

# PAIN AND THE PHYSICIAN:

## The laws, public policy and tips on management

► Kathryn Borgenicht, M.D.





*"I see here several good deeds that seem to have gone unpunished."*



# SO

WHAT HAVE YOU HEARD

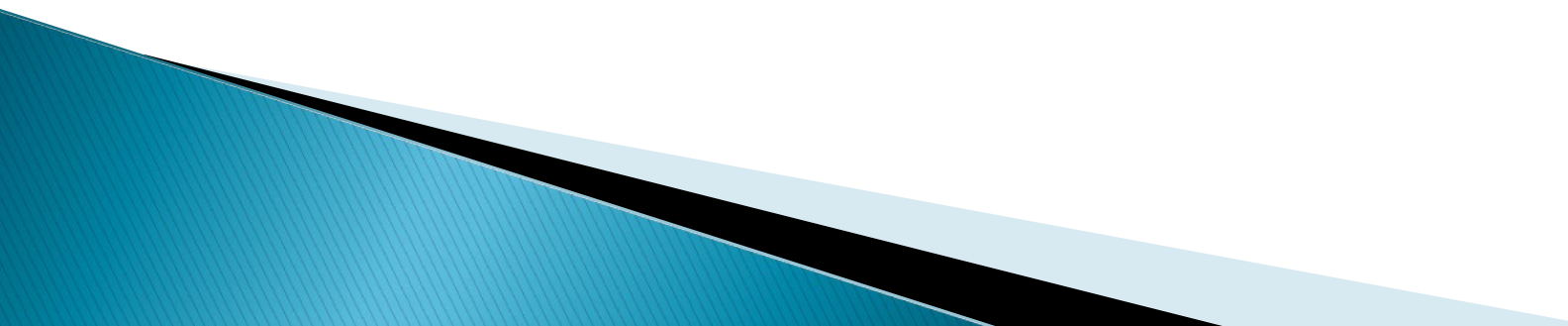
WHAT HAVE YOU EXPERIENCED

WHAT HAVE YOU BEEN TAUGHT

WHAT IS YOUR PERSONAL EXPERIENCE WITH PAIN

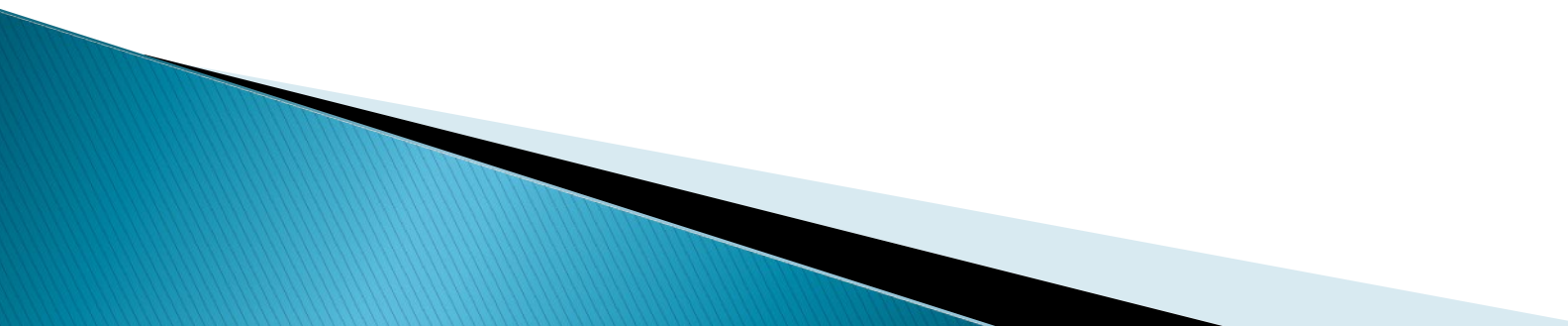


# The War on Opioids?

- There is a problem with opioid diversion
  - There is a problem with deaths from prescription opioids – 18,000/year die from opioids and opioids in combination
  - Approximately the same number of people die each year from NSAIDS!
  - Various solutions have been sought
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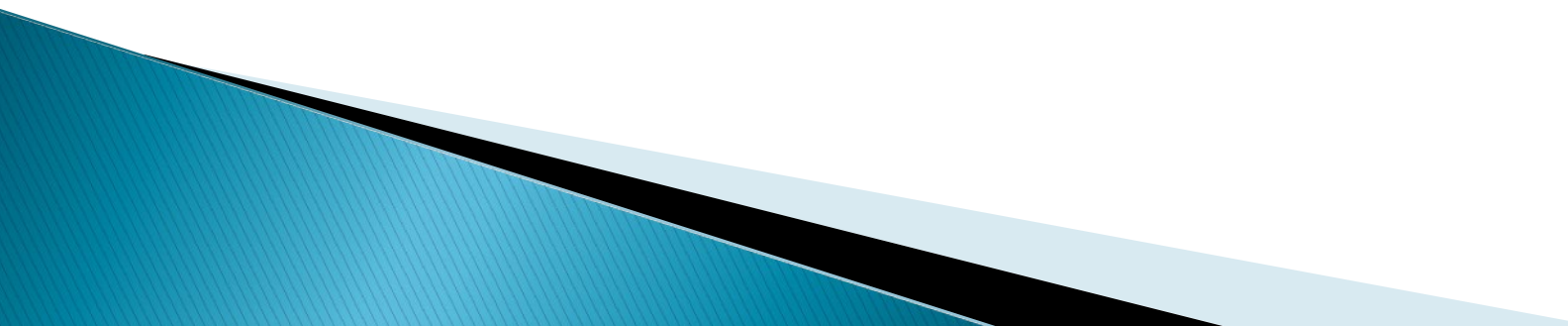


