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# **Effective Recruitment Strategies to Attract Orthopaedic Surgeons to Rural Nebraska**

*Carmen A. M. Pavlik*

## **ABSTRACT**

Rural communities have difficulty establishing and maintaining a quality healthcare workforce. Twenty percent of Americans compose the rural populations in this country, but only nine percent of physicians practice in these rural areas. From 2000 to 2020, the demand for orthopaedic physicians is expected to increase by 23%, mainly due to the aging population of the United States. Although the demand for orthopaedic surgeons to these underserved, aging rural populations is increasing, there is a shortage which continues to grow in rural areas. One possible driving force of this shortage could be the recruitment strategies exercised by the healthcare managers in these rural communities. Orthopaedic surgeons may avoid work in a rural area due to its remoteness, lack of new technology, and few opportunities for family members. The objective of this study was to identify factors that could enhance recruitment of orthopaedic surgeons to health care facilities in rural Nebraska using Lexington Regional Health Center (LRHC), one of Nebraska's critical access hospitals, as a case study. Strategies such as loan repayment plans, competitive pay, "humanizing" the work environment, and motivational analysis show promising solutions to recruitment strategies in rural healthcare.

*Keywords:* recruitment, rural, Nebraska, orthopaedic, physician, surgeon

## INTRODUCTION

Americans living in rural areas lack adequate access to quality health care (Daniels et al., 2007). According to Hancock et al. (2009), twenty percent of the American population lives in rural areas today, but only nine percent of physicians practice in these areas. Within these rural areas, the populations are typically older with a higher prevalence of poverty and chronic disease, and contain a greater proportion of individuals who lack insurance or receive support from Medicare/Medicaid (Schiff et al., 2012).

As the population ages, the prevalence of musculoskeletal diseases, obesity, osteoarthritis of the hip and knee, and joint pain rises. According to Fu et al. (2013), these health concerns have caused an estimated increase in the demand for orthopaedic services by 23% between 2000 and 2020. These researchers also found that there were urban-rural discrepancies in the orthopaedic workforce between 1995-2010 with fewer orthopaedic surgeons in rural areas who were also older than their urban counterparts (Fu et al, 2013).

Hancock et al. (2009) stated that, according to rural health literature, a driving force of physician shortages in rural areas is poor recruitment strategies. Orthopaedic physicians avoid recruitment to the rural workforce because of the professional and social isolation, difficulty obtaining cross coverage, lack of innovative technology, and few educational options for children that these areas may offer (Williams et al., 2011).

The purpose of this study was to identify current strategies used to recruit orthopaedic surgeons to rural Nebraska health care settings using Lexington Regional Health Center (LRHC), a twenty-five bed critical access hospital, as a case study. In addition, recruitment strategies are suggested that managers could use for their health care facilities.

## **HEALTH CARE IN RURAL NEBRASKA**

A nationwide shortage of healthcare professionals in rural communities in the United States is an extreme threat to these areas (Watanabe-Galloway, 2015). About one in every four Nebraskans lives in rural areas (Wilson et al., 2018) and almost 90% of its cities contain fewer than 3,000 people (Watanabe-Galloway et al., 2015). All counties, except for Douglas and Lancaster, have been designated by the State of Nebraska to have a shortage of at least one type of healthcare specialty (Wilson et al., 2018). According to data.HRSA.gov, Nebraska had 64 critical access hospitals, 143 rural health clinics, 9 federally qualified health centers, and 11 short-term hospitals located outside of urbanized areas as of July 2018 (NE Office of Rural Health, 2017). At one point in time, Nebraska's hospitals were ranked No. 1 in the country in financial stability (Ward, 2018). Today, Ward (2018) states that half of Nebraska's hospitals are operating at a 2% profit margin with 21 hospitals in the red.

