

ABSTRACT

Canada is known to have one of the highest rates of MS in the world, with the small area of Central Alberta ranked as one of the highest rates of Multiple Sclerosis in the country. Alberta is a large, landlocked province in Western Canada with a small population of approximately 4 million. About 10% of the population live in the central area of the province and is characterized by numerous small communities with unique healthcare needs.

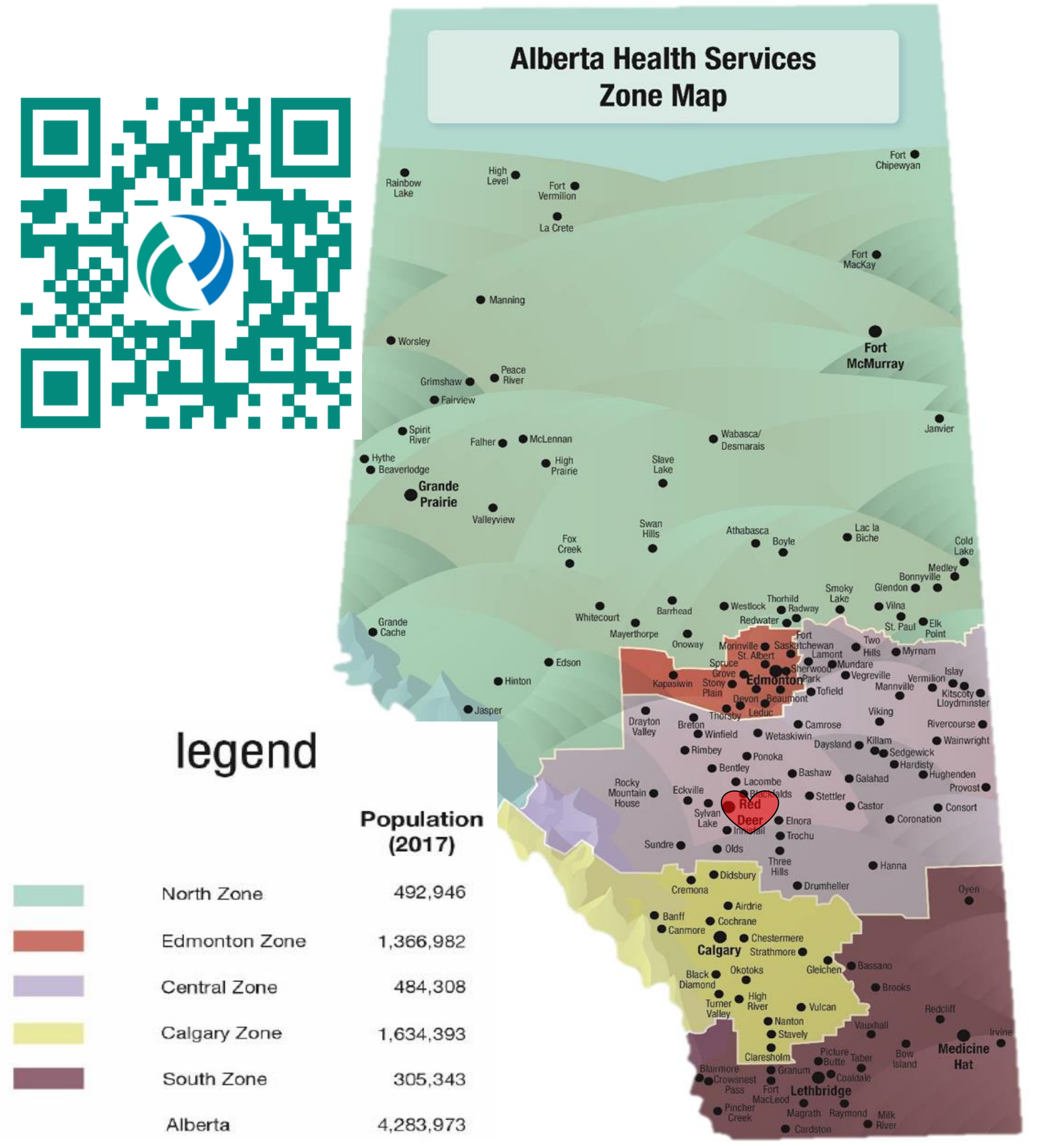


Impact of the Interdisciplinary Team on Quality of Life in a Rural Multiple Sclerosis Clinic