# It Has Been Said

- ▶ “ This is a national emergency ..... The likes of which we have never seen”
  - ▶ Not so, in the late 1960s heroin was as big a problem but the face was of the addict was black, destitute and engaged in petty crimes to feed their needs
  - ▶ Drug laws – more than 90% convicted were black or latino
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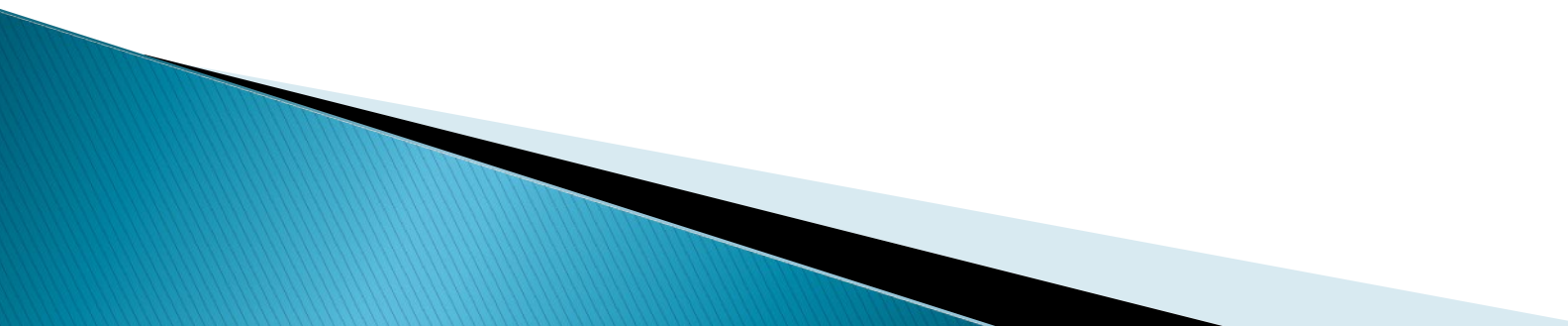


# EUROPE AND OPIOIDS

- ▶ Same number of opioids being prescribed
  - ▶ People are not dying at the same rate as in the United States
  - ▶ Addiction is treated as a public health problem, not as a crime
- 



# The other side of the coin

- 100,000 million people with pain
  - Estimate of \$560–635 lost dollars from undertreated pain
  - 45,000 suicides in this country, estimate that 1 / 2 due to inadequate pain control
  - Amount of research by NIH looking at this issue has gone down in the past 10 years. Less than 1% of NIH budget
- 



# Pain as a national health crisis

- ⑩ 66 million partially or totally disabled
- ⑩ 8 million are permanently disabled by back pain
- ⑩ There are 65,000 new cases of permanent disability diagnosed each year



# Cost of Untreated Chronic Pain

- ⑩ Disables more people than cancer or heart disease and costs the American people more than both combined
- ⑩ Major reason for health care utilization and disability
- ⑩ I do have an opinion

# Pain and Disparity

- ⑩ Untreated, chronic pain can rob quality of life from those who suffer – affecting physical, psychological, social and spiritual well being
- ⑩ Minority patients have less access, are at greater risk for undertreatment of pain
- ⑩ Women have increased prevalence of chronic pain but have more trouble being treated
- ⑩ Older patients are less likely to receive adequate analgesia treatment



