**Project Narrative**: Approximately 5-10% of the US population will seek care for painful temporomandibular muscle and joint disorders (TMJD) in their lifetime. General dentists are typically the first health care providers to see TMJD pain patients. However, there is no consensus regarding initial treatment for these problems. As a result care varies from home-based self-care instruction with or without medications to use of mouth guards and other treatments. TMJD embraces a number of pains that involve the masticatory muscles, the temporomandibular joint or both.

The objective of this survey is to learn more about your experience treating patients with TMJD pain. This survey will ask you questions about how you diagnose TMJD pain and what initial treatment(s) you provide for your TMJD pain patients. You do not need to review your charts to answer any of the questions. The survey results will be used to assess the feasibility of doing a randomized clinical trial in the dental Practice-Based Research Networks (PBRNs) to determine the best initial treatment for your patients with TMJD pain. The information you provide will be kept confidential.

**Survey**

1. Do you believe that doing a study to determine the best initial treatment for your patients with TMJD (temporomandibular muscle and joint disorders) pain would be an important question to study in the PBRNs?

   Yes ❑
   No ❑

2. Do you believe that this study to determine the best initial treatment for your patients with TMJD pain should be limited to patients with

| | Yes | No |
|---|---|---|
| a) Acute pain (less than 6 months) | ❑ | ❑ |
| b) Chronic pain (6 months or more) | ❑ | ❑ |
| c) Currently no pain but history of pain | ❑ | ❑ |

3. What would motivate you to be in this study? (*check all that apply*)

   Give back to the profession ❑
   Help to generate evidence ❑
   Receive monetary payment for your time ❑
   Other(s) (*please specify*) ❑
   _____

4. From your day to day experience, what do you think is the most important thing you need to know about TMJD pain?

   _____
   _____

5. What frustrates you the most when you see a patient with TMJD pain?

   _____
   _____

6. In the last year, did you refer or treat any TMJD pain patients?

| | Yes | No |
|---|---|---|
| Refer: | ❑ | ❑ |
| Treat: | ❑ | ❑ |

If you selected **no to both**, then you are done: **Thank you**!

If you answered **yes** please **continue**.

a. If **Refer** is **yes**:

i. In the last month, estimate the number of TMJD pain patients you referred? ___

ii. In the last year, on average, estimate the number of TMJD pain patients you have referred per month? ___

If you only **refer** TMJD pain patients, then you are done: **Thank you**!

If you **treat** TMJD pain patients, please **continue**.

b. If **Treat** is **yes**:

i. In the last month, estimate the number of TMJD pain patients you treated? ___

ii. In the last year, on average, estimate the number of TMJD pain patients you have treated per month? ___

7. How do you diagnose TMJD pain (*check all that apply*)?

| | Yes | No |
|---|---|---|
| By asking specific questions | ❑ | ❑ |
| By physical examination | ❑ | ❑ |

8. *If you diagnose TMJD pain with **questions**, please indicate* the frequency you use each of these questions:

| Questions | Never | Sometimes | Half of time | Usually | Always |
|---|---|---|---|---|---|
| Do you have pain in your temples, face, jaw joint, or jaws? | ❑ | ❑ | ❑ | ❑ | ❑ |
| Do you have pain when you open your mouth wide? | ❑ | ❑ | ❑ | ❑ | ❑ |
| Do you have pain when you chew? | ❑ | ❑ | ❑ | ❑ | ❑ |
| Do you have pain when you are clenching or grinding your teeth? | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other (please specify): _____ | ❑ | ❑ | ❑ | ❑ | ❑ |

9. *If you diagnose TMJD pain with **physical examination**, please indicate* the frequency you use each of these exams:

| Physical examination | Never | Sometimes | Half of time | Usually | Always |
|---|---|---|---|---|---|
| Palpation of jaw muscles | ❑ | ❑ | ❑ | ❑ | ❑ |
| Palpation of TMJ | ❑ | ❑ | ❑ | ❑ | ❑ |
| Examining for limited range of motion | ❑ | ❑ | ❑ | ❑ | ❑ |
| Presence of pain with range of motion of the jaw | ❑ | ❑ | ❑ | ❑ | ❑ |
| TMJ noises | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other (please specify): _____ | ❑ | ❑ | ❑ | ❑ | ❑ |

10. In a study of TMJD pain in your practice, would you be willing to use only the following two questions* to identify patients with TMJD pain?

