Occupational Medicine Potpourri:

Demystifying Occ Med for the Primary Care Physician

Matthew Lundquist, MD, MPH, FACOEM

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Disclaimer

- I have no conflicts of interest
- All opinions expressed in this presentation are my own and do not reflect those of my employer or any other entity
- All clinical cases discussed have had details altered so as to protect the privacy of the individuals

Why have a talk like this?

- Whether intentionally or informally, primary care physicians are regularly practicing occupational medicine
- Understanding Occ Med principles protects your patients from iatrogenic disability and reduces administrative headaches
- You practice Occ Med whether you realize it or not anytime you deal with your patients' work
  - Occupational history: "What do you do for work?" Ask regularly, job change common
  - Work notes, FMLA forms, workers' comp injuries, DOT, etc

Outline

- What is Occupational Medicine?
  - Board Certification process, “Day in the life,” visit types
- Understanding disability
  - Impairment, limitations, restrictions, oh my!
  - Relevant laws and regulations (the alphabet soup)
  - Writing a work note
- Clinical case studies

The Specialty and Practice of Occupational Medicine

Occupational Medicine

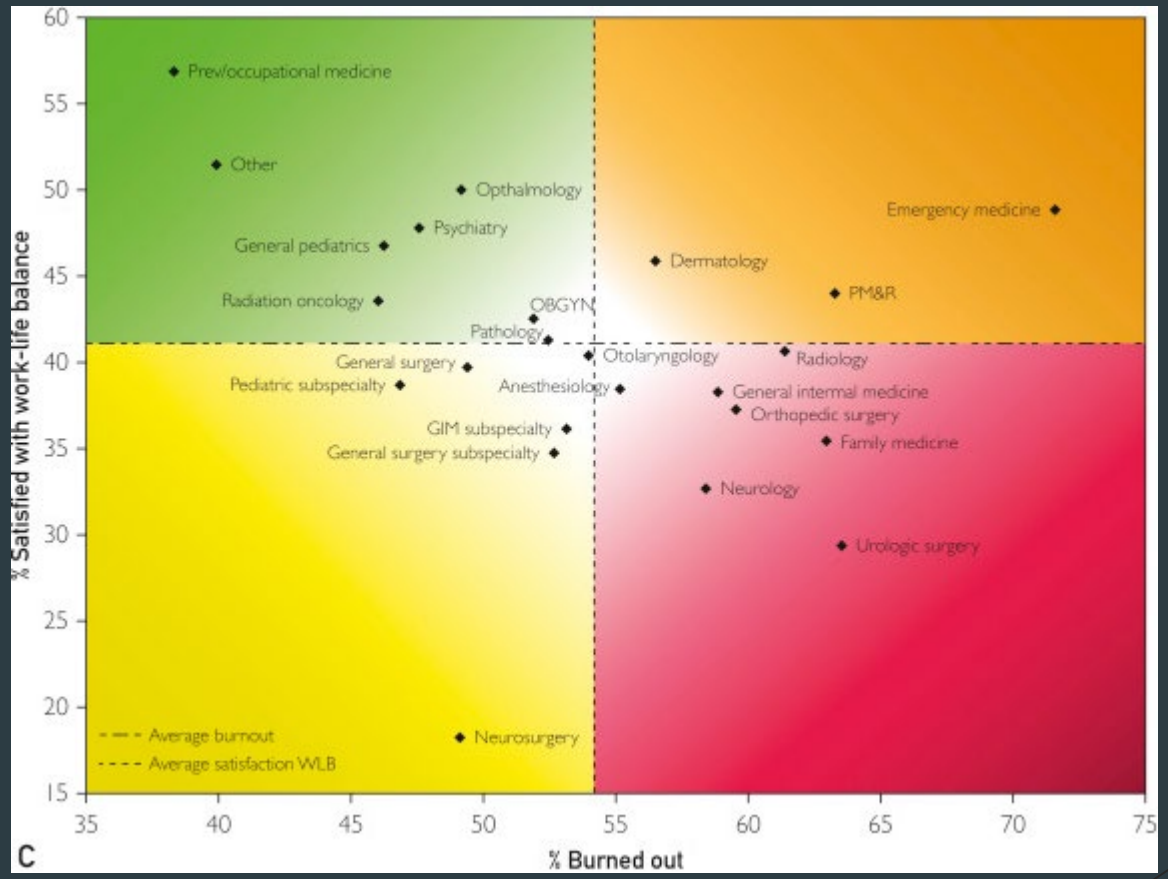
- From the American Board of Preventive Medicine: "Occupational and Environmental Medicine (OEM) focuses on the health of workers, including the ability to perform work; the physical, chemical, biological, and social environments of the workplace; and the health outcomes of environmental exposures. Practitioners in this field address the promotion of health in the workplace, and the prevention and management of occupational and environmental injury, illness, and disability"
- Specialty College: American College of Occupational and Environmental Medicine (ACOEM)
  - To promote optimal health and safety of workers, workplaces, and environments by advancing the specialty of occupational and environmental medicine
- Practically speaking, Occ Med providers ensure that workers are safe to start, continue, and resume working