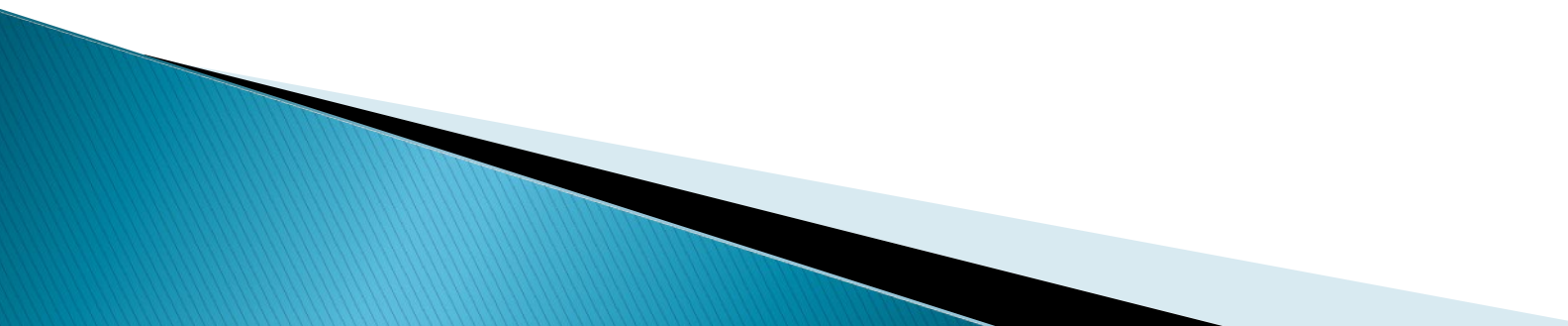
# Pain and Primary Care

- ⑩ Pain is a major reason for office visits
- ⑩ There are 6000 pain specialists in the US
- ⑩ Primary care must become involved
- ⑩ Chronic pain is like any other chronic disease

**What is being done out there –  
Control, Education, Treatment**



# Solutions to Drug diversion/abuse

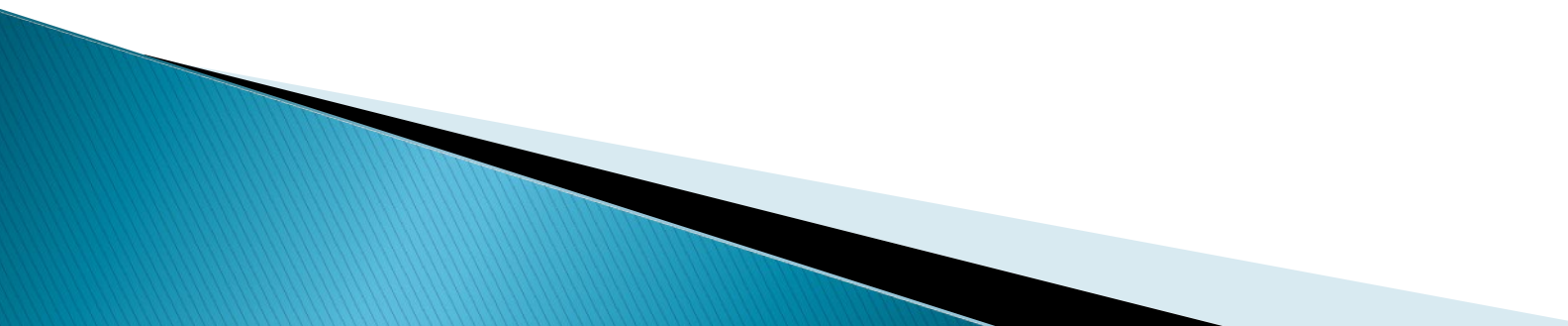
- Restrict use of drug
  - Set limits on amount of drug
  - Set limits on physicians
  - Drug registries
  - Provider education
  - Counseling for patients
  - OR SCARE THE H.... OUT OF EVERYONE
- 

# Control – Restrict use of Drug

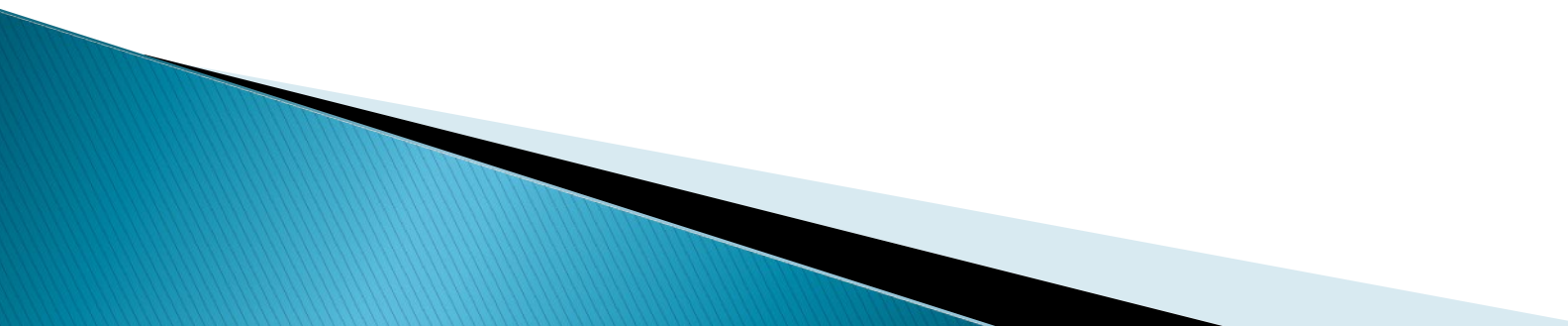
- Oxycodone was initially restricted
- Huge rise in use of hydrocodone, became the most abused drug
- Now we are looking at increase of heroin and smoking in younger adults as substitute for illegally getting opioids



# Control – Set limits on doses – dose ceilings

- Washington state
  - Set ceiling on how much opioid an individual could get
  - Mandated a pain specialist consult
  - Did exclude hospice
  - Chilling effect, decreased access
- 