The number of individuals 65 years and older in rural Nebraska (19.6%) is greater than its urban counterpart (10.7%) (NE Rural Health Advisory Commission, 2016). The lack of health insurance and the chronic health conditions of rural Nebraskans are thought to have been the main driving forces causing the shortage of healthcare practitioners in these areas (Watanabe-Galloway, 2015) including orthopaedic surgeons.

## **ORTHOPAEDIC SERVICES IN RURAL NEBRASKA**

An orthopaedic physician's duties as a healthcare provider are to diagnose, treat, and educate to prevent further injury that occurs during any type of physical movement ("Summary Report," 2018). Orthopaedic physicians must be able to consider the relative costs and benefits of potential actions, such as surgery, to be sure to choose the action most appropriate for the patient ("Summary Report," 2018). Deshpande (2014) used the competency modelling approach

to determine the ideal profile of the orthopaedic surgeon. In short, a mature and professional orthopaedic physician will be a technologist, collaborator, health advocate, communicator, manager, and innovator (Deshpande, 2014).

In a rural setting, an orthopaedic physician must be able to use these tasks and skills amongst a wide variety of patient conditions to optimize patient and community health. Educational requirements to fulfil the role of an orthopaedic physician include undergraduate and medical degrees. After completing these degrees, post-doctoral training may follow including both a residency and fellowship training in which the orthopaedic physician continues to obtain evidence-based knowledge through practice alongside an experienced mentor in the field.

After numerous years of medical and interpersonal training, there are still ethical challenges that face orthopaedic physicians practicing in healthcare facilities throughout the United States. Capozzi and Rhodes (2015) identified four main ethical challenges faced in orthopaedic surgery today, of which one is the obligation of a physician to serve a sports team. With sports as a prevalent activity in the Midwest, this is likely a challenge that may arise in rural Nebraska. Additional challenges these specialists face in rural Nebraska include a lower than normal physician-to-patient ratio, patient compliance in the aging population, and lack of funding for advanced technology (Employer, 2018). Although these challenges and ethical issues may arise, an orthopaedic physician should maintain the profession's focus which is providing adequate, quality care for the well-being of the patient (Capozzi & Rhodes, 2015).

As mentioned earlier, the number of orthopaedic physicians is not only declining in rural areas, but has created urban-rural discrepancies in the US orthopaedic surgeon workforce spanning from 1995 to 2010. Fu and colleagues (2013) performed a meta-analysis and concluded that there were fewer orthopaedic surgeons in rural areas than urban areas. These orthopaedic

surgeons practicing in rural areas were also found to be older than their urban counterparts (Fu et al., 2013). Older orthopaedic physicians are more likely to retire within the next five years, leading to an accelerating decrease in the number of practicing physicians in rural areas (Fu et al., 2013).

Rural facilities are using unique methodologies of scheduling patients to utilize the limited orthopaedic physician resources that are currently available. For example, many rural Nebraska hospitals do not have full time orthopaedic surgeons on their interprofessional teams, yet hire traveling physicians who practice at numerous rural facilities. At these hospitals, orthopaedic clinics are held one or two days per week making appointment availability very limited. These physicians will perform surgeries during the morning and then patient evaluations at the clinic in the afternoons. The lack of orthopaedic physicians to these rural areas may be due to a variety of reasons, but more effective recruitment strategies could positively impact the recruitment of orthopaedic physicians to these underserved areas.

### **DEFINING RECRUITMENT AND ITS CHALLENGES**

Recruitment causes many difficulties in any industry, but none find it more strenuous than healthcare due to the shortage of physicians (Employer, 2018). In this industry, the stakes are high and facilities cannot afford to make the wrong hire due to negatively impacting the quality of care given to the patient and the legal risks associated with many health care rules. The top four industry-specific challenges that face recruiters of healthcare professionals include scarcity of qualified employees, dilemmas between education and experience, the race for new graduates, and the increasing numbers of retiring baby boomers (Employer, 2018). On top of these challenges, rural health care recruitment managers also have to consider the factors that

turn practitioners away from the rural workforce, including lower pay, longer work hours, and social isolation (Hancock et al., 2009).

