referrals, new patient volumes and expenses versus revenue are all measured.	
	<p>Patient status</p> <ul style="list-style-type: none"> <li>• Outcomes, satisfaction</li> </ul>	Patient satisfaction metrics are often very high for the chiropractic clinic.	
	<p>System status</p> <ul style="list-style-type: none"> <li>• Facility actual (or impression of) value</li> <li>• Non-DC staff impression</li> <li>• DC staff impression</li> </ul>	<p>Stakeholders across all domains reported a very favorable perception of the chiropractic clinic's value to the system. Referring physicians reported high satisfaction with having chiropractic treatment as part of their case management approach, and noted positive clinical outcomes for patients.</p> <p>Interdisciplinary activities ranging from formal presentations to ad hoc encounters between the chiropractors and other providers at the facility are valued.</p>	<p>Absolutely (the chiropractic clinic is valued), especially now in the day and age that we live where we're looking to keep costs down, look for other alternatives besides prescription drugs and surgeries. I think it's definitely a good thing to have chiropractic integrated in with the hospital network. (Staff)</p>