

Session II: Methods and Metrics for Chronic Pain Assessment

Exploring the Treatment and Management of Chronic Pain and Implications for Disability Determinations: A Workshop

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Financial Disclosures

Research funding from NIH
(Salary Support to Institution)

Employed by Duke University
(Salary)

Editor-in-Chief for PTJ
(Honorarium and Travel)

Education content for Rehab
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Guiding Question for the Next 10 Minutes

- What current evidence is available to support best practices in the measurement and assessment of chronic pain?

There is Substantial
Evidence Delinking
Anatomical Pathology
from Pain Severity



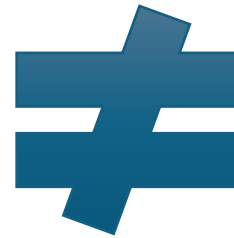
Short History of Imaging and Spine Pain

- Accuracy of imaging **questioned** for diagnosis and clinical decision making



Short History of Imaging and Spine Pain

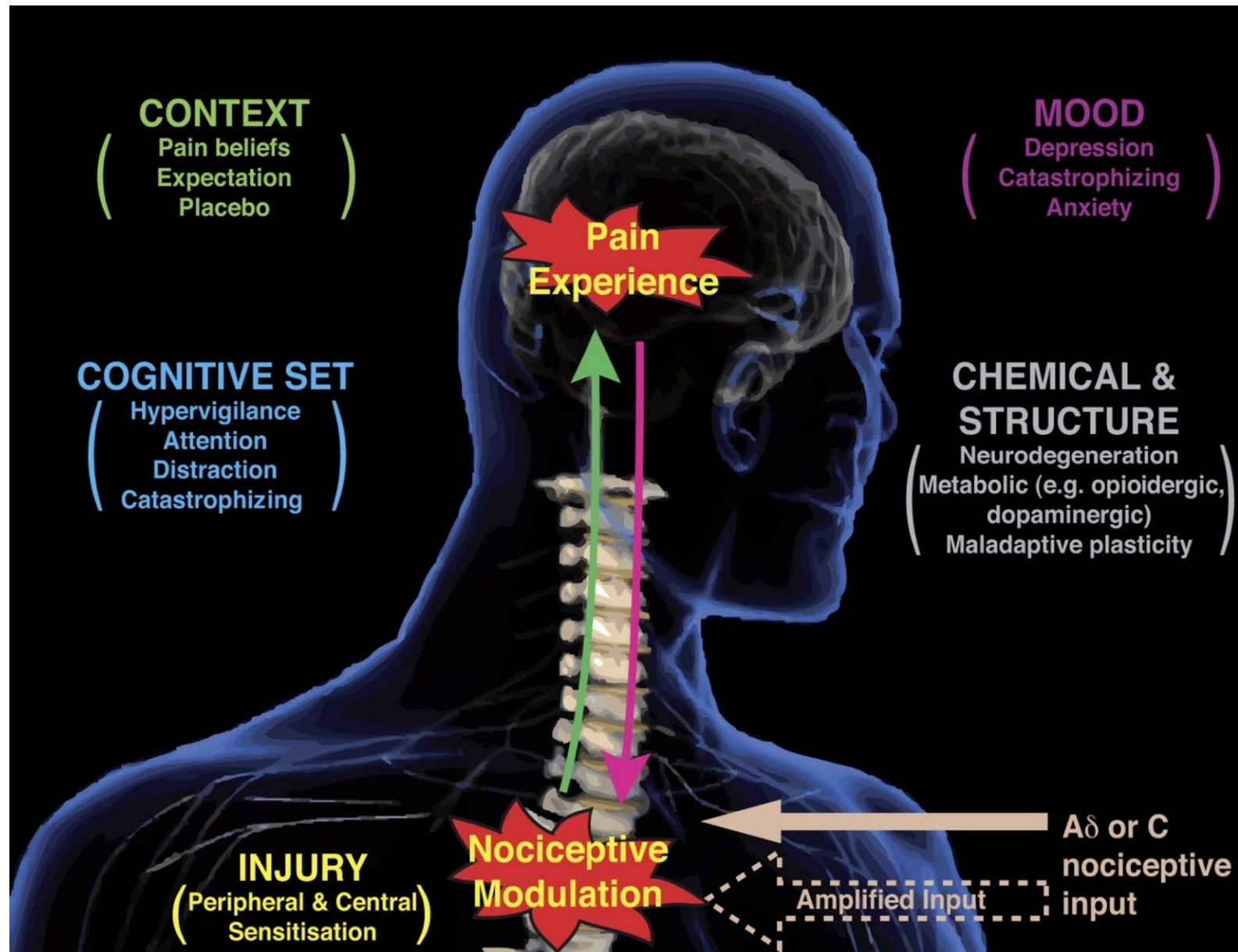
- Imaging **not recommended** for diagnosis and decision making