Multiple Pathways to Board Certification

- Unique for Occ Med
- Both pathways require an MPH prior to or during training
- Residency/fellowship pathways: primary residency in OEM versus completing a residency in another board (typically IM, FM, and EM) *and then* doing OEM fellowship (some programs still call it a residency)
- Complementary pathway: designed for midcareer physicians who already are practicing Occ Med and looking for board certification
- *Once board certified, can eventually apply for Fellowship within ACOEM*

Occupational Medicine as a Specialty

- High job satisfaction, lowest burnout among all specialties (from 2015 but persists in current surveys)



Mayo Clin Proc. 2015 Dec;90(12):1600-13.

Occupational Medicine as a Specialty

- 3300 board certified OEM physicians as of January 2025
  - 85 graduating residents/fellows annually
  - 88 candidates took the initial certification exam in 2025 with 84% pass rate
  - >50% of OEM physicians are over age 60
- Compare to 250-270,000 IM physicians and 105,809 FM physicians
- Among ACOEM physicians, 45% board certified in OEM while 65-70% hold boards in FM, IM, or EM
- In sum, most practitioners of Occ Med aren't board certified… and that's why I'm here today

Practice Settings

- Occ Med practices (sometimes combined with urgent care)
  - “Bread and butter Occ Med”
- Corporate/onsite
  - Health clinic in a factory
- Insurance companies
  - Overseeing disability units, performing file reviews, etc
- Chief Medical Officers
- Government
  - Military, VA, FAA

Types of Visits

- Workers' compensation injuries
  - Acute and chronic MSK, concussions, blood/body fluid exposures, inhalations, chemical exposures, lacerations
  - 51 different Workers' Comp systems within the US each with unique req's & forms
- Pre-placement/new hire physicals, drug screening, immunizations, clearances
- Regulated exams: DOT/FMCSA, FAA, OSHA surveillance (asbestos, lead, heavy metals), NRC
- Public safety: firefighters, police, EMT
- Fitness for duty and return to work evaluations
- Additionally: employer site visits, air quality assessments, ergonomic assessments, on-site clinics, IMEs/RMEs

Collaborating with Occ Med

- As continuity providers and PCPs, you know your patients extremely well
- Typically as consultants, we don't
- Therefore we will typically request information from treating providers regarding certain conditions that may be disqualifying
- We are NOT asking you to clear your patient – that's our job
- We ARE asking for your assistance in understanding their condition, how well it is controlled, and particularly if you have any concerns to share
  - Feel free to pick up the phone and call us, it often saves time
  - When a treating provider is unwilling to respond, we are not able to clear the patient

Dear Clinician,

I am in the process of evaluating your patient, John Smith DOB: 01/01/1900 , for commercial motor vehicle medical certification. They have indicated that you currently treat them for: [said condition]

I am asking for your assistance as I determine whether they are medically fit per Federal Motor Carrier Safety Administration Medical Examination Guidelines in 49 CFR 391.43. I kindly request that you send me the following information at the above address at your earliest convenience:

- ☐ A current medication list.
- ☐ Recent office notes pertaining to this/these condition(s)
- ☐

☑ Please share any information or observations you are aware of that may impact their ability to safely drive and operate a commercial motor vehicle (attach additional pages as necessary). Additionally, kindly initial one of the options below and sign and print your name at the bottom of the page:

____ (initial here) In my opinion, my patient's medical condition(s) would not prevent them from safely performing these tasks.