# Control (also a tool)– Drug Registry

- Prescription monitoring programs – a tool to improve patient care
  - 44 states have one
  - There is no transfer of info between states
  - In Montana, access is providers and pharmacists
- 



# Efficacy?

- ▶ Most data is anecdotal
- ▶ One program suggests that it helps identify abusers but also helps providers provide better pain control, indeed with more drugs
- ▶ Substitution effect
- ▶ No change in opioid deaths
- ▶ Health Affairs – 2/14/13

# Education - Knowledge and practice

- ⑩ No standard chronic pain treatment
- ⑩ Key terms
- ⑩ Limited time, what to talk about
- ⑩ What medicine to use

# Definitions

- ⑩ Pain
- ⑩ Addiction
- ⑩ Tolerance
- ⑩ Dependence



# Pain

- ⑩ Pain is whatever the person says it is, experienced whenever they say they are experiencing it  
–Mary McCaffery
- ⑩ Chronic pain is a disease, not just a symptom

# Addiction

- ⑩ Rare but feared side effect
  - 11,882 hospitalized pts treated w/opioids, 4 cases of addiction in pts w/no prior history
- ⑩ Data suggest addiction is a disease independent of pain care
- ⑩ Is a major barrier to adequate pain control from all sides

# Addiction

- ⑩ Public sees it as a black hole
- ⑩ Unmodulated, uncontrolled use of a drug that cause dysfunction with continued use without change in the dysfunction
- ⑩ Primary, chronic neurobiological disease with genetic, psychosocial and environmental factors influencing its development and manifestations. Characterized by behaviors such as: impaired control over drug use, compulsive use, continued use despite harm and craving



# Addiction

- ⑩ Pain – is an alarm that makes you not function
- ⑩ Treating pain you become more functional
- ⑩ Treating addiction may not make you more functional

# Physical Dependence

- ⑩ State of adaptation that is manifested by a drug class specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist.

# Tolerance

- ⑩ State of adaptation in which exposure to drug induces changes that result in a diminution of one or more of the drug's effects over time
- ⑩ Can occur to both desired and undesired effects of drugs
- ⑩ Variable in occurrence and never absolute, thus, no upper limit to dosage of opioids can be established




# Education - Basic Neurophysiology

- ⑩ Pain is a complex perception
- ⑩ Depends on
  - Nature of stimulus
  - Situation in which it is experienced
  - Memories
  - Present emotions
  - Assigned meaning

# Chronic Pain Neurophysiology

- ⑩ Not just acute pain that persists
- ⑩ “wind up” – increasing responsiveness to repeated identical stimuli
- ⑩ Prolonged impulse discharges that outlast initial response
- ⑩ Expanded receptive field
- ⑩ Catastrophizing

# When all is said and done

- ⑩ We are not as bad as we think we are
  - ⑩ 11-30% general population suffers from chronic pain
  - ⑩ Studies show, all but 2-3% of that group need to be referred for special care
  - ⑩ Not rocket science
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# Great Resource

- ▶ Listening to Pain: A Clinician's Guide to Improving Pain Management Through Better Communication
  - Scott M. Fishman M.D.
- Demystifying Opioid Conversion Calculations: A guide for effective dosing:
  - Mary Lynn McPherson

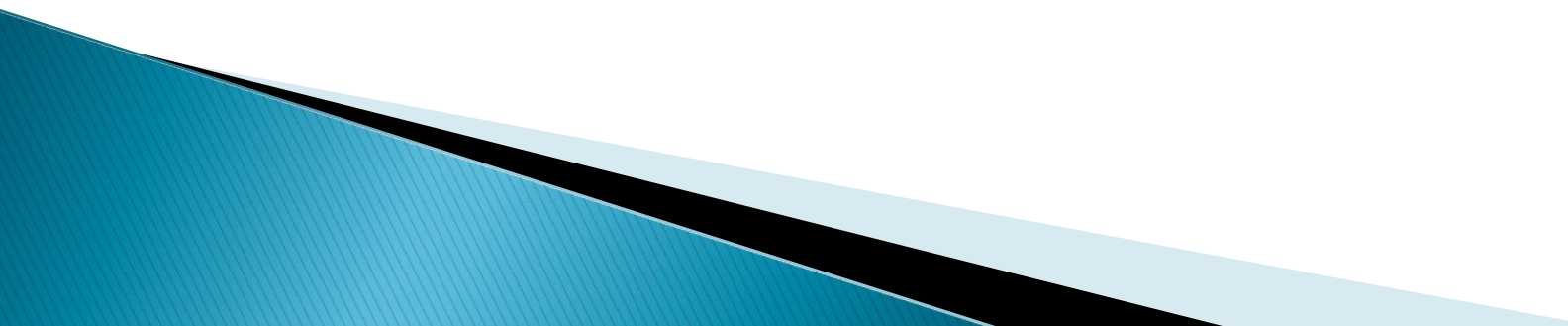
# Success in Treating Chronic pain

- ⑩ Ability to live a meaningful life
- ⑩ IMPROVED DAILY FUNCTIONING
- ⑩ Decreased somatic focusing

