Student Guidelines for Care Plan Development

Your pain management plan should adopt a patient-centred, comprehensive, team-oriented/ collaborative approach. The care plan should be accurate, evidence-based, comprehensive, realistic, and practical. It should document information about pain assessment and management, including appropriate medication(s) and other strategies that address physical, spiritual, psychological, social, socioeconomic, and/or cultural issues as appropriate.

The care plan should capture/illustrate the following:

- Clear goals that are relevant to patient and family needs
- A comprehensive approach to address patient and family needs (e.g., consideration of psychosocial needs)
- Evidence of interprofessional collaboration
- Multidisciplinary assessment (i.e., input from all professions)
- A coordinated management plan, including a variety of strategies
- Clear monitoring parameters and follow-up strategies

The format of the care plan is flexible and should indicate how the team will **collaborate** on the identified **patient-centred goals**. Subheadings/sections can be helpful in organizing the plan.

Care Plan Guidelines for Students

Please present your care plan ensuring that the following components are included. There should be evidence that the care plan is:

- Patient- and family-centred: Goals should be clear and based on interprofessional assessment
- Interprofessional: Have clinicians representing different professional backgrounds been represented? Is there evidence of a shared plan of care or are all the professions working independently?
- Psychosocial determinants: Are there considerations of how inclusion, equity and diversity factors affect your care plan?

Feel free to be creative in your presentation! You may wish to prepare a dialogue that demonstrates your team's thought process. Other important elements to include are:

Case Presentation

- Medical History
- Current & Past Medications/Treatments
- Pain History and Assessment
- Pain Features
- Symptoms

- Whole Person Considerations: Activity and Participation
    - Work/school, home, family routine, leisure, mobility, ADLs, sleep
    - Self: (role interference, mood, self-image, perceived coping, age/development, culture/ethnic/religious background)
    - Relationships: roles, support, sexual relationships
- Relevant Past Pain Experience (childhood, family members, past success)
- Relevant Physical Exam Findings

Management Plan

- Physical
- Pharmacological
- Psychological/emotional
- Other factors affecting care plan:
    - Social/socioeconomic
    - Cultural
    - Spiritual
- Educational component for patient and family about pain management
- Plans to prevent further pain and disability

Follow-up and Monitoring

THE CASE OF JULIE WU (TEAM B)

WHO:

Julie Wu (she/her) is a 13-year-old female, diagnosed with juvenile idiopathic arthritis (JIA). She lives in Burlington, Ontario.

BACKGROUND HISTORY:

- Julie's family moved from China to Canada 2 years ago and English is not her first language, however she has been a highly engaged student and performs well, taking extra ESL (English as a second language) coaching on the weekends. Recently, Julie is having some difficulty with concentration at school and, therefore, has not been performing as well academically. Her parents and teachers have attributed this decline to transitioning to high school and the long hours she spends practicing for her competitive gymnastic meets.
- Julie's gymnastics coach has encouraged her to ice and rest as needed, but also to try and persist through the pain when it happens.
- Julie has been experiencing a "dull achy" persistent pain in her hands and knees over the past 2 years. More recently she has noticed that her jaw hurts when she eats, and she feels tired all the time
- She recently told her paediatrician about these symptoms at her regular annual check-up. Dr. Clark (she/her) also thought that her pain and tiredness were most likely due to joint and

muscle overuse and recommended using Ibuprofen 100mg prior to gymnastics and up to three times daily as needed.