In rural Nebraska, current strategies used to recruit orthopaedic surgeons include loan repayment programs, housing stipends, and clinical training programs (Daniels et al., 2007; Williams et al., 2011). For example, one issue that arises in rural settings is the travel between multiple locations that comprise a rural health facility. Locations may include hospitals, outpatient clinics, and home health visits. A solution that many rural health care facilities are using is providing a company car so that personal vehicles are not used in work-related travel (Watanabe-Galloway et al., 2015).

When creating novel recruitment strategies, health care managers cannot simply focus on simply offering financial reimbursement and benefits. Although these are important, the manager must first define the community and its needs and then focus on a market of prospective orthopaedic physicians who have the background and experience to fit in with a unique, rural community. To further explain this process, a case study was performed on the health care facility located in Lexington, Nebraska.

## **LEXINGTON REGIONAL HEALTH CENTER: A CASE STUDY**

### **Lexington, Nebraska Demographics**

Lexington, Nebraska is a rural town in Dawson County in central Nebraska with a population of about 10,400 people (Data USA, 2016). Of this population, about 62% are Hispanic, 27% are Caucasian, 10% are black, and 1% are of another race. As of 2016, 35% of Lexington residents are foreign born (Thorell et al., 2018). The average age in this town is 22.3 years (native-born) and 39.5 years (foreign-born) (Data USA, 2016). Lexington is known for its major contribution to the manufacturing industry, employing over 2,100 individuals (Data USA,

2016). Dawson County had the highest Medicare Reimbursement rates per enrollee in Nebraska at \$9,692 in 2014, which were \$104 more than the national average (Data USA, 2016). This high reimbursement rate may be due to 10% of the population of Dawson County living with diabetes (Thorell et al, 2018). These statistics show the highly diverse population that exists, not only in Lexington, but in the entire county. Not every county in Nebraska is going to be known for its high foreign-born population and manufacturing workforce similar to Dawson County, so these statistics show that numerous populations across Nebraska's counties are highly diverse and require their own unique healthcare facility.

Lexington Regional Health Center (LRHC) is a 25-bed critical access hospital located in Lexington, Nebraska (Lexington Regional Health Center, 2018). LRHC opened in September of 1976 and was originally known as Tri-County Hospital, a 40-bed hospital-only facility. This facility currently provides four main services, including urgent and primary care, family medicine specialties, outpatient services, and outreach clinics. In 2016, a 31,000-square foot outpatient facility was built to house sixteen examination rooms, three operating rooms, nine pre- and post-operation recovery rooms, and four post-surgical rooms. Thirty-two providers, along with other clinicians, work together to provide quality healthcare by using innovation at this rural healthcare facility. According to their website, LRHC promises integrity, valuable services to their patients, distinguished compassion, and innovation to make improvements where they are needed (Lexington Regional Health Center, 2018). From an employment perspective, LRHC provides a variety of occupations for professionals in rural healthcare due to the diverse needs of the Lexington community.

### **Current Recruitment Strategies at LRHC**

Alex Kacik (2018) wrote in a recent issue of *Modern Healthcare* that one of the best ways to create a healthy work environment is to hire individuals with a diverse background who can adapt to the unique situations that may arise in the workplace. Dr. Paula Brungardt who holds a doctorate in nursing and works as a provider at LRHC stated in a recent discussion that the facility wants healthcare practitioners who can accept and adjust to diverse situations because that is exactly what occurs at LRHC (personal communication, December 4, 2018). For example, with large Hispanic and Somalian populations within the community, there is often a translator in the room that the provider must communicate with to be able to assess and understand the patient's concerns. Dr. Brungardt stated this type of setting is often novel to practitioners from urban areas because they do not have experience communicating with translators and other family members in the examination room during the patient's visit.