# Time tested format

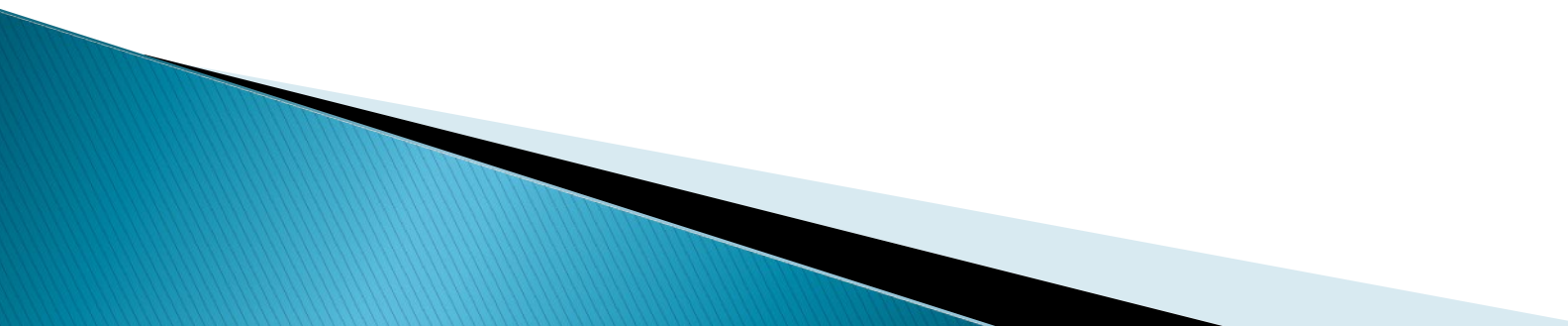
- ⑩ History – key to most diagnosis and treatment, including patient's belief system
- ⑩ Physical examination
- ⑩ Lab and xray- frequently fruitless

# History – Patient related variables

- History of opioid use – what has worked
  - Patient naive or tolerant
  - Age
  - Weight
  - Health care beliefs
  - Home environment
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# Risk Management

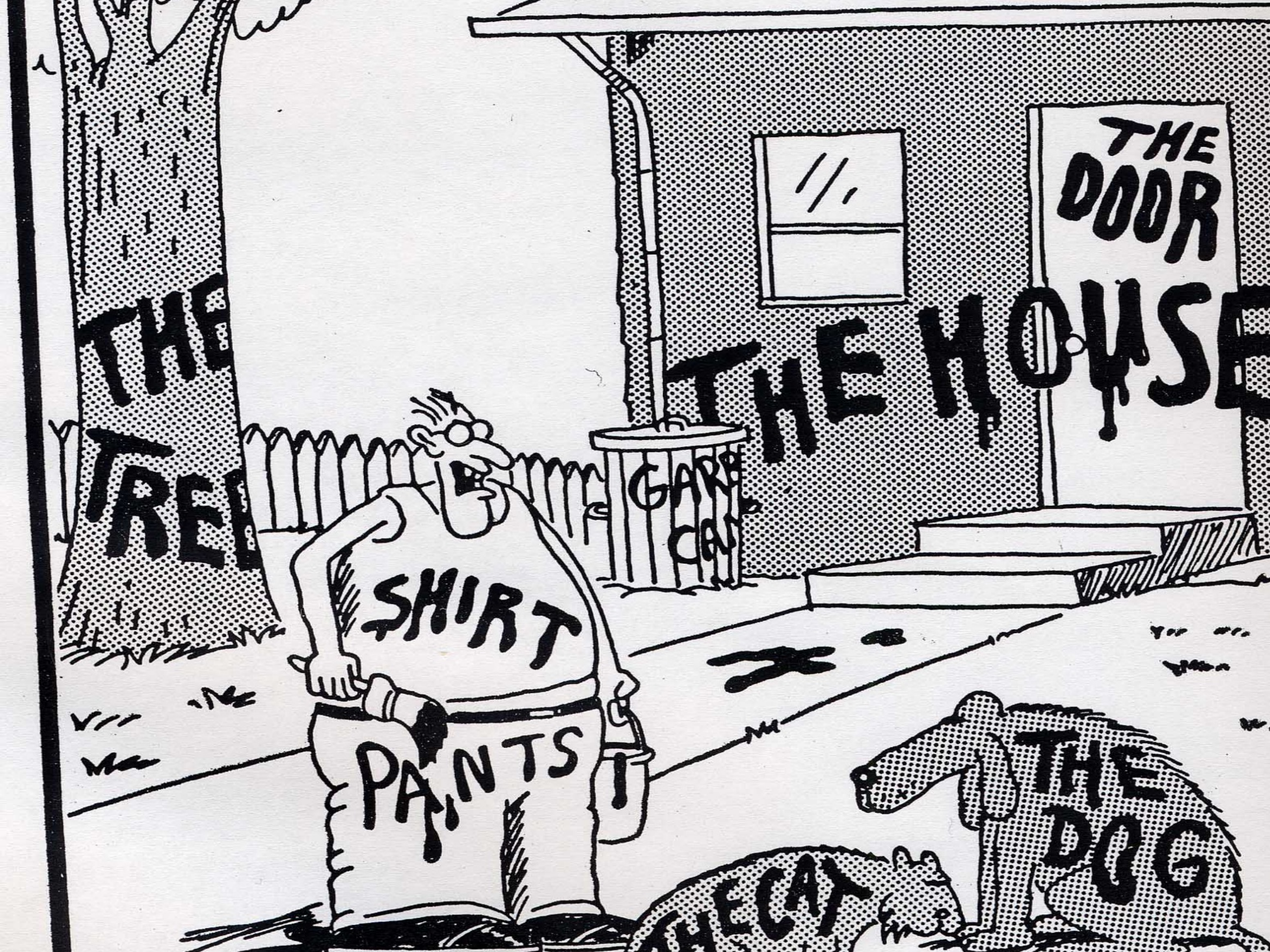
- ▶ Risk Stratification – CAGE, Opioid Risk Tool
  - ▶ Pain Agreements
  - ▶ Prescription Drug Registry
  - ▶ Documentation – setting functional goals and maintaining them
- 

