

Patient Before Visit Questionnaire (with variable scoring, references at end)

1. How would you rate your tooth pain on a 0 to 10 scale at the present time, that is right now, where 0 is "no pain" and 10 is "pain as bad as it could be"? (**current pain**)

0	1	2	3	4	5	6	7	8	9	10
No pain										pain as bad as can be

2. In the past 7 days, how intense was your worst tooth pain rated on a 0 to 10 scale, where 0 is "no pain" and 10 is "pain as bad as it could be"? (**worst pain**)

0	1	2	3	4	5	6	7	8	9	10
No pain										pain as bad as can be

3. In the past 7 days, on average, how intense was your tooth pain rated on a 0 to 10 scale, where 0 is "no pain" and 10 is "pain as bad as it could be"? (that is, your usual pain at times you were experiencing pain) (**average pain**)

0	1	2	3	4	5	6	7	8	9	10
No pain										pain as bad as can be

A pain score of 7 or greater was considered severe. An overall measure of severe pain was defined as severe pain on all three assessments.

4. I feel that the treatment outcome for my tooth will turn out (**Treatment expectation: scored 1-4**):
 Poor, Fair, Good, Very good

5. To what degree are you afraid about receiving dental treatment today? (**Treatment fear: scored 1-5**):

- Not at all afraid
- A little afraid
- Somewhat afraid
- Very afraid
- Extremely afraid

6. Medications: Have you taken any of the following medications or supplements in the past 7 days for the tooth that was treated today? (each yes or no)

- Prescription pain medications
- Over-the-counter pain medications (a prescription was not needed)
- Antibiotics prescribed by your dentist
- Herbal medications

Questions 7-9 are related to any jaw or temple pain you may have had in the last 30 days (**TMD screening questions**)

7. On average, how long did any pain in your jaw or temple area on either side last? (dichotomized as any pain, yes/no, for TMD screening)

No pain	From very brief to more than a week, but it does stop	Continuous
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8. Have you had any pain or stiffness in your jaw on awakening? Yes / No

9. Did the following activities change any pain (that is, make it better or make it worse) in your jaw or temple area on either side?

- a) Chewing hard or tough food: Yes / No
- b) Opening your mouth or moving your jaw forward or to the side: Yes / No
- c) Jaw habits such as holding teeth together, clenching, grinding, or chewing gum: Yes / No
- d) Other jaw activities such as talking, kissing, or yawning: Yes / No

Question 7 (as 1 for any pain and 0 for none), and 8, 9a-d, were summed, score range of 0-6; a score of 3 or higher was considered a **positive TMD** screen.

10. Everyone experiences painful situations at some point in their lives, such as headaches, tooth pain, joint or muscle pain. Please indicate the degree to which you have these thoughts, feelings when you're in pain (**pain catastrophizing, each question scored 1-5, for a total score range of 2 – 10**)

It is terrible and I think it is never going to get any better	Not at all	To a slight degree	To a moderate degree	To a great degree	All the time
I feel I can't stand it any more	Not at all	To a slight degree	To a moderate degree	To a great degree	All the time

11. Over the past 2 weeks, how often have you been bothered by any of the following problems?
(Depression score: each question scored 1-4; sum of the 2 questions, score range 2-8)

Little interest or pleasure in doing things	Not at all	Several days	More than half of the days	Nearly every day
Feeling down, depressed or hopeless	Not at all	Several days	More than half of the days	Nearly every day

12. Over the past 2 weeks, how often have you been bothered by any of the following problems?
(Anxiety score: each question scored 1-4; sum of the 2 questions, score range 2-8)

Feeling nervous, anxious or on edge	Not at all	Several days	More than half of the days	Nearly every day
Not being able to stop or control worrying	Not at all	Several days	More than half of the days	Nearly every day

13. The next questions ask about your experiences including feelings and thoughts during the past month. In each case, mark how often you felt or thought a certain way. (**Stress**) In the past month, how often have you felt...

a)... that you were unable to control the important things in your life	Never	Almose never	Sometimes	Fairy often	Often
b) ... confident about your ability to handle your personal problems?	Never	Almose never	Sometimes	Fairy often	Often
c) that things were going your way	Never	Almose never	Sometimes	Fairy often	Often
d) difficulties were piling up so high that you could not overcome them?	Never	Almose never	Sometimes	Fairy often	Often

(Scoring for stress. Questions a & d were scored 1-5, b & c were reversed coded so that higher numbers indicated more stress. The scores for the 4 questions were summed for the stress score, range of 4 to 20.)