- Julie was seen this past October for routine dental assessment and cleaning.
- Her dentist, Dr. Delaney (they/them), noted that she had limited opening of her mouth and associated pain in front of the ears and in the face. Further questioning revealed that her diet had been altered for several months and was restricted to softer foods due to her persistent jaw pain. Julie reported that she felt she had lost a lot of weight in the past few months (about 10 -15 lbs).
- Julie also experienced multiple episodes of an acute increase in pain associated with her jaw "locking" open for several minutes.
- Julie reported that she often woke up with her teeth very tight together.
- A panoramic radiograph showed some discontinuity of the cortical bone in both condyles.
- Taking into account Julie's medical history, facial pain, jaw clenching and findings in the panoramic radiograph, Dr. Delaney diagnosed a Temporomandibular Joint (TMJ) Disorder. Dr. Delaney referred Julie to her pediatrician, Dr. Clark, and to a dentist with expertise in temporomandibular disorders (TMD) for further investigation and treatment. Gentle massage with a cold or warm compress, soft diet, and avoidance of unnecessary repetitive TMJ stressors (e.g., chewing gum) were also recommended. An occlusal splint to protect the dentition, relieve symptoms, and decrease her joint loading were also recommended.
- One week later, Dr. Clark saw Julie and wrote the following note requesting a consultation for Julie with an interprofessional rheumatology team at the local children's hospital.

Referral Note: Julie Wu

I would like to refer a mature 13-year-old girl, Julie Wu, to you for a consult regarding the possibility of juvenile idiopathic arthritis. Julie has had joint complaints off and on for nearly 2 years. She is a competitive gymnast and many of the symptoms were thought to be sports injuries or due to overuse. I had originally recommended that she use Ibuprofen 100mg prior to gymnastics and up to three times daily as needed. This has not been effective for pain relief. Recently, she was seen by a dentist and was found to have jaw pain and limitation of mandibular movement, weight loss, and X-ray changes. On examination today, she had swelling in both knees, tenderness over her temporomandibular joints bilaterally, and diffuse hand pain. Baseline lab results are consistent with some inflammation. Her x-rays have revealed some periarticular osteopenia in her hands with some evidence of soft tissue swelling in several PIP joints. There were bilateral knee effusions, but no bony abnormalities. According to our records, she experienced a 5.9 kg weight loss in the past 6 months. She has significantly reduced her gym training and has not competed this season. I have started her on 250mg of naproxen BID. She also requires rehabilitation and assistance with management strategies to deal with this problem.

Sincerely Yours,

Dr. F. Clark, MD

CURRENT PAIN MANAGEMENT CHALLENGE

- Julie has moderate persistent pain in her hands and knees (rated 6/10) and severe intermittent pain in her jaw (rated 8/10).
- In-between acute attacks, Julie's jaw pain remains mild to moderate (rated 3/10 – 5/10).

PSYCHOSOCIAL/FAMILY HISTORY:

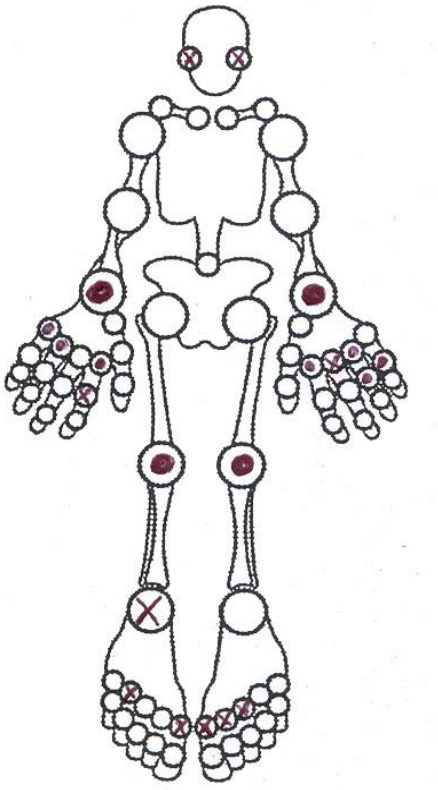
- Over the past two years, Julie's parents and coach believed that her pain may be due to her "overdoing it" in gymnastics. However, her grandparents wondered if the pain was due to growing pains as Julie's mother had terrible growing pains when she was going through puberty and Julie's older sister had them as well.
- Julie and her parents are quite upset with the idea of Dr. Clark's potential diagnosis. They are very concerned what this diagnosis and ongoing pain will mean for her future.
- Julie is used to doing well academically and performing at a high level in gymnastics.
- However, with Julie's worsening symptoms she has missed a lot of school due to medical appointments.
- Xiao Mei works in a factory and Jia Ming is a construction worker. Jia Ming has chronic low-back pain related to his job. There is no family history of autoimmune inflammatory diseases.
- Julie's mother, Xiao Mei (she/her) and father, Jia Ming (he/him) are also concerned about getting Julie to her many medical appointments as they are worried about missing work and losing their jobs and medical coverage. Furthermore, her parents are not fluent in English and are finding it challenging to understand the details of the treatment plan.
- Julie's older sister, Clare is 16 years old. Both Xiao Mei and Jia Ming report that since Julie's diagnosis, Clare has been more irritable at home and has had anger outbursts towards her parents. Arguments usually occur when Julie's parents request that Clare helps Julie at home, especially when Julie is in pain.
- In consultation with the treatment team, Dr. Clarke has also communicated that the parents sometimes become very angry with the treatment team. The parents state that their daughter still suffers through bouts of pain at home, and it is very difficult for the parents to witness. Julie's father has had a few angry outbursts with the medical team, because he feels helpless at times, and is demanding medicine that works.
- Julie's parents are managing financially and want to know all the information they can to help her, however they are finding it hard to navigate the health care system. It has been challenging for them to understand the patient education material that have been provided to them. Last year, Jia Ming was in the emergency room for a kidney stone, where the family had an upsetting experience with a health care provider. The provider refused to speak to Xiao Mei "because she couldn't speak English" and laughed when Jia Ming asked for information to be given to them in Chinese.
- Julie is sad about how her pain has interfered with her social life and has affected her grades at school. She is passionate about gymnastics and now feels like a failure amongst her peers. Her parents are afraid that she is becoming depressed and that her schoolwork is in jeopardy.