# Other Risk Avoidance Strategies

- Recognize this as a complex problem
- One approach is not going to be successful
- Multimodal approach
- Initial evaluation – must be a full assessment, must include comorbidities, psychological status, risk for addiction and diversion etc.







THE  
TREE

SHIRT

PANTS

GARBAGE  
CAN

THE HOUSE

THE  
DOOR

THE CAT

THE  
DOG



# Let's Talk Drugs

## ⑩ Opioids

- Morphine, MS Contin, MSIR
- Hydromorphone
- Oxycodone, Oxycontin, Oxyfast
- Fentanyl
- Combination drugs

## ⑩ Methadone

## ⑩ NSAIDS



# Equianalgesic Table – rules of thumb (KISS)

- ⑩ Oral morphine = oral oxycodone = oral hydrocodone
- ⑩ Oral hydromorphone is 6-7 times as strong as oral morphine
- ⑩ IV morphine is 3 times as strong as oral morphine
- ⑩ IV hydromorphone is 5 times as strong as IV morphine

# Equianalgesic Table (cont)

- ⑩ These are best estimates!
- ⑩ Fentanyl patches – Lowest dose of patch equals 50 mg morphine/24 hours
- ⑩ Fentanyl patches – should not be used in opioid naïve patients

# Equianalgesic table – but

- ▶ Based on single dose crossover studies in patients who were opioid naïve, acute pain
- ▶ Patients with chronic pain not studied
- ▶ Patient specific variables missing

# Equilanagesic table – finally

- ▶ Opioid equianalgesia equivalents are ranges with large variation, thanks to the heterogeneous populations from which this data are derived and applied. Numbers in an equianalgesia table get you to the ballpark to play ball. Hitting a home run is dependent on the interactions between the pitcher and batter: sometimes you strike out; sometimes there are base hits. You can not make it neater than reality. Dr. Mellor P. Davis





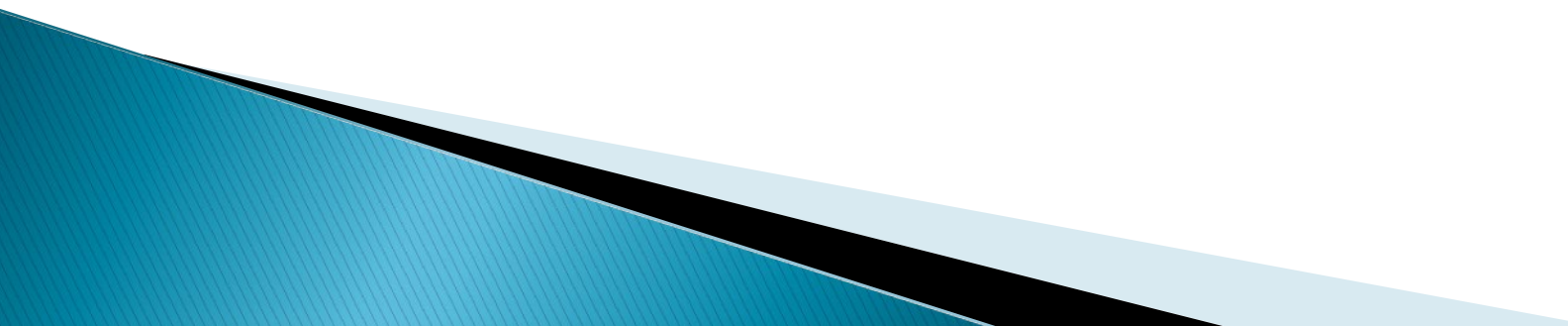
**Before we try assisted suicide, Mrs. Rose, let's give the aspirin a chance**