____ (initial here) In my opinion, my patient's medical condition(s) would prevent them from safely performing these tasks

Your particular expertise with regard to the assessment of your patient and his/her medical condition(s) is crucial so that I may make an informed final determination of his/her medical fitness to drive. If you wish to speak by phone about any specific questions or concerns ***or if you require any clarification as to what physical abilities commercial motor vehicle driving requires,*** please do not hesitate to call me at the above number. Thank you for your attention to this request.

Disability Medicine

Disability and OEM

- OEM has a large focus on return to work and stay at work programs due to high stakes of disability
- Disability is a significant burden to one's social, psychological, and physical wellbeing, not to mention financial loss to individual and society
  - Disability affects approximately 22% of US adults in a given year, including 33% of those age 65 or older *(Theis KA, et al. Which one? What kind? How many? Types, causes, and prevalence of disability among U.S. adults. Disabil Health J 2019;12:411-421.)*
- The odds of a worker EVER returning to *any* work drop once a worker is kept out of work: *(Waddell G, Burton AK. Is Work Good for Your Health and Well-being? London, United Kingdom: The Stationery Office; 2006.)*
  - 12 Weeks off work: 50% probability of return to gainful employment
  - 24 weeks off work: 20% return
  - 36 weeks off work: 10% return

OEM, Work, and Health

- Keeping individuals *working safely* is a cornerstone of Occupational Medicine
- "Work offers a routine and purpose, a reason for getting up in the morning. The workplace is a social environment, a community. Depending on your occupation, doing your job involves engaging with cubicle mates, bosses, subordinates, union brothers and sisters, suppliers, vendors and customers."
  (Farrell, Christopher. "Working Longer May Benefit Your Health." The New York Times. March 3, 2017)
- Strong evidence base showing that work is generally good for physical and mental health and well-being
  - Conversely, "worklessness" is associated with poorer physical and mental health and well-being
  - Associated with an approximately 50% increased risk of mortality with men more negatively affected than women *(Forman-Hoffman VL, et al. Disability status, mortality, and leading causes of death in the United States community population. Med Care 2015;53:346–354)*

Physician Perspectives on Disability Determination

Statement	Physician Agreement %
Feels caught between interests of patient & society	62
Negative effects on the patient-physician relationship	82
Permissible to embellish clinical data	39
Better if an independent group determines disability	80*
Should represent patient's interests over welfare disability system	53

Zinn and Furutani, Journal of General Internal Medicine, 1996

* No, you cannot just refer to Occ Med but we can help! :)

Definitions

- Disability: any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions)
- Impairment: measurable/observable deviation or loss in physical or psychological function
  - Ex = loss of the right arm, swelling/decreased range of motion after grade II ankle sprain, low score on cognitive assessment
- Limitation: a task or activity that a person is physically *unable* to do as a result of an impairment
  - Ex = inability to carry something with amputated arm, inability to weight bear after ankle sprain, loss of executive functioning due to cognitive loss
- Restriction: recommended activity modification/prohibition to reduce the chance of harm and/or to allow for recovery
  - Ex = No lifting greater than xx lbs, Occasional walking/standing, May not be left alone

What is disability in terms of work?

- Disability = the real-world ***impact*** that impairment has on an individual's ability to live, function, and work
- Disability is contextual
  - Epilepsy (impairment) would be disabling for a school bus driver or pilot but not an admin assistant
  - Having a "disability" (how we use it colloquially) does NOT necessarily mean you cannot work but it might limit your ability to perform certain kinds of work

Alphabet Soup of Disability in US

- ADA - Per EEOC: The Americans with Disabilities Act makes it unlawful to discriminate in employment against a qualified individual with a disability.
  - Under the ADA, you have a disability if you have a physical or mental impairment that substantially limits a major life activity
  - Employers would need to attempt to accommodate unless proves that doing so is an undue hardship
- FMLA - Per DOL: The Family and Medical Leave Act provides eligible employees with up to 12 weeks (16 in CT) of *unpaid*, job-protected leave per year for certain conditions
  - Birth/care of newborn or during adoption placement; medical leave because of a serious health condition or to care for immediate family member with a serious health condition
  - Leave can be continuous or intermittent
- GINA: Genetic Information Nondiscrimination Act
  - Basically employers need to avoid having/keeping/using genetic information *including family history*