Do you have pain in your temples, face, temporomandibular joint (TMJ), or jaws once a week or more?

Do you have pain when you open your mouth wide or chew once a week or more?

Yes ❑

No ❑

**These are valid and reliable questions used in diagnosing TMJD pain (Nilsson et al., The reliability and validity of self-reported temporomandibular disorder, pain in adolescents. J* Orofac Pain 2006;20(2):138-44).

11. *Indicate* what percent of your patients with TMJD pain have experienced TMJD pain for:

| | |
|---|---|
| Less than 6 months | ___ |
| 6 months or more | ___ |
| | 100% |
| I do not know | ❑ |

12. *Indicate* what percent of your patients with TMJD pain have reported the following levels of TMJD pain from mild (1) to severe pain (10):

| | |
|---|---|
| 1-3 | ___ |
| 4-6 | ___ |
| 7-10 | ___ |
| | 100% |
| I do not know | ❑ |

13. How often do your TMJD pain patients report the following symptom(s)?

| Symptoms | Never | Sometimes | Half of time | Usually | Always |
|---|---|---|---|---|---|
| Jaw pain | ❑ | ❑ | ❑ | ❑ | ❑ |
| Facial pain | ❑ | ❑ | ❑ | ❑ | ❑ |
| Earache | ❑ | ❑ | ❑ | ❑ | ❑ |
| Headache | ❑ | ❑ | ❑ | ❑ | ❑ |
| Problem with opening or closing the mouth | ❑ | ❑ | ❑ | ❑ | ❑ |
| Catching or locking of the jaw | ❑ | ❑ | ❑ | ❑ | ❑ |
| TMJ noises | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other (*please specify)*: _____ | ❑ | ❑ | ❑ | ❑ | ❑ |

14. What treatment(s) do you use for TMJD pain? (*check all that apply*)

| **Treatment** | |
|---|---|
| Splint/mouth guard | ❑ |
| Over the counter or prescription medications | ❑ |
| Self-care (*it includes but is not limited to home based use of heat, ice, soft diet – see options in question 17*) | ❑ |
| Jaw exercises (e.g. stretching exercises) | ❑ |
| Occlusal adjustment | ❑ |
| Referral to physical therapist | ❑ |
| Other (*please specify*): _____ | ❑ |

15. How often do you use the following splints/mouthguards for treating TMJD pain?

| **Splint** | **Never** | **Sometimes** | **Half of time** | **Usually** | **Always** |
|---|---|---|---|---|---|
| Hard custom mouthguard (i.e., Stabilization splint/ occlusal splint) | ❑ | ❑ | ❑ | ❑ | ❑ |
| Soft custom mouthguard | ❑ | ❑ | ❑ | ❑ | ❑ |
| Soft over the counter mouthguard | ❑ | ❑ | ❑ | ❑ | ❑ |
| Anterior repositioning splint | ❑ | ❑ | ❑ | ❑ | ❑ |
| Nociceptive Trigeminal Inhibition appliance (NTI) | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other (*please specify*): _____ | ❑ | ❑ | ❑ | ❑ | ❑ |

16. How often do you use the following medications for treating TMJD pain?

| **Medications** | **Never** | **Sometimes** | **Half of time** | **Usually** | **Always** |
|---|---|---|---|---|---|
| Over the counter **acetaminophen** | ❑ | ❑ | ❑ | ❑ | ❑ |
| Over the counter **aspirin** | ❑ | ❑ | ❑ | ❑ | ❑ |
| Over the counter **ibuprofen** | ❑ | ❑ | ❑ | ❑ | ❑ |
| Over the counter **naprosyn** | ❑ | ❑ | ❑ | ❑ | ❑ |
| Prescription **aspirin** | ❑ | ❑ | ❑ | ❑ | ❑ |
| Prescription **ibuprofen** | ❑ | ❑ | ❑ | ❑ | ❑ |
| Prescription **naprosyn** | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other nonsteroidal anti-inflammatory medication(s) (NSAID) you recommend or prescribe (*please specify*): _____ | ❑ | ❑ | ❑ | ❑ | ❑ |

| | | | | | |
|---|---|---|---|---|---|
| Low dose tricyclic antidepressants | ❑ | ❑ | ❑ | ❑ | ❑ |
| Muscle relaxant | ❑ | ❑ | ❑ | ❑ | ❑ |
| Tramadol (Ultram) | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other opioids | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other (*please specify)*: | ❑ | ❑ | ❑ | ❑ | ❑ |