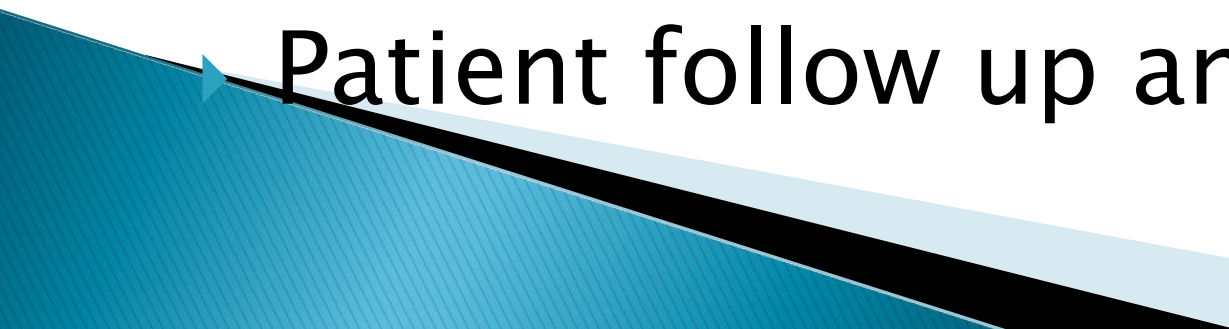
# The Versatile Opioids

- ⑩ Many types
- ⑩ Many routes
- ⑩ Many uses
- ⑩ If used correctly, well tolerated
- ⑩ No maximum dose
- ⑩ No one opioid is better than any other

# Is there a better opioid

- Simple answer is no
  - Does have some patient variability
  - But no data that morphine, hydromorphone, oxycodone works any better than anything else.
  - Fentanyl is a special drug and needs to be handled with caution
- 

# Five step approach to opioid conversion

- ▶ Globally assess the patient – worsening existing pain, new type of pain
  - ▶ Determine the total daily usage of current opioid
  - ▶ Decide which opioid best for new agent, consult the conversion tables with all the caveats
  - ▶ Individualize the dose based on assessment done and make sure there is adequate breakthrough medication
  - ▶ Patient follow up and continued reassessment
- 



# Methadone

- ⑩ Old medication
- ⑩ Multiple ways of delivering
- ⑩ Cheap
- ⑩ Works for both nociceptive and neuropathic pain (opioid and NMDA antagonist)
- ⑩ Wide individual patient variation
- ⑩ You need to be careful

# Methadone – difficulties

- ⑩ Long half life
- ⑩ Complex pharmacokinetics and drug interactions
- ⑩ QT dilemma
- ⑩ Difficult to titrate quickly
  - Time to reach steady state may be one week

# 5:1 Morphine:Methadone ratio

- MED 500-1000mg
  - ⑩ 10:1 ratio
- MED > 1000mg
  - ⑩ 20:1 ratio

# Misc Issues to remember

- ⑩ Combination opioids (percocet, vicodin, tylox) all contain significant tylenol which can cause liver toxicity
- ⑩ Nucenyta, Tramadol no real difference in pain control or in toxicity



# Monitor and Control Side Effects

- ⑩ Constipation – the one side effect that doesn't go away with time
- ⑩ Nausea/vomiting
- ⑩ Hallucinations
- ⑩ Itching
- ⑩ Sedation
- ⑩ Many are self limiting/may depend on developing a steady state
- ⑩ Confusion

# Can we talk constipation

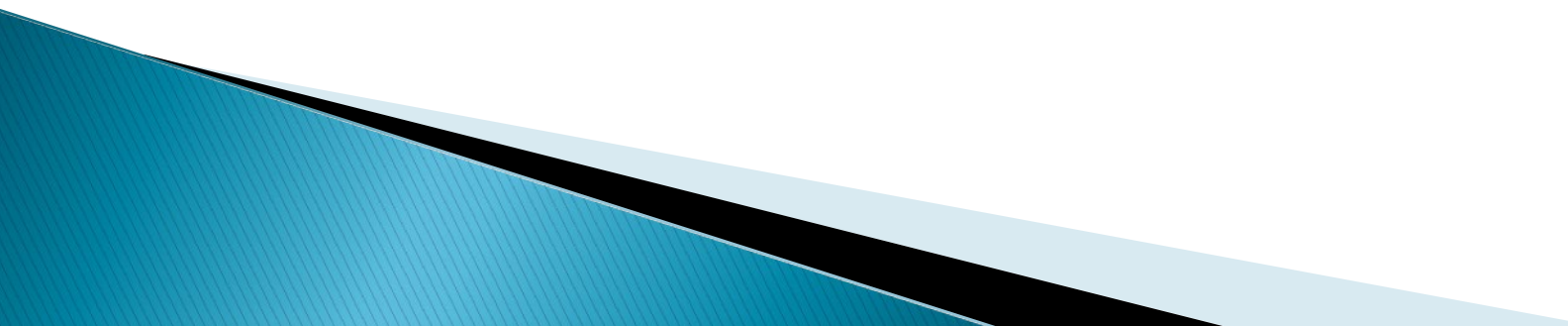
- ▶ An overlooked symptom/problem
- ▶ Multiple reasons for this
  - Nursing time
  - Physician time
  - Bed rest
  - And I am sure there are many others
- ▶ Don't give prn
- ▶ Don't use Colace!!!!
- ▶ Monitor and communicate