Quick Side Note – OSHA Recordability

- OSHA: Occupational Safety and Health Administration
- Responsible for oversight of workplaces and promulgating standards to protect workers from hazardous conditions and substances
  - Regulations regarding hearing, lead and other heavy metals, bloodborne pathogens, respirator standard
- OSHA also tracks injuries in the workplace and some employers are very sensitive to so-called “recordable injuries”
  - Prescription drugs, rigid splints, PT, time away from work or re-assigned
  - Please consider if you are seeing a patient (particularly initially) for a workers’ comp injury if they truly need a prescription dose of a medication or if OTC dosing would suffice (think NSAIDs)

Approaching the Disability Request

- Most often, your patient will state that they cannot perform their job (or certain parts of it)
- They may ask you to write restrictions or place them out on a leave
- I recommend that you see them for a formal in-person visit, ideally with a job description in hand

Approaching a Disability Evaluation

- Clinical Assessment
  - Establish a diagnosis if not already clear
    - Not necessarily easy with chronic or non-specific pain
  - Determine severity of condition
- Assess impairment and any limitations they have
  - Ask them what their job entails and why they cannot perform specific functions
  - How does their condition impact work function?
  - Do they need an accommodation or a leave of absence?
- Write restrictions ***specific to the condition and the job***
  - While a patient is telling you what they cannot do is important, make your restriction recommendations based on clinical findings, your direct observations, and the whole picture

Behind the scenes

- When you complete FMLA forms, assist a patient in requesting an accommodation, or complete paperwork for a disability insurance company, this becomes a legal/HR issue
  - Your medical records should reasonably justify your rationale with clear references to your findings and observations
  - If someone ultimately cannot work and attempts to obtain disability insurance benefits, they will scrutinize your records to ensure benefit eligibility
    - *Not helpful on its own: "Patient says cannot work more than 5 hours or lift > 20 lbs"*
- Remember that your restrictions may not be able to be accommodated which could result in your patient not being able to work (even though they have some degree of work capacity)
- Disabling/restricting someone affects their livelihood, psychological well being, and their family (not to mention their employer) so please realize the impact of what you are writing

Writing appropriate restrictions

- Avoid administrative restrictions
  - “Work from home” restrictions are generally administrative because getting to/from work is on the patient
- Always consider their occupation during your evaluation
  - If you are asked to write that a clinician cannot work more than x hours due to a mental health condition, are they actually fit to work or might there be a mental health impairment that requires them to be referred to HAVEN?
- Avoid getting involved in workplace politics
  - If someone is claiming inability to work with a coworker, that is something they should address with management
  - Do NOT provide restrictions of “[patient] cannot work with/for [coworker]”
- Avoid recommendations for specific work hours (ie, may not work 11p-7a shift) unless it is clearly related to a medical condition (perhaps narcolepsy)
- These might be uncomfortable situations, especially if you are not finding medical evidence to support their claimed limitations

Examples

Preferred

- Occasional lifting up to 25 lbs
- Frequent sitting, occasional standing and walking
- No climbing ladders
- Occasional stooping
- No work at elevated/unprotected heights
- May not work alone
- May be given 1.5x time to complete work

Avoid

- May not work in Building A
- Light duty for 4 hours/day between 9am-1pm
- No working around others*
- Avoid stressful situations
- No working with the public*
- May not work with [specific] machine

My Official Guidance

*Please list any medical restrictions your patient requires in order to protect themselves or others from significant harm. When writing a restriction, please use standard terms of **Never (or No)**, **Occasional** (0-⅓ of an 8-hour shift), **Frequent** (⅓-⅔ of an 8-hour shift), and **Constant** (⅔-entire 8-hour shift) to quantify how often they can do a restricted action. Medical restrictions could include, but are not limited to, standing, sitting, walking, bending/stooping, squatting, crawling, climbing, balancing, handling, etc., as well as restrictions on hours worked per day/week. If you are restricting lifting, carrying, pushing, and/or pulling, please list both the frequency and weight limit. Please refrain from writing administrative restrictions such as "No patient care", "May work light duty", or stating that they may not perform a specific job task; rather, provide specific work restrictions such as those as listed above, based on their medical condition(s).