Orthopaedic surgeons must be personable in their communication skills due to rural population values. For example, an orthopaedic physician in a rural area must have superb bedside manners while working with patients from diverse populations. The strength of this communication will build a relationship of trust between the orthopaedic physician and the patient, allowing the patient to be comfortable asking more questions and improving his/her health literacy. If patients follow precautions given by the orthopaedic physician during their visit, the outcome will result in fewer repeat visits and improve effective patient care (Johnson, 2018). Johnson (2018) stressed the importance of having a health-literate patient population to be able to manage their health and prevent disease. He said many facilities are discovering that the effort to create a more health-literate population often depends on the trust that has been established in the patient-physician relationship (Johnson, 2018).

After addressing recruitment strategies based on the diversity of the community, LRHC began to consider the financial burden of student loans that follow an orthopaedic surgeon long after s/he has obtained an education. LRHC offers housing stipends and participation in loan repayment programs to reduce financial stress for the physician. Other strategies included in LRHC's current compensation package are geared more towards family and life outside of work. LRHC includes insurance benefits for the surgeon's family, including medical and dental insurance. Upon being hired, LRHC is willing to work with the surgeon and his or her spouse to assist in finding work for the spouse. The LRHC website stressed the importance of mental health and life outside of work and so has limited weekend shifts that the surgeon is required to work (Lexington Regional Health Center, 2018).

### **Suggested Recruitment Strategies for LRHC**

Building upon LRHC's recruitment strategies, it is recommended that strategic thinking be adopted by health care managers across rural Nebraska to create effective recruitment strategies to bring first-class orthopaedic surgeons to small, isolated communities. First, managers should identify the needs of orthopaedic services unique to that patient population. For example, the median age in Lexington is fairly young, around 31 years old, but many of these individuals are employed in the manufacturing workforce where they use their body to perform physically-laboring and strenuous tasks (Data USA., 2016). Daily physical labor increases the chance of injury to bones, joints, and muscles of the body which often require orthopaedic services to diagnose and treat. Many rural workers, such as local farmers or other self-employed individuals, also rely on LRHC's orthopaedic services because it is the closest clinic to their home and the daily demands that their job may require.

This suggests the need for an orthopaedic surgeon who is both flexible and innovative in his or her procedures and techniques is prevalent because there are unique and novel injuries that arise in rural healthcare. According to William Weed, a physical therapist and co-owner of New West Orthopaedic and Sports Rehabilitation in Kearney, Nebraska, the supply of orthopaedic services is extremely critical to the rural Nebraskan population (personal communication, January 15, 2019). Weed stated that patients in the rural Midwest often have a strict timeline for their recovery process due to the desire to get back to work, so they do not want to be held back because of a backlog in the provision of surgical services or a lack of services available to them. For example, the prevalence of rotator cuff injuries, low back injuries, and spinal injuries are prominent in mid-Nebraska. None of these injuries are easy to repair and none of them can be treated using the exact same process, so an orthopaedic surgeon will only be successful if s/he is creative with his/her therapeutic approach and is able to adjust treatment plans according to what patients need. These injuries must be managed efficiently with the highest quality of care because many of these patients rely on physical labor to creating a living for themselves and their family. When devising a recruitment strategy that looks for both flexible and innovative orthopaedic surgeons, LRHC should look for surgeons who have done a rural residency track or who have been in an extended rural clinical rotation that have experience utilizing these skills (Hancock et al., 2009, Daniels et al., 2007).

Salaries are a component that must be part of the strategic recruitment process at LRHC. A suggestion given by Williams et al. (2011) in his comprehensive review of future recruitment needs in urban and rural hospitals includes a starting compensation above \$300,000 for surgeons immediately out of residency. This number may be higher depending on the experience of the interested candidate. Although this salary may seem high for a rural position, Williams et al.