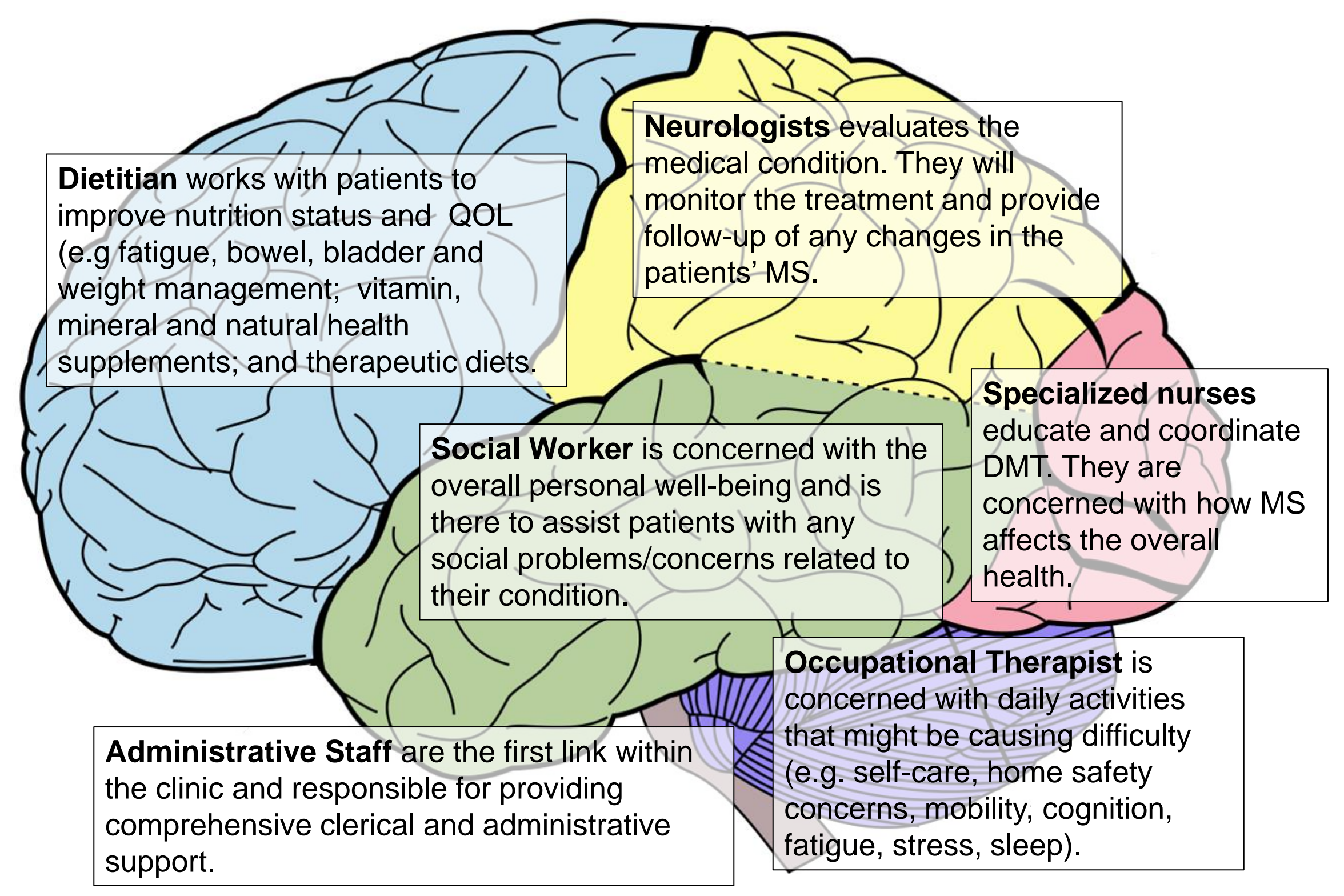
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Central Alberta Multiple Sclerosis Clinic