Clinical case studies

Patient DI

- 32 y/o female presenting with 4-month history of progressive dyspnea, wheezing, and nocturnal coughing.
- Recently seen by your colleague for an urgent visit, diagnosed with presumptive asthma, and started on low-dose ICS/LABA and given a rescue inhaler
- She continues to have breakthrough symptoms and is using rescue inhaler at least 8-9 times per week
- Exam today reveals she's in NAD with normal breath sounds, normal O2 sat
- What do you do next?

Patient DI

- Review of your colleague's note appears to be fairly typical for asthma
- No occupational history documented so you, having recently heard the importance of this, ask
- She responds that she works in an autobody spray paint shop "but I always use my respirator"
- She confirms she is annually fit tested for her half-face P100 respirator with organic vapor cartridges and has no concerns about its seal
- What are you thinking now?

Occupational Asthma

- Every adult with new asthma needs a complete work/exposure history because 5-20% of new adult-onset asthma is occupational
  - Make sure to ask whether symptoms improve on days off (weekends AND vacations (but consider alternate workweek in your questioning!))
  - Ask whether symptoms are worse in the evenings *after work*
  - Consider serial peak flow measurements both during the workday AND evening (aim for 4x/day over several weeks)
- Autobody spray paints contain diisocyanates which are asthma sensitizers and the leading cause of OA in industrialized countries (Tarlo & Lemiere, NEJM 2014; Lefkowitz et al., Am J Ind Med 2015)
- Once sensitized, attacks can be triggered by concentrations well below occupational exposure limits
- **Isocyanates are absorbed dermally as well as by inhalation**

Occupational Asthma

- Typical course: latency period (weeks to years) of sensitization after first exposure, then symptoms that worsen across the work week (especially at night) and improve on days off
  - Very challenging work history since can have long latency AND can start at any time
- In *sensitized* workers, exposures well below occupational limits (including *dermal exposure*, which respirators do not address) can trigger asthma
  - PPE reduces but does not reliably eliminate risk
  - **"But I always wear my respirator" does not rule out OA**
- Removal from exposure is the cornerstone of management and is especially important for low-molecular-weight sensitizers like isocyanates
  - Prognosis worse and may persist without **complete** elimination of exposure

Patient FF

- 36 y/o female applying to be a volunteer firefighter presents for pre-placement exam. History significant for epilepsy. Last seizure 7 years ago, maintained now on AED with no reported recurrences. Denies hx aura. Sees neuro annually.
- Presents neuro clearance letter…

From a neurologic standpoint, given the duration of seizure control, I believe she should be able to work as a firefighter including interior firefighting, wearing a CBA respirator, performing rescue operations and fulfilling EMS role, if she should follow all the seizure precaution which includes:
A. Driving: patient does not advise to drive unless seizure free for 3- 6 months on stable dose of antiepileptic.
B. Other precautions : patient is to have someone with them if and water/swimming, caution with open flames/cooking, caution on ladders/high altitudes, caution when caring for small children as discussed in this visit.
C. Avoid triggers: Stress, importance of medication adherence. Avoid situations that can enhance seizure recurrence such as lack of sleep, undue stress, fatigue, excessive alcohol, recreation or drugs.

She should not be driving a commercial motor vehicle and should confirm from DMV and the employer if she can drive a fire truck or an ambulance.

- Thoughts?

Patient FF

- We didn't clear her for interior duties or fire apparatus driving
- So she went out and saw a second neuro at her own expense…

Given the fact that the patient has been seizure free for 7 years on her current medication and that she has been driving during that time. She also as a fire department volunteer has participated in fire department training involving the use of hoods and aids for breathing approximately 6 times a year as well as other emergency training episodes.
At the present time there are no findings that would restrict her from participation in either ambulance or fire department activities. Her current level of function and ability to be an emergency medical responder or fire department responder would ultimately depend upon the rules and restrictions of each individual department.

- Does this change your opinion?
- Is there any regulatory body that gives guidance?