(2011) suggests this amount with much certainty because this value is near to the starting compensation of an urban orthopaedic physician and common business knowledge implies that there must be parity between urban and rural salary offers in order to hire and retain these specialized physicians. The recruitment manager at LRHC would need to discuss this strategy not only with the chief financial officer, but also the chief executive officer and the chief medical officer before final decisions are made.

A health care workplace is one of the most professional settings in the United States, with high expectations in expertise, integrity, emotional stability, and adaptability to stressful settings. These expectations may cause stress in orthopaedic surgeons who hold major responsibilities and leadership roles amongst an interprofessional health care team. A disgruntled surgeon may not be in the correct mind set to provide the highest quality of patient care, so the idea of “humanizing” the workplace published in a recent *Modern Healthcare* article may be a solution to consider during the strategic thinking process (Kacik, 2018). Applying this theory to LRHC would include interviewing orthopaedic surgeons during their first year of employment at LRHC and asking for their feedback on how to create a work environment that maximizes their job satisfaction and productivity, resulting in better patient-physician interactions and patient outcomes. Feedback from the surgeons may include team building exercises to improve the micro-culture between clinicians, practicing effective communication methods specific to LRHC, or even creating an employee appreciation program (Kacik, 2018).

Humanizing the workplace would be an effective marketing and recruitment technique for the position of orthopaedic physician because s/he will inevitably spend ten or twelve hour days at LRHC and a friendly workplace culture will motivate a physician to provide his or her best possible care during times of exhaustion. As a manager, part of helping humanize the

workplace is interacting with employees. This interaction builds rapport and boosts their performance levels which would lead to better motivation and higher quality patient care (Kacik, 2018). Although attrition is inevitable, changing parts of the work environment that may be frustrating to new orthopaedic physicians earlier in their career at LRHC may result in longer retention of those individuals. An interested candidate for the orthopaedic physician position will likely be drawn to a positive and friendly work environment at LRHC.

An important aspect of rural Nebraska is the close-knit feeling that the small communities bring. Many patients desire this environment in their local health care setting because it brings them comfort and allows trust to be established between themselves and the surgeon. To create this type of environment, orthopaedic physicians must be comfortable communicating with every department in the facility and develop trusting relationships with fellow employees. This type of setting does not feel inviting to every orthopaedic physician, so it would be an important aspect to emphasize when recruiting an orthopaedic surgeon to LRHC.

Orthopaedic physicians will, most likely, be interested in physical activity and movement, so they will likely be interested in an idea related to “gamifying fitness” as described by Butcher (2018) in *Modern Healthcare*. In short, the orthopaedic surgeons and other clinicians would use electronic applications on their phones to track daily physical activity, nutritional choices, and other healthy habits. These statistics would be compiled at the end of each week or month to track the clinicians’ progress. Incentives could be given based on facility or department goals depending on the size of the rural hospital. For example, a hospital with fewer than 50 clinicians could give facility-based incentives, but a larger hospital with more than 50 clinicians could give incentives to individual departments.

Since LRHC contains multiple departments, such as Family Medicine and Urgent Care, this theory could be implemented across the facility so that it could not only improve clinicians' health and nutritional habits, but could also work to create that close-knit, small community feel amongst the providers. "Gamifying fitness" would promote team cohesion within interprofessional teams at LRHC. The author believes this theory of "gamifying fitness" would also be a contributing factor in effectively recruiting an orthopaedic physician to LRHC because of the competitive nature of orthopaedic surgeons and their interest in movement and physical activity. This theory would also allow the incoming orthopaedic physician fulfil his or her need for socialization, as described by Maslow's Hierarchy of Needs (Maslow, 1954). Fulfilling the need for socialization would allow the orthopaedic physician to feel comfortable in the interprofessional team at LRHC and provide the highest quality of patient-centered care.