Short History of Imaging and Spine Pain

- Imaging **may be harmful** for the individual



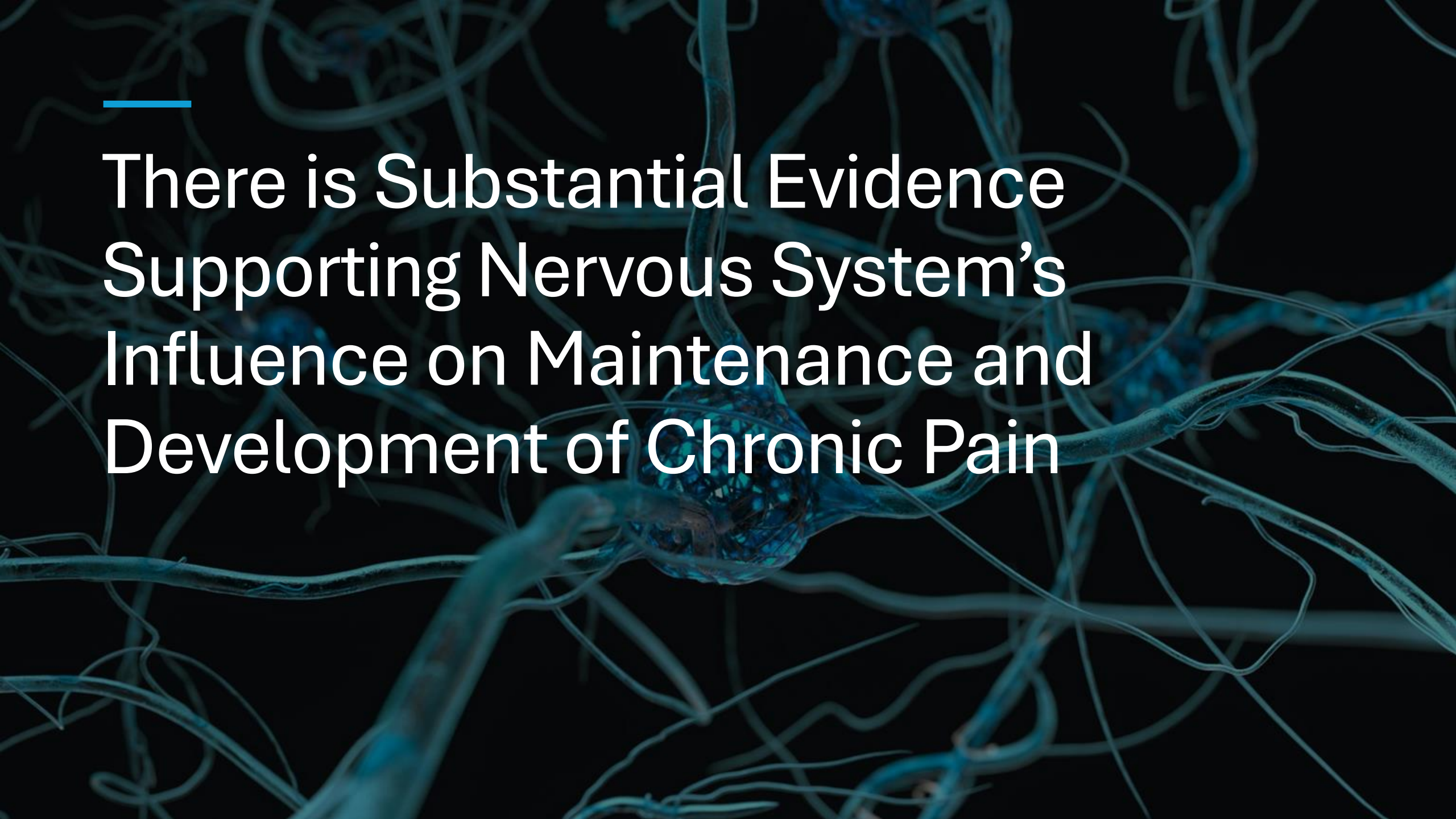


With Permission from Irene Tracey (UK)

Workshop Implications

Evidence linking anatomy
with pain is weak

For pain assessment,
there is limited value in
using diagnostic terms
like “discogenic” or “facet
joint” or “sacroiliac” or
even “osteoarthritis”



There is Substantial Evidence
Supporting Nervous System's
Influence on Maintenance and
Development of Chronic Pain



Volume 98, Issue 4
April 2018

JOURNAL ARTICLE

Chronic Musculoskeletal Pain is a Nervous System Disorder... Now What? FREE

Steven Z George ✉, Mark D Bishop

Physical Therapy, Volume 98, Issue 4, April 2018, Pages 209–213,
<https://doi.org/10.1093/ptj/pzy002>

Published: 30 March 2018 **Article history** ▼

Embedding This Shift in Assessment

- Quantitative sensory testing (QST) has been suggested to assess nervous system processing of nociception
- QST is a form of psychophysical testing that applies a given modality with specific parameters and then a response is measured