The **Central Alberta MS Clinic** provides appropriate interdisciplinary services to empower persons affected by MS to achieve their optimal level of independence, wellness and quality of life. Services are provided through timely, accessible education, treatment, support and research. Although the unique characteristics of the rural environment presents some challenges, a targeted, flexible approach provides much opportunity to provide exceptional care. The team includes Neurologists, Nurses, Social Worker, Occupational Therapists and Dietitian and has access to Pharmacy, Physical Therapy, Speech Language Pathology, Urology and limited access to Mental Health Services.. The MSC services the entire Central Zone and has access to telehealth equipment to facilitate decreased travel for outlying communities. Central Zone includes the area from Two Hills to Drumheller, Lloydminster to Rocky Mountain House, and everywhere in between.

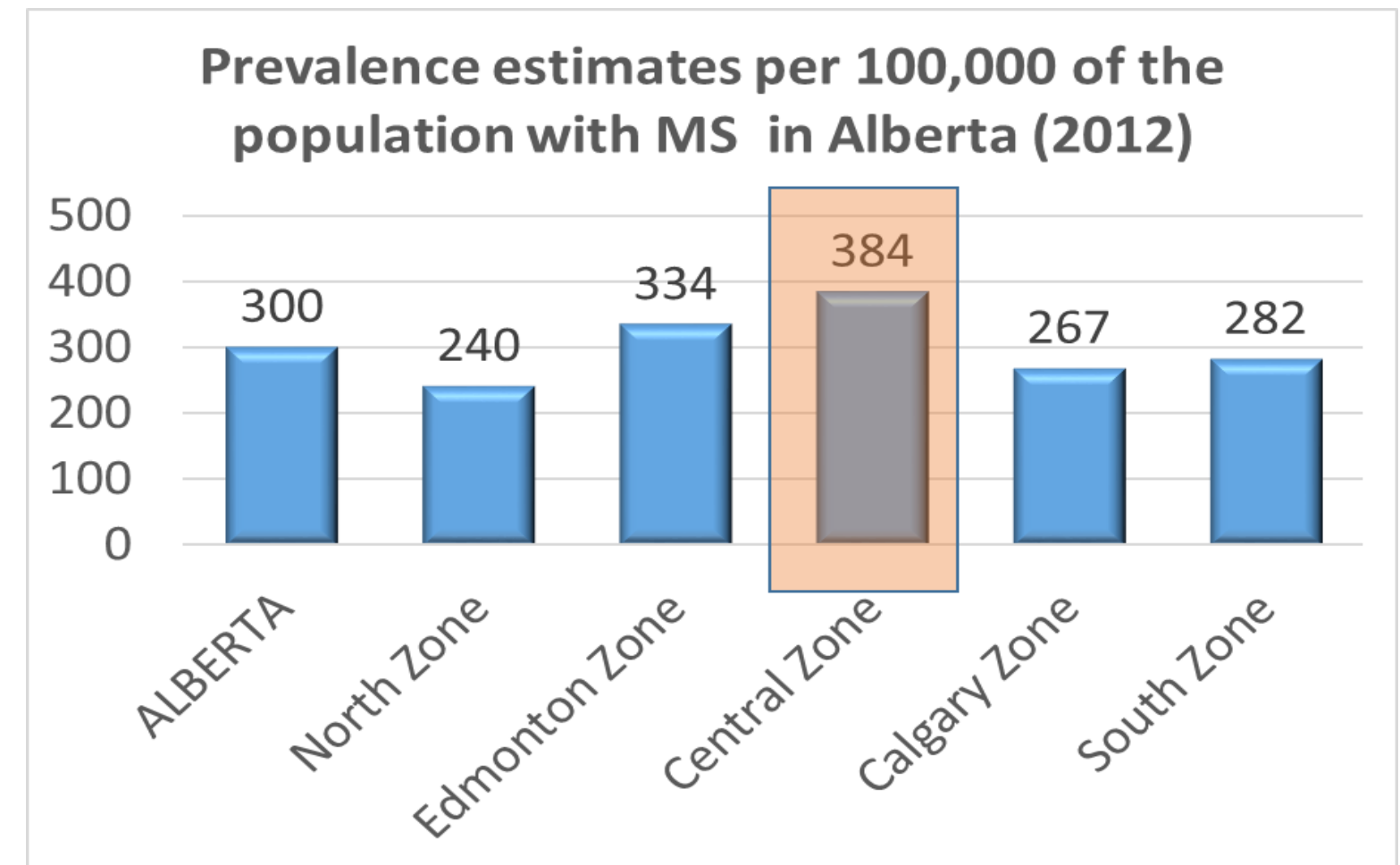


MS team and clinic facts



A database of information on patients in the MS clinic has been available since 2003. At present, our clinic has 938 active cases and 57 inactive cases (N=995). The average length of stay in the clinic is 8 years. The maximum time patients attend the clinic is 19 years.

Average age for Females=54 years and for Males=52 years. The youngest patient in the clinic is 13 years.