PHYSICAL ASSESSMENT:

Objective: Thin, quiet, and flat affect; appears fatigued; has stated that she wakes up at night in pain 2-3 times per week.

Key Physical Findings:

- Jaw opening limited to 2 fingers with deviation to right.
- Significant tenderness over the right TMJ (temporomandibular joint) and to lesser degree on the left side of her TMJ.
- On palpation there is crepitus on right TMJ. She has effused wrists bilaterally and multiple MCP (metacarpal phalangeal) and PIP (proximal interphalangeal) joints bilaterally and bilateral knee effusions. She has significant stress pain on her right ankle and several tender MTP (metatarsal phalangeal) joints. She has a total of 22 active joints on examination, of which 11 are effused.
- Antalgic gait pattern (i.e., protective gait due to pain).



In total 11 effusions and 22 active joints.

Active range of Motion (AROM):

		R	L
Wrist	flexion	50°	45°
	extension	5°	10°
Knee	flexion	138°	140°
	Extension	0°	-5°

Grip strength (measured with “Jamar Dynamometer”): right 16 kg left 15 kg

Analysis: 13-year-old girl with a 2 year history of joint and jaw pain. Assessment findings and blood-work results are consistent with symmetrical polyarthritis.

MEDICATIONS:

- Naproxen 250mg BID

PLAN:

You are a member of the team at the children's hospital responsible for Julie's care plan. You have completed your assessment of Julie and are now going to meet with the team to organize a plan to manage Julie's arthritis and related pain. When telling Julie and her family that you will be meeting with her regarding her plan, she says *"It really hurts. I'm tired and sick of it. How do we get it to stop?"*

References for Case B: Julie Wu (Juvenile Idiopathic Arthritis)

- Carrasco R. Juvenile idiopathic arthritis overview and involvement of the temporomandibular joint: prevalence, systemic therapy. Oral Maxillofac Surg Clin North Am. 2015 Feb;27(1):1-10.
- Giancane G, Consolaro A, Lanni S, Davì S, Schiappapietra B, Ravelli A. Juvenile Idiopathic Arthritis: Diagnosis and Treatment. Rheumatol Ther. 2016 Dec;3(2):187-207.
- International Association for the Study of Pain (2019): Classification of Chronic Pain.

https://www.iasp-pain.org/PublicationsNews/Content.aspx?ItemNumber=1673 (repeat from general resources)