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Nociceptive, neuropathic, or nociplastic low back pain? The low back pain phenotyping (BACPAP) consortium's international and multidisciplinary consensus recommendations

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Workshop Implications

The move towards assessment of nervous system processing is consistent with the evidence

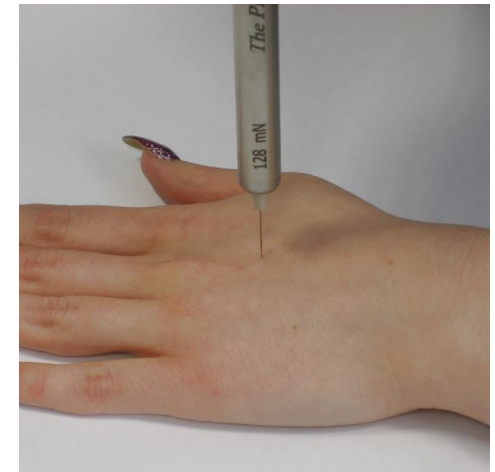
There is still likely limited value in assessment of pain related disability

Philosophical Issue

- “To feel pain is to feel a private, psychological entity. Public entities – a pin for example – may cause someone to feel pain. But to feel the pin is not to feel the pain. It is not the ability to feel pins we wish to measure here but the ability to feel pains.”
- (Savage, W (1970), *The Measurement of Sensation: A Critique of Perceptual Psychophysics*)



Wellcome Images



Pain- Related Disability Assessment

- Interested in more than measuring the ability to feel pain
- Also interested in measuring the impact or interference that pain has on the individual's life