REFERENCES for the measures described above

Pain measures

- Von Korff M, Ormel J, Keefe FJ, Dworkin SF. Grading the severity of chronic pain. *Pain*. 1992 Aug;50(2):133-149. doi: 10.1016/0304-3959(92)90154-4. PMID: 1408309. [Scale of zero to 10]
- Law AS, Nixdorf DR, Rabinowitz I, Reams GJ, Smith JA Jr, Torres AV, Harris DR; National Dental PBRN Collaborative Group. Root canal therapy reduces multiple dimensions of pain: a national dental practice-based research network study. *J Endod*. 2014 Nov;40(11):1738-45. doi: 10.1016/j.joen.2014.07.011. Epub 2014 Sep 1. PMID: 25190605; PMCID: PMC4254176. [Categorization of None (0), Mild (1-3), Moderate (4-6), and Severe (7-10)]

Treatment outcome expectation

- Nixdorf DR, Law AS, Lindquist K, Reams GJ, Cole E, Kanter K, Nguyen RHN, Harris DR; National Dental PBRN Collaborative Group. Frequency, impact, and predictors of persistent pain after root canal treatment: a national dental PBRN study. *Pain*. 2016 Jan;157(1):159-165. doi: 10.1097/j.pain.0000000000000343. PMID: 26335907; PMCID: PMC4684798.

Treatment (dental) fear reference

- Milgrom P, Fiset L, Melnick S, Weinstein P. The prevalence and practice management consequences of dental fear in a major US city. *J Am Dent Assoc*. 1988 May;116(6):641-7. doi: 10.14219/jada.archive.1988.0030. PMID: 3164029.

TMD screening references

- Fonseca Alonso B, Nixdorf DR, Shueb SS, John MT, Law AS, Durham J. Examining the Sensitivity and Specificity of 2 Screening Instruments: Odontogenic or Temporomandibular Disorder Pain? *J Endod*. 2017 Jan;43(1):36-45. doi: 10.1016/j.joen.2016.10.001. PMID: 27986100.
- Daline IH, Slade GD, Fouad AF, Nixdorf DR, Tchivileva IE. Prevalence of painful temporomandibular disorders in endodontic patients with tooth pain. *J Oral Rehabil*. 2023;50(7):537-47.
- Gonzalez YM, Schiffman E, Gordon SM, Seago B, Truelove EL, Slade G, Ohrbach R. Development of a brief and effective temporomandibular disorder pain screening questionnaire: reliability and validity. *J Am Dent Assoc*. 2011 Oct;142(10):1183-91. doi: 10.14219/jada.archive.2011.0088. PMID: 21965492; PMCID: PMC4527600.

Pain catastrophizing references

- Jensen MP, Keefe FJ, Lefebvre JC, Romano JM, Turner JA. One- and two-item measures of pain beliefs and coping strategies. *Pain*. 2003 Aug;104(3):453-469. doi: 10.1016/S0304-3959(03)00076-9. PMID: 12927618.

Depression references

- Seo JG, Park SP. Validation of the Patient Health Questionnaire-9 (PHQ-9) and PHQ-2 in patients with migraine. *J Headache Pain*. 2015;16:65. doi: 10.1186/s10194-015-0552-2. Epub 2015 Jul 15. PMID: 26174509; PMCID: PMC4501946.
- Kroenke K, Spitzer RL, Williams JB. The Patient Health Questionnaire-2: validity of a two-item depression screener. *Med Care*. 2003 Nov;41(11):1284-92. doi: 10.1097/01.MLR.0000093487.78664.3C. PMID: 14583691.

Anxiety references

- Seo JG, Park SP. Validation of the Generalized Anxiety Disorder-7 (GAD-7) and GAD-2 in patients with migraine. *J Headache Pain*. 2015;16:97. doi: 10.1186/s10194-015-0583-8. Epub 2015 Nov 23. PMID: 26596588; PMCID: PMC4656257.
- Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med*. 2006 May 22;166(10):1092-7. doi: 10.1001/archinte.166.10.1092. PMID: 16717171.
- Schalet BD, Cook KF, Choi SW, Cella D. Establishing a common metric for self-reported anxiety: linking the MASQ, PANAS, and GAD-7 to PROMIS Anxiety. *J Anxiety Disord*. 2014 Jan;28(1):88-96. doi: 10.1016/j.janxdis.2013.11.006. Epub 2013 Dec 1. PMID: 24508596; PMCID: PMC4046852.

Stress references

- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behavior*, 24(4), 385–396. <https://doi.org/10.2307/2136404>
- Ingram, P. B. t., E. Clarke and J. W. Lichtenberg (2016). "Confirmatory Factor Analysis of the Perceived Stress Scale-4 in a Community Sample." *Stress Health* 32(2): 173-176. <https://doi.org/10.1002.smi.2592>