Whole Health for Pain and Suffering:
An Integrative Approach

Whole Health for Pain and Suffering
Day 1 Afternoon

• Self-Care and Pain
• Nutrition and Exercise
• Recharge and Reconnect

4. Self-Care and Pain:
An Overview

Whole Health for Pain and Suffering

It is much more important to know what sort of a patient has a disease than what sort of a disease a patient has.

- William Osler
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Promoting self-management of pain empowers patients to proactively address their pain and shifts how patients and clinicians relate to one another.

Victorious & Vicious Pain Cycles

Promote Self-Management of Chronic Pain

- Use "Third Person Statements" to discuss a self-management plan (e.g., "Many people with chronic pain feel...")
- Validate the experience of chronic pain, including the many losses
- Understand the mindset of many individuals with pain
- Educate about the limitations of pain medications
- Encourage patients with pain to move
- Provide positive feedback for any reported attempts at self-management
- Involve significant others to encourage self-management behaviors
Effective Communication about Chronic Pain

- When pain is chronic, focusing on intensity, location, duration, etc., is not necessarily productive.
- All pain does not have to be gone in order to set functional goals, to start doing more physical activity or work on improving quality of life.
- Educate about the difference between what “hurts” and what “harms” their body.
- Address fear of pain and over anticipation of pain that leads to avoidance behaviors.
- Enhance self-efficacy by focusing on what they can still do, as opposed to what they can no longer do.

Self-Management Action Plan

- Exercise
- Relaxation/meditation/quieting response
- Social support/social activity
- Meaningful life activities
- Pleasurable activities
- Attitude/mood/thinking
- Sleep Hygiene
- Activity Pacing
- Self Management of Flare-ups

Three Areas of Focus

1. Explore what matters most:
   — What do you want your health for?
   — What health goal will help you connect to what is most meaningful in your life?
2. Identify strengths:
   — But in spite of...you have been able to ...
   — Some of the strengths or signs of resilience that you bring to the present situation are ...
3. Identify support needed to achieve health goal
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Three Areas of Focus

• Explore what matters most to patient:
  – What do you want your health for?
  – Why do you want to be healthy or improve your pain management?
  – What is a health goal that will help you connect to what is most meaningful in your life?
• Identify patient’s strengths:
  – But in spite of ..., you have been able to ...
    – Some of the strengths or signs of resilience that you bring to the present situation are ...
• Determine the support they need to achieve their health goal
  – Moreover, some of the people (resources) you can call upon (access) are ... And they can be helpful by doing ...

SMART Goal Setting

Collaborate on Setting a SMART Goal

• S: Specific
• M: Measurable
• A: Action-orientated
• R: Realistic
• T: Timed

• What 3-6 month SMART Goal would help you to meet the change you desire?
• Example: “I plan to take a 15 minute walk five times a week.”

Identify Strengths
Create an action plan that also addresses barriers
Identify Skills, Resources, and Tools Needed
Identify support and follow-up needed

SMART Goal Setting

Collaborate on Goal Setting - Pick one Goal to get Started.

• What 3 – 6 month SMART Goal would help you to meet the change you desire?
• **SMART**: Specific, Measurable, Action-Orientated, Realistic, Timed
• Example: “I plan to take a 15 minute walk five times a week.”

Strengths. What strengths and inner resources do you have to achieve this goal?
Barriers / Action Plan. Are there any potential barriers to your meeting this goal? Create an action plan that also addresses overcoming barriers.
Resources. Check in with your health care team to make sure you have all of the skills, resources and tools you need for success.
Follow-up Plans. Identify support and follow-up needed.
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Developing Personal Resilience: Your PHI

- Take a few minutes to complete a PHI for yourself
- Find a partner
- Discuss with your partner:
  - Do you have a personal mission?
  - Is there an aspect of your health you would like to commit to work on?

Care for the Caregiver

- It is challenging to work in modern health care.
- It is tough to bear witness to other people’s suffering.
- It is especially hard to work with people in chronic pain.

How are you doing?
Burnout Check-In

1. I feel emotionally burned out or emotionally depleted from my work.

2. I have become more callous toward people since I took this job—treating patients and colleagues as objects instead of humans.

What Are Some of the Causes of Burnout?

- Too many bureaucratic tasks
- Spending too many hours at work
- Present and future impact of Affordable Care Act
- Feeling like just a cog in the wheel
- Income not high enough
- Lack of professional fulfillment
- ‘Inability to provide patients with quality care they need’
- Too many difficult patients
- Increasing computerization of practice
- Difficult colleagues or staff
- Compassion fatigue
- Difficult employer

1 = Not at all important
7 = Extremely important
Burnout in Pain Clinicians

207 Pain Specialists surveyed for 3 elements of burnout
- Emotional exhaustion high in 60%
- Depersonalization 36%
- Low sense of personal accomplishment 19%

#1 contributor:
Job dissatisfaction

What Contributes to Burnout?