Pain Assessment

Pain measurement considering “impact” or “interference” has two key components

Days pain is experienced
in a set period

How frequently pain
interferes with activities

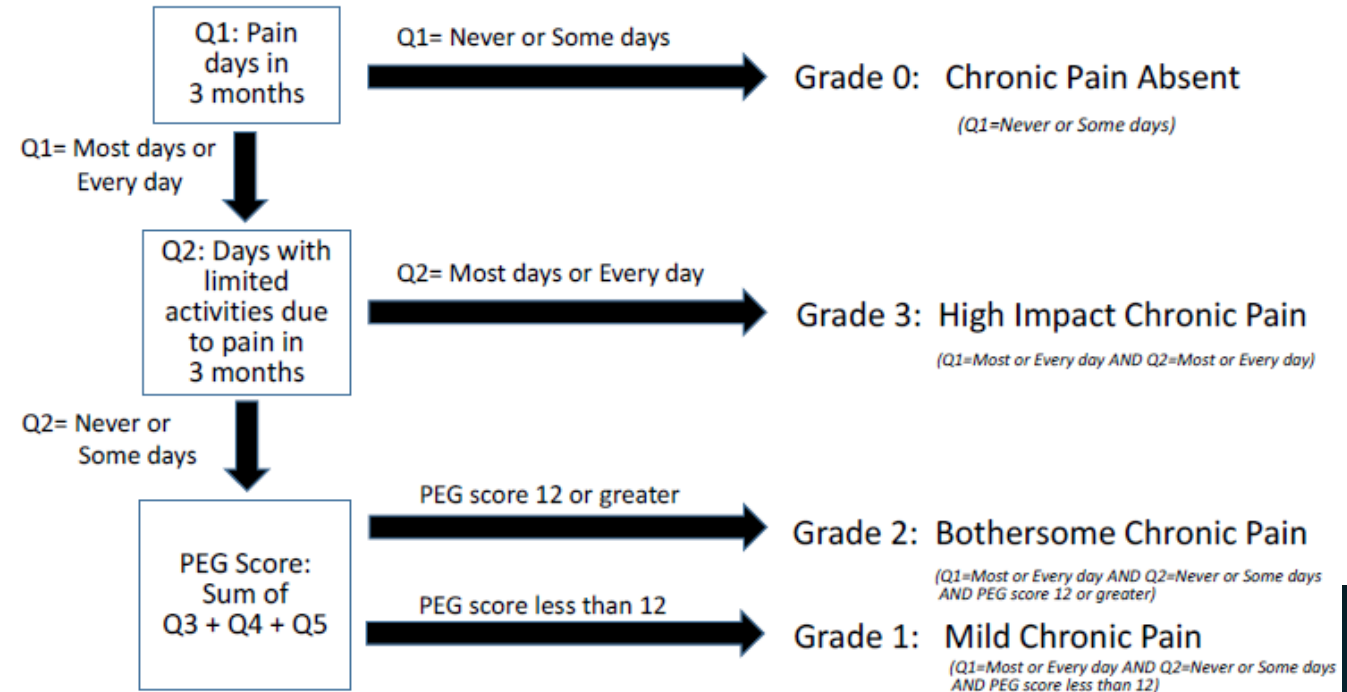
Specific Example


- Graded Chronic Pain Scale Revised
 - (Von Korff et al, *PAIN* 2020)
- Uses # days of pain in past 3 months as primary differentiator
- And responses from Pain, Enjoyment, and General Activities (PEG) scale

Chronic Pain Grade Example

Graded Chronic Pain Scale Revised (Von Korff et al, *PAIN* 2020)

Figure 2 Chronic Pain Grade Scoring Rules for Chronic Pain Grade Scale-Revised



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Notes: GCPS-R items 1 and 2 were developed by United States government employees (National Center for Health Statistics) and are therefore in the public domain. The PEG (GCPS-R items 3-5) is a work product of United States government employees (Veteran's Health Administration) and is therefore in the public domain.

Chronic Pain Grade Example

- Estimates from Von Korff et al (2020):
 - Grade 0 = 59.5%
 - No chronic pain
 - Grade 1 = 15.4%
 - Mild chronic pain
 - Grade 2 = 10.1%
 - Bothersome chronic pain
 - Grade 3 = 15.0%
 - High Impact chronic pain

Workshop Implications

This standardization
allows for
comparison across
different populations
and conditions

Data like these may
have important
implications for
disability
assessment

Caveat to Consider

- Physical performance measures have been used to assess disability or functional levels
 - Classic example = Functional Capacity Evaluations (FCEs)
- These tests have been used to ascertain how much pain is impacting performance but the science supporting that is dubious
 - Classic example = implication of variation in maximal effort



Guiding Question for the Next 10 Minutes

- What current evidence is available to support best practices in the measurement and assessment of chronic pain?



Guiding Question for the Next 10 Minutes

- Self-report measures play an important role in pain assessment
- Measures that assess pain impact and interference may be very relevant for disability assessment
- Role of QST and physical performance measures unclear in this context



Thank you!