*If you prescribe NSAID(s)*, *please check one or two* NSAID(s) you prefer to prescribe:

| | |
|---|---|
| None | ❑ |
| Ibuprofen | ❑ |
| Naprosyn | ❑ |
| Aspirin | ❑ |
| Other *(please specify):* _____ | ❑ |

*If you prescribe muscle relaxants*, *check one or two of* the muscle relaxant(s) that you prefer to prescribe:

| | |
|---|---|
| None | ❑ |
| Orphenadrine (Norflex®) | ❑ |
| Methocarbamol (Robaxin®) | ❑ |
| Metaxalone (Skelantin®) | ❑ |
| Cyclobenzaprine (Flexeril®) | ❑ |
| Diazepam (Valium®) | ❑ |
| Clonazepam (Klonopin®) | ❑ |
| Other *(please specify):* _____ | |

17. How often do you recommend the following self-care for TMJD pain?

| **Treatment** | **Never** | **Sometimes** | **Half of time** | **Usually** | **Always** |
|---|---|---|---|---|---|
| Application of heat | ❑ | ❑ | ❑ | ❑ | ❑ |
| Application of ice | ❑ | ❑ | ❑ | ❑ | ❑ |
| Eat a pain-free diet | ❑ | ❑ | ❑ | ❑ | ❑ |
| Eat a soft diet | ❑ | ❑ | ❑ | ❑ | ❑ |
| Chew food on both sides of your back teeth at the same time | ❑ | ❑ | ❑ | ❑ | ❑ |
| Keep your tongue up gently on your palate | ❑ | ❑ | ❑ | ❑ | ❑ |
| Keep your teeth apart | ❑ | ❑ | ❑ | ❑ | ❑ |

| | | | | | |
|---|---|---|---|---|---|
| Relax your jaw (muscles) | ❑ | ❑ | ❑ | ❑ | ❑ |
| Avoid chewing gum | ❑ | ❑ | ❑ | ❑ | ❑ |
| Avoid clenching or grinding your teeth | ❑ | ❑ | ❑ | ❑ | ❑ |
| Avoid biting on objects such as pens | ❑ | ❑ | ❑ | ❑ | ❑ |
| Avoid biting on your tongue, lips or cheeks | ❑ | ❑ | ❑ | ❑ | ❑ |
| Avoid biting on your fingernails | ❑ | ❑ | ❑ | ❑ | ❑ |
| Avoid pushing your tongue against your teeth | ❑ | ❑ | ❑ | ❑ | ❑ |
| Avoid caffeine | ❑ | ❑ | ❑ | ❑ | ❑ |
| Get a good night's sleep | ❑ | ❑ | ❑ | ❑ | ❑ |
| Identify events that trigger the pain | ❑ | ❑ | ❑ | ❑ | ❑ |
| Other (*please specify*): _____ | ❑ | ❑ | ❑ | ❑ | ❑ |

18. Which **initial treatment(s)** do you **prefer** to provide for TMJD pain? (*check all that apply*)

| | |
|---|---|
| Self-care (listed on question 17) | ❑ |
| Jaw exercises (e.g. stretching exercises) | ❑ |
| Jaw massage | ❑ |
| Over the counter medications | ❑ |
| Prescription medications | ❑ |
| Splints/mouthguards (any type) | ❑ |
| Other (*please specify*): _____ | ❑ |
| No preference | ❑ |

19. If you are invited to participate in a randomized controlled trial (**RCT**) to assess the best **initial treatment** for TMJD pain, would you be willing to participate?

| | |
|---|---|
| Yes | ❑ |
| No | ❑ |

If **yes, skip to question #21**.

20. If **no**, then please answer these questions:

a) Why would you not be willing to participate?

_____
_____
_____

b) Describe the conditions, if any, that would need to exist for you to participate?