1. Perfectionism
2. Lack of coping skills for stress
3. Personal bad habits (smoking, recreational drug use)
4. Lack of control over office processes
5. Lack of control over schedule
6. Poor relationships with colleagues
7. Lack of time for self-care
8. Difficult and complicated patients
9. Not enough time in the day
10. Excessive paperwork
11. Regret over chosen career
What Does Resilience Mean to You?

- What is going well in your practice of providing pain care to Veterans?
- What are the challenges of providing pain care to Veterans? Where do you struggle?
- How do you feel you are doing at this time with respect to burnout? How does this compare with other times?
- What areas of self-care would most contribute to building and maintaining your resilience?

Burnout → Resilience: What Helps?

- Self-Care
  - Meditation, relaxation, massage
  - Support group for clinicians
  - Talking about feelings
  - Professional counseling
  - Sense of control over one’s schedule
  - Time management

Resilience Can Be Learned!

1. Positive attitude
2. Cognitive flexibility
3. Moral compass
4. Role model
5. Face fears
6. Develop active coping skills
7. Social support
8. Physical well-being
9. Train regularly
10. Recognize and foster signature strengths
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Significant Improvements with Maslach Burnout Inventory

![Graph showing improvements in Maslach Burnout Inventory](image)

Significant Improvements with Depression, Anxiety and Stress

![Graph showing improvements in depression, anxiety, and stress](image)
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Body Scan

- Aware
- Present
- Centered
- Focused
- Calm
- Grounded
- Non-judgemental

Seljalandsfoss, Iceland (D. Kopacz, 2018)

Photo credit: sianmonument via Foter.com / CC BY-NC-ND

Body Scan

- What was your experience?
- Could you sense/feel your body?
- Were there areas that were easier/harder to access?
- Could you notice how thoughts arose and left?
- Did you have insights about where you carry stress?
- How could you use this practice as a way to reframe stress?

Practice for a short time, multiple times during your day.
5. Self-Care and Pain I: Nutrition and Exercise

Whole Health for Pain and Suffering

Nutrition and Movement: Questions to Consider

- Does nutrition impact pain?
- What are different dietary intervention options?
- What are some nutrition resources?
- My patient has pain. What are some exercise options they may not have considered?

Frank

- 53 y.o. Gulf War Veteran (Army)
- Osteoarthritis (OA) – knees, hands
- Given oxycodone
  - Hates how it makes him feel
  - Fatigue an issue
- Offered injections
- Comorbidities: HTN, obesity, GERD
- Job in construction he can’t do much longer
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OA: Not-so-fun Facts

• By 2030, ¼ of Americans will have OA
• Complex – not just ‘wear and tear’
  – Physiological pathways go awry
  – Chondrocytes, osteoblasts
  – Microfracture – callus – microfracture
  – Interleukins and cytokines
  – Soft tissues get involved
• Options can seem limited
  – Pills
  – Procedures (surgery, injections)

Frank Completes the Brief PHI

Frank’s Vitality Signs

How you feel you are on the scales below from 1 to 5, with 1 being miserable and 5 being great.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Physical Well-Being</th>
<th>Mental Emotional Well-Being</th>
<th>Likelihood of day-to-day life</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 miserable</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2 miserable</td>
<td>3 (Best)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3 miserable</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Frank: Where He Is and Where He’d Like to Be

<table>
<thead>
<tr>
<th>Area of Whole Health</th>
<th>Where He Is</th>
<th>Where He’d Like to Be</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Health</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Physical Health</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Social Health</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Mental Health</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Employment</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Financial Security</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Psychosocial Function</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
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Frank starts with a question:
How can I exercise if I hurt all the time?

OA and Activity

• Recommended in all guidelines
• Best support for knee OA
  – Hip generally favorable
  – Hands by consensus opinion
• Types: aerobic, resistance and flexibility
  – Aquatic exercises have moderate quality evidence of benefit
• How much: start 20’ three times weekly
  – Shoot for 180’
  – Lessen if pain not returning to baseline a few hours after activity
• Studies support individualizing activity by preference (class, with trainer, at home)

De-Mythologizing

Exercise Does NOT Tend to Worsen OA

2014 review of reviews
– No association of leisure activity and incident knee OA
– Moderate and vigorous activities don’t wear out joints
– Odds ratio with walking and knee OA was 0.8 in one study
– Hip studies show the same
– Work-related joint use (heavy lifting, heavy tools) seems to be the biggest contributor
• Not sports so much
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**OA and Activity: The FAST Trial**