When the health care manager has considered all the unique needs of the rural Nebraskan community, recruitment strategies should be framed to assess these demands so that a potential candidate understands the job deliverables and profile in that specific location (Yate, 2014). After performing this strategic thinking process for LRHC, the author suggests that a flexible and innovative orthopaedic physician would be the best recruit for this facility with a compensation value above \$300,000, a more "humanized" workplace, and the inclusion of "gamifying fitness" being the most effective recruitment strategies in addition to current strategies used by LRHC.

### **Use of Patient Feedback in the Strategic Thinking Process**

Managers at rural health care facilities should include patient research and feedback when devising these recruitment strategies so that they portray the correct needs of their community accurately. Castellucci (2018) addresses the use of patient research to assess and change the

needs of patients' healthcare feedback. Patient research usually occurs in the form of surveys, given to the patients after receiving care at a specific facility. The managers of that facility utilize patient feedback to improve clinical and operational functions, which also gives the facility a competitive edge over other clinics in the area. With this in mind, feedback that LRHC has obtained from past orthopaedic patients may cause managers to change their recruiting strategies to look for characteristics that patients desire in an orthopaedic physician. These characteristics recommended by patients in an orthopaedic setting may include friendlier services, improved health literacy measures, or simply more time with the physician. When recruiting, LRHC needs to utilize patient feedback when adjusting their strategies in the recruiting process. These changes will affect the type of orthopaedic physician recruited and hired at LRHC, which should improve the quality of services provided, consequently improving the level of patient care provided (Castellucci, 2018).

### **TARGETING THE RIGHT MARKET**

The recruitment strategies devised by the health care manager will not be effective if the targeted market is not reached. To find candidates that may have interest in rural health care, smaller markets must be targeted. Galloro (2008) emphasizes marketing to a more focused market because an organization is more likely to be successful in obtaining an excellent candidate and, therefore, funds for the marketing efforts will be well spent. All rural health care facilities should follow key points given by Daniels et al. (2007) that may impact recruitment, which include community attractiveness, professional opportunities at the healthcare facility, and awareness of health needs.

One possible marketing strategy would be to place ads in local rural newspapers surrounding rural towns because news spreads by word of mouth and an orthopaedic physician

brought up in one of these rural towns may be interested in moving back. In the newspaper ads, a statistic, such as the one found in a recent issue of *Modern Healthcare* stating that LRHC was ranked in the top 75 “Best Places to Work in Healthcare: Providers/Insurers” across the U.S., may be used to catch the eye of the reader. Marketing directors at the rural facilities should create a video, described by Watanabe-Galloway et al. (2015), showing the workplace and technology offered and current staff that the candidate could work with, along with highlighting the community and resources in that area. A popular marketing strategy being implemented today is the use of virtual reality, a website tool used to make the individual feel that s/he is present in the setting that the virtual reality page is set up to illustrate (Watanabe-Galloway et al., 2015).

Another marketing strategy would be to post the job description, specific to the facility’s workplace, on rural health job search websites such as 3rnet.org or careers.ruralhealthweb.org. Schiff et al. (2012) and Halaas et al. (2008) suggest marketing to medical students enrolled in a rural healthcare program as these students are more likely to end up in the rural healthcare workforce. LRHC may want to create an extended community-based program that exposes medical residents to a positive rural experience, possibly influencing at least one of the residents to want to return and work for LRHC as a future orthopaedic physician. These are just a few suggested marketing strategies that the marketing director could use at LRHC to target the extremely small market of orthopaedic physicians and medical residents interested in rural practice.

## CONCLUSION

In conclusion, there is a shortage of orthopaedic physicians in rural health care settings not only in Nebraska, but the entire United States. The importance of having adequate access to

orthopaedic services in rural Nebraska is critical to the state's economy due to so many individuals using their body for physical labor to earn a living. Formulating effective recruitment strategies to be used in rural Nebraska health care facilities can address the growing urban-rural discrepancies of orthopaedic services in Nebraska and the United States. These strategies show promising methods for increasing access to orthopaedic services at rural facilities, such as Lexington Regional Health Center.

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