_____
_____
_____

21. *If **yes***, would you be willing to assign your patients to (*check all that apply*):

| | Yes | No |
|---|---|---|
| a. Different treatments? | ❑ | ❑ |
| b. Placebo group (inactive pill)? | ❑ | ❑ |
| c. "No treatment" group? | ❑ | ❑ |

22. *Select* **two initial treatments** for TMJD pain that you would like to test in the RCT:

| | |
|---|---|
| Self-care without exercise | ❑ |
| Jaw exercises (e.g. stretching exercises) | ❑ |
| Jaw massage | ❑ |
| Prescription medications | ❑ |
| Over the counter medications | ❑ |
| Splint/mouth guard | ❑ |
| Other (*please specify)*: | ❑ |

_____

23. Why did you select those 2 treatments in question 22? (*check all that apply*)

| | Choice #1 | Choice #2 |
|---|---|---|
| **Indicate the treatment**: | _____ | _____ |
| **Reason** | | |
| Best to reduce pain | ❑ | ❑ |
| Patient compliance | ❑ | ❑ |
| Cost | ❑ | ❑ |
| Ease of application | ❑ | ❑ |
| Patient preference | ❑ | ❑ |
| Other (*please specify*): | ❑ | ❑ |

_____

24. Indicate if you have already used the selected treatments in question 22 (*check all that apply*)

| | Choice #1 | Choice #2 |
|---|---|---|
| **Indicate the treatment**: | _____ | _____ |
| Yes | ❑ | ❑ |
| No | ❑ | ❑ |

25. When treating TMJD pain patients, do you encounter any difficulty(ies) when providing any of the two treatments in question 22?

Yes ❑
No ❑

If **no, skip to the Practitioner Demographics questions**.

26. *If **yes***, *please indicate* the difficulty(ies) you encounter in using each treatment selected in question 22: (*check all that apply*)

| | Choice #1 | Choice #2 |
|---|---|---|
| Indicate the treatment: | _____ | _____ |
| **Reason** | | |
| Cost | ❑ | ❑ |
| Lack of experience | ❑ | ❑ |
| Lack of knowledge | ❑ | ❑ |
| Availability | ❑ | ❑ |
| Time consuming | ❑ | ❑ |
| Short-term efficacy | ❑ | ❑ |
| Other (*please specify*): | ❑ | ❑ |

27. When treating TMJD pain patients do you believe your patients will have any difficulty(ies) accepting or complying with the two initial treatments selected in question 22?

Yes ❑
No ❑

If **no, skip to the Practitioner Demographics questions.**

28. *If **yes**, please indicate* any difficulty(ies) that you believe your patients might have regarding each treatment selected in question 22: (*check all that apply*)

| **Indicate the treatment**: | Choice #1 | Choice #2 |
|---|---|---|
| Concerns | | |
| Cost | ❑ | ❑ |
| Side effects | ❑ | ❑ |
| Patient non-compliance | ❑ | ❑ |
| Difficult to use | ❑ | ❑ |
| Other (*please specify*): | ❑ | ❑ |

**Practitioner Demographics**

| | | |
|---|---|---|
| Date of birth | Mm/yyyy | |
| Gender | Male | ❑ |
| | Female | ❑ |
| Race | American Indian/Alaska Native | ❑ |
| | Asian | ❑ |
| | Black/African American | ❑ |
| | Native Hawaiian/Pacific Islander | ❑ |
| | White | ❑ |
| | Other | ❑ |
| | Not reported | ❑ |
| Ethnicity | Hispanic or Latino | ❑ |
| | Not Hispanic or Latino | ❑ |
| | Unknown | ❑ |
| | Not reported | ❑ |
| For how many years have you practiced dentistry? | 5 or fewer | ❑ |
| | 6-10 | ❑ |
| | 11-15 | ❑ |
| | 16-20 | ❑ |
| | 21-25 | ❑ |
| | 26+ | ❑ |
| Specialty | None | ❑ |
| | Orthodontics | ❑ |
| | Endodontics | ❑ |
| | Pediatrics | ❑ |
| | Periodontics | ❑ |
| | Prosthodontics | ❑ |
| | Oral Surgery | ❑ |
| | Oral Medicine | ❑ |
| | Oral Radiology | ❑ |
| | Other | ❑ |

**Thank you - Your time and expertise are appreciated.**