# Tramadoln't

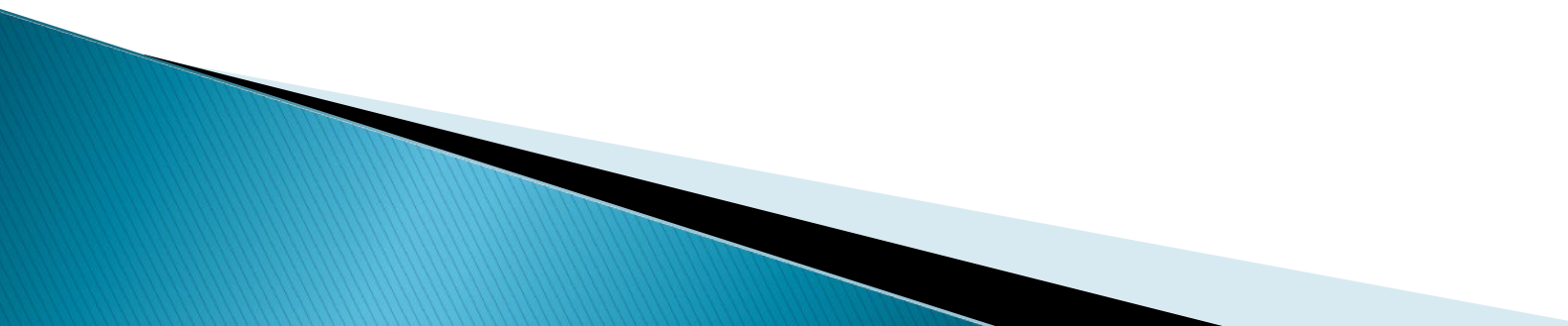
- ▶ “ what would happen if codeine and Prozac had a baby and that baby grew up to be a sullen unpredictable teenager who wore only black and sometimes kicked puppies and set fires”
  - David Juurlink, Internist and Pharmacist, University of Toronto,
  - Author of blog “tox and hound”



# Tramadol

- ▶ SNRI – like venlafaxine
  - ▶ Converted in liver to an opioid
  - ▶ Converted by CYP enzyme in liver which makes it very variable as enzyme varies in most people, depending on their genetics
  - ▶ Don't really know how much a dose of either of these medications you are getting
  - ▶ Seizures, hypoglycemia
- 

# Here's the Rub

- ▶ Interdisciplinary care works. However...
  - ▶ Access is extremely limited both for availability and cost
  - ▶ Since 1999, programs in US have decreased from over 1000 to under 150
  - ▶ In Europe and Asia, these programs have increased
  - ▶ We tend to use drugs and interventions
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# Neuroplasticity – what?

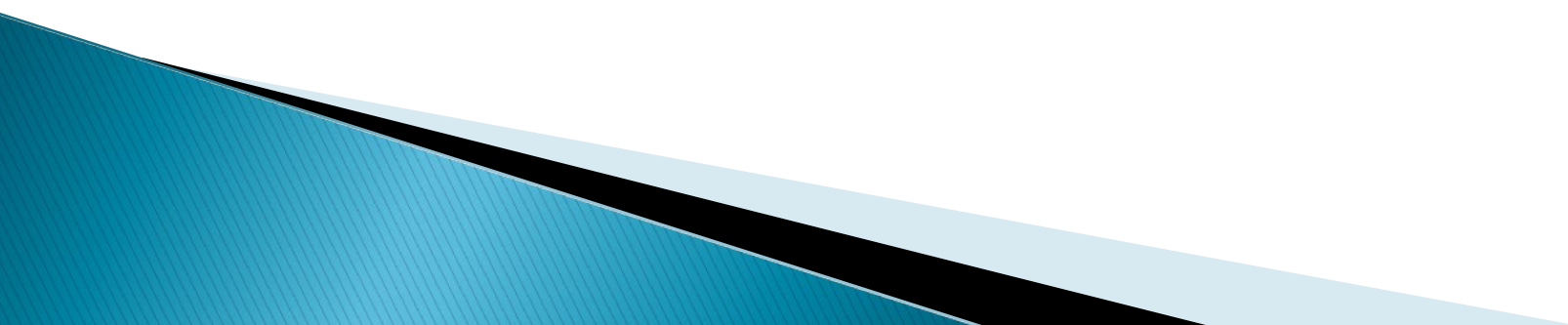
The brain is not a fixed entity!

What is fired is wired

What you don't use you lose

When you make them you break them, when you break them you make them

IE – you can retrain what your brain has learned





# FINALLY – my favorite anonymous quote

- ▶ What matters most to the patient is as important as what is the matter with the patient
  - ▶ QUESTIONS
- 