NFPA/Seizures

6.10 Neurological Disorders.

6.10.1 Category A medical conditions shall include the following:

(1) All epileptic conditions, including simple partial, complex partial, generalized, and psychomotor unless all of the following conditions are met:

(a) No seizures for the most recent consecutive 10 years

(b) Currently on a stable regimen of antiepileptic drugs (AED) for the most recent 5 years with no side effects impacting the performance of the 14 essential job tasks or no AED for the most recent 5 years

(c) Normal neurological examination results

(d) A definitive statement from a qualified neurological specialist that the candidate meets the criteria specified in 6.10.1(1) and is neurologically cleared for firefighting training and meets the performance of the 14 essential job tasks

Patient FF

- Not cleared for interior (or paramedic/ambulance driving), “your fire dept is welcome to consider the neurologist opinion if they wish”
- She presented again this year again requesting interior FF duties (and didn’t bring documentation)
- Would you consider clearing her for interior duties if she gets to 10 years seizure-free?

Patient BD

- 60 y/o male presenting for a DOT Examination (for his public service license). First time to our office.
- On DOT form, indicates no PSxH, “See letter” for medications, and checks yes in PMH section for:
  - Hypertension, Anxiety/Depression/Nervousness/Other Mental Health Problems, Spent a night in the hospital.
- His additional comments: High Blood Pressure (Under Control), Depression (I take meds), Put in the hospital 2 years ago

Treating Provider Letter

"I am writing on behalf of my patient SD who has been under my care since 12/14/2023. Patient is currently prescribed medication for treatment of a mental health condition, and I have evaluated their response to this medication. Patient has not reported any side effects from this medication that would impair his ability to safely operate a motor vehicle. If you have any questions, please do not hesitate to call me."

Patient BD

- Upon further questioning, admits to Bipolar Disorder but does not recall names of medications (directs us to Epic)
  - *Sidebar: most Occ Med hospital based practices do not use Epic*
  - Lithium, Lurasidone (Latuda), Olanzapine (Zyprexa) and several BP meds
  - Epic also reveals he's had 5-6 hospitalizations since time of diagnosis, most recently in 2020 and 2023
- Patient is adamant he does not discontinue his medications when he becomes manic and mania occurs for "unknown reasons."
- Mental status exam normal

Bipolar and Commercial Driving

- Bipolar Disorder is a psychiatric condition characterized by the occurrence of *at least one manic episode*, and may also have episodes of hypomania and depression.
- Mania, is defined as a period of abnormally and persistently elevated, expansive, or irritable mood, **lasting at least one week**. During episodes of mania, individuals may exhibit symptoms such as increased energy and activity, grandiosity, **decreased need for sleep**, pressured speech, racing thoughts, **distractibility**, and **engagement in high-risk behaviors**.

- Takeaway: Uncontrolled BPD and specifically mania precludes commercial driving

What do you do as the Medical Examiner?

- Consider whether condition itself precludes driving no matter what
  - If not, is it well-controlled?
  - Consider also whether the treatment precludes driving (ie, sedation, etc)
- For BD
  - 2 antipsychotics and a mood stabilizer – potential side effects
  - Is his condition refractory to treatment? Is he compliant with medication?
    - 2 hospitalizations in the last 5 years and 5-6 hospitalizations since 1990
  - Call his treating clinician!

Patient BD

- Treating clinician expressed concern for medication compliance. Added in that prior manic episode resulted in a motor vehicle accident
- We therefore did not certify him
- 2 weeks later, his clinician messaged us that the patient was admitted for mania

BD Takeaways (really "Occ Med Takeaways")

- Contact the treating clinician with questions about medical conditions and/or compliance
  - Consider a phone call if something isn't adding up
- Trust but verify

- If you are the treating provider *being contacted*, please be completely upfront with any concerns you have. Although you are not the provider directly clearing this patient, you know them in a continuity way that the (often) one-time evaluation provider does not. We make the final call but we cannot often do so without your input -- we rely on your expertise and knowledge of your patient.

Dear Clinician,

I am in the process of evaluating your patient, John Smith DOB: 01/01/1900 , for commercial motor vehicle medical certification. They have indicated that you currently treat them for: [said condition]

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Conclusions

- Occupational Medicine is its own unique specialty that evaluates workers' fitness for duty/working in multiple contexts
- Occupational histories are a key part of a complete examination …and you'll often learn about some pretty interesting jobs from your patients!
- Occ Med providers rely on information provided by a worker's PCP and specialists to render our opinion on occasion
- Keeping a worker at work with appropriate *medical* restrictions is good medical care and avoids unnecessary disability and morbidity

Thank you!