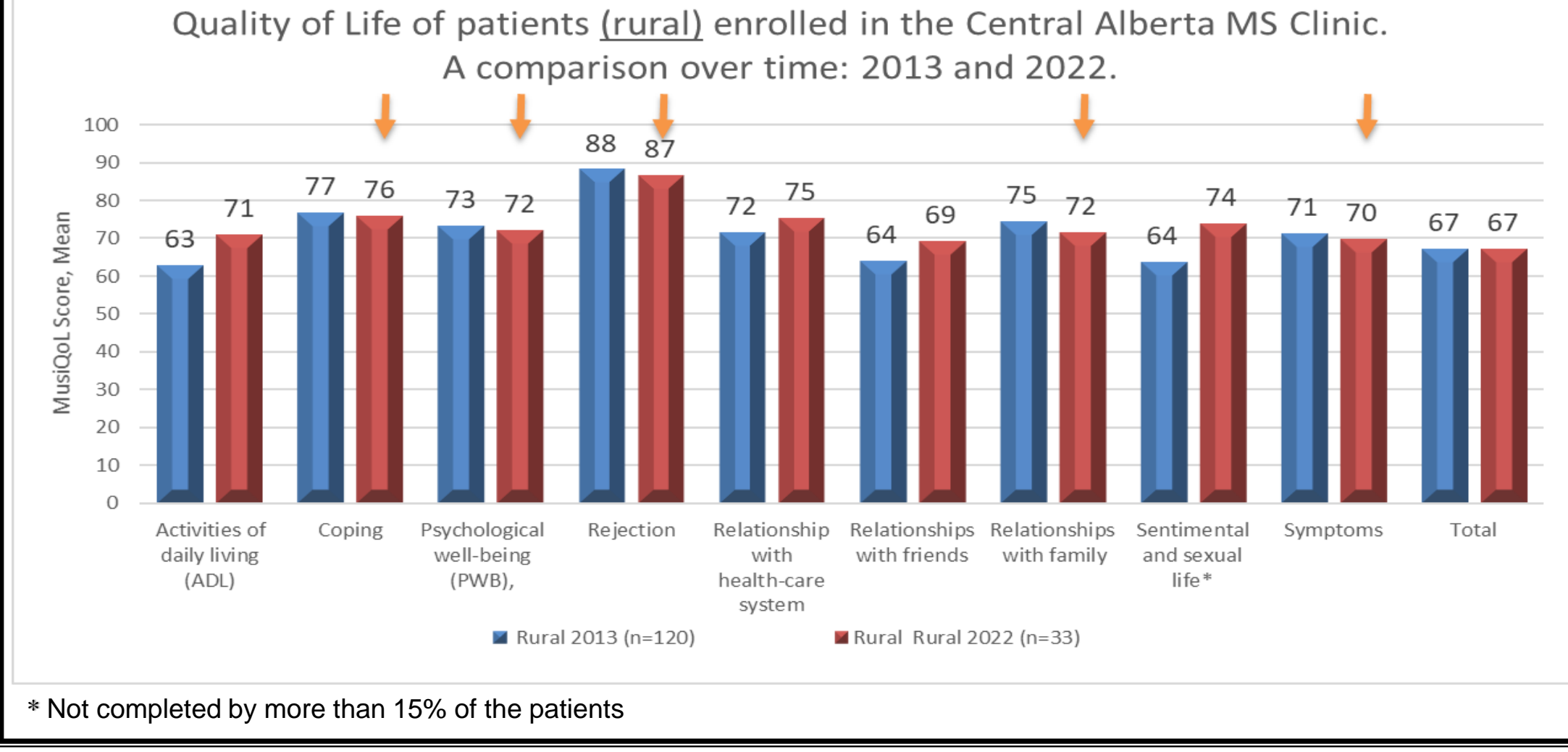
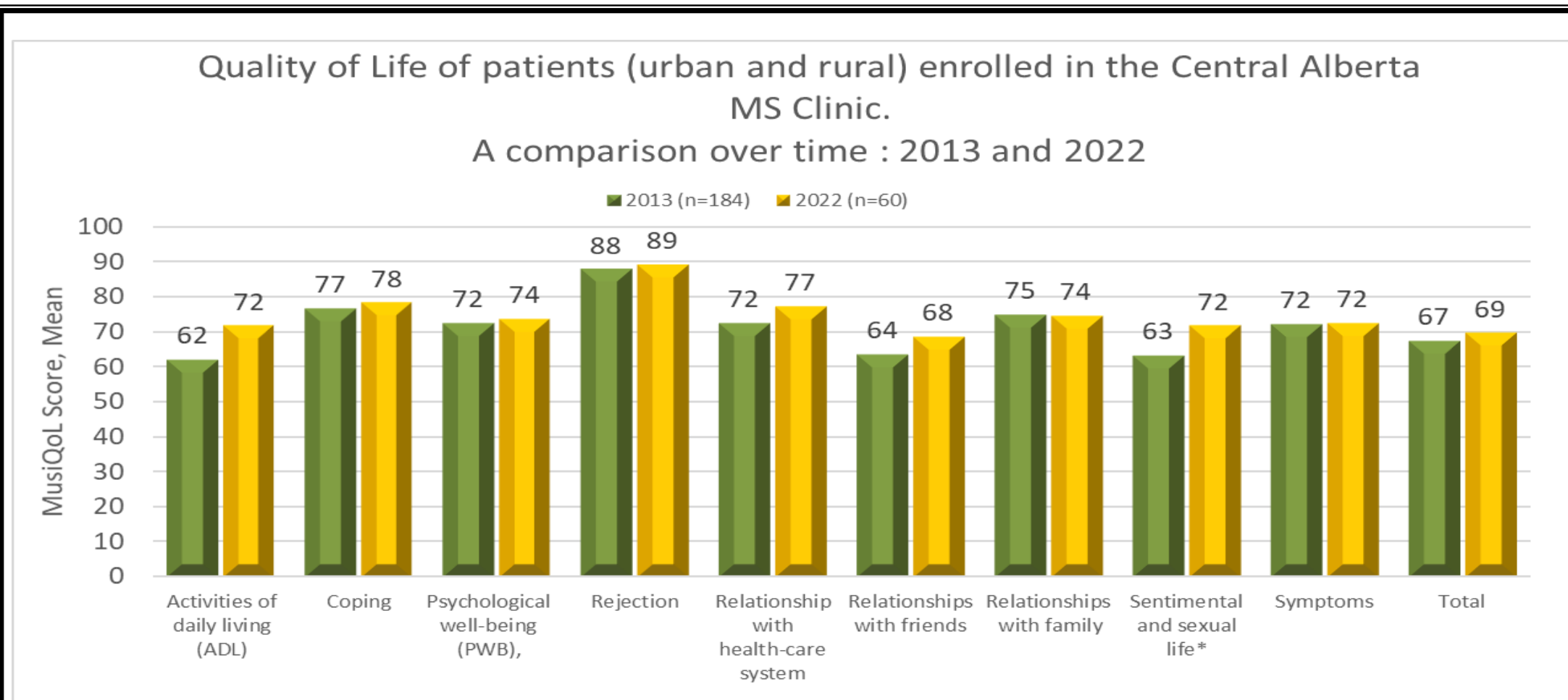
Distance MS Patients in Central Zones have to travel for treatment
36.9 % of the patients live in Red Deer, while 46.7% of patients have to travel more than 10 miles to the clinic (between 15 miles and 108 miles).

The multiple sclerosis international quality of life (MusiQoL) survey

According to the CDC, quality of life (QOL) is a broad multidimensional concept that usually includes subjective evaluations of life's positive and negative aspects. It is challenging to measure because, although the term "quality of life" has meaning for nearly everyone and every academic discipline, individuals and groups can define it differently.

The MusiQoL contains 31 items that reflect nine different domains. Each domain was given a name based on its constituent elements or items: Activities of Daily Living (eight items), Psychological Well-Being (four items), Symptoms (three items), Relationships with Friends (four items), Relationships with Family (three items), Relationships with Healthcare System (i.e. satisfaction with healthcare; three items), Sentimental and Sexual Life (two items), Coping (two items) and Rejection (two items).

Responding individuals in 2013 (N=184) and 2022 (N=60).



DISCUSSION

The total mean score of the MusiQoL of the respondents was 67.2 (±13.7) in 2013 and 69.5 (±16.8) in 2022. Marginally poorer 2022 results in the domains of psychological well-being, symptoms, coping, relationships with family, and rejection were found in patients located in the rural areas of Central Alberta and could be related to the COVID-19 pandemic's complexity and mandatory isolation.

Even though MS may cause considerable disability, most rural Multiple Sclerosis patients benefited from interdisciplinary MS care in Central Alberta and reported above standard QoL. The flexible, targeted, interdisciplinary approach to care of 'right person, right place, right time' provided an opportunity to impact self-management, coping, improved mental health and independence. These factors along with improved disease modifying treatment options contributed to increased QoL and hope for rural patients and their families.

Given the progressive, potentially disabling nature of MS and the resulting disruption in the lives of young people, counseling is often required to assist in adjustments and adaptations. To be most effective, mental health and family counseling is best provided in the context of MS as a contributing factor. Access to affordable quality counseling and mental health assistance on this team is limited.

LIMITATIONS OF THE STUDY

- The sample size in 2022 was relatively small (n = 60) and further research with a larger sample of MS patients would be desirable.
- Clinical characteristics of the patients (EDSS score, type of MS, patients taking disease-modifying drugs, Duration of the Disease, etc.) were not included in this analysis.

RECOMMENDATION

- Using QoL measures may provide health care providers in the clinic with information regarding the general health status of their MS patients who might otherwise go unrecognized.
- Mental Health services should be embedded in the program to better meet the needs of the rural patients living with MS.
- It is recommended that MusiQoL follow-up studies include clinical outcomes reported by neurologists and or care providers to allow for analysis of QOL by Clinical Status.

ACKNOWLEDGMENT

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