- 365 seniors with knee OA exercised for 18 months
- Aerobic exercise improved function by 10%, pain by 12%
- Resistance training improved function by 8%, pain by 8%

*Ettinger WH et al, JAMA 1997;277(1)25‐31.*

**Tai Chi and Qi Gong**

*Photo: VA.Reno.gov*

**Tai Chi for Chronic Pain**

- QUERI Evidence Map
- Note locations for “Pain” and “Osteoarthritis”
- Reviews have found benefit for OA, back pain, fibromyalgia
  - More study needed
  - Not as much for RA or headache

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**Tai Chi and OA**

- 2014 review – 6 studies
  - “…effective way of relieving pain and improving physical function”
  - OA of knee
- 2013 systematic review found support for Tai Chi in OA of knee
  - Moderate quality
  - Pain
  - Physical function
  - Stiffness

**Yoga and Pain**

**A 2013 Review and Meta-Analysis**

“Evidence suggests that yoga is an acceptable and safe intervention, which may result in clinically relevant improvements in pain and functional outcomes associated with a range of musculoskeletal conditions.”

- 17 studies (12 good quality), n=1626
- Moderate overall effect for function and pain
  - Pain in OA, RA, LBP
  - Function in LBP and fibromyalgia


Frank asks another question:

Does how I eat influence my pain?
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Food & Drink: Does Nutrition Influence Pain

- Modulates inflammation
- Influences hormones
- Influences vitamin and mineral deficiencies
- Food intolerances can trigger pain symptoms
- Modulates multiple systems
- Affects overall function (sleep, mood)
- Influences obesity

Nutrition & Inflammation: It’s Complicated...

- Ways that diet alters inflammation:
  - Processed foods altering insulin response
  - Influence on obesity
  - Vitamin and mineral deficiency
  - Microbiome disruption and immune dysfunction

Nutrition and Obesity in OA

- OA is made worse by excess weight
- 10 pounds of weight loss...
  - Led to a 28% increase in function
  - N=80, intervention a low energy diet
  - NNT to improve WOMAC scores by >50% was 3.4
  - Led to noticeable pathological changes
    - Decreased joint compression
    - Altered hamstring firing
  - totalbodycoach.tumblr.com
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### Pain influencing food: It goes the other way too!

- Chronic pain linked to dietary shifts
  - More overeating, reduced satiety
  - Altered palatability of food
  - Ventral striatum and prefrontal cortex changes
  - Changes regardless of obesity


### What dietary intervention options do we have for Frank?

### Food & Drink: General Health Plan Options

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>2. Eating Out</td>
<td>10. Fruits/Veggies</td>
</tr>
<tr>
<td>5. Food Groups</td>
<td>13. Portion Size</td>
</tr>
<tr>
<td>6. Fats</td>
<td>14. Food Labels</td>
</tr>
<tr>
<td>7. Proteins</td>
<td>15. Mindful Eating</td>
</tr>
</tbody>
</table>
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Making it Practical: Examples

- Apps
  - My Fitness Pal
  - FitBit
  - VA-specific apps

- EWG: Clean 15 and Dirty 12
  - https://www.ewg.org/

- Mindful Eating
  - https://www.eatingmindfully.com

Nutrition Tools - Passport Chapter 8

- Anti-Inflammatory Diet (pg 138)
- Elimination Diet (pg 141)
- Microbiome (pg 148)

AID – Highlights

- What affects inflammation?
  - The fats we eat
  - Omega-3's and 6's (ratio matters)
  - Anti-oxidant foods
  - Glycemic index and load
  - The microbiome

The Anti-Inflammatory Food Pyramid.
### 14 Ways to Eat Toward an AID

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1. Keep non-fish animal fats intake low</td>
<td>8. Eat legumes</td>
</tr>
<tr>
<td>2. Eat more fish</td>
<td>9. Eating nuts and seeds</td>
</tr>
<tr>
<td>3. Limit omega-6 fats</td>
<td>10. Eat anti-inflammatory herbs and spices</td>
</tr>
<tr>
<td>4. Eat more omega-3's</td>
<td>11. Don’t char food</td>
</tr>
<tr>
<td>5. Keep vegetable and fruit intake high</td>
<td>12. Pay attention to glycemic load</td>
</tr>
<tr>
<td>6. Eat whole grains</td>
<td>13. Avoid obesity</td>
</tr>
<tr>
<td>7. Eat dietary fiber</td>
<td>14. Ensure adequate magnesium intake</td>
</tr>
</tbody>
</table>

### Elimination Diets

**Types of Elimination Diets**

- Junk Food Elimination
- Common Trigger Elimination
- Classic Elimination

**Junk Food**

- Low hanging fruit
- Typically easier to find a dietary smart goal—many nutrition goals to choose from
- Often a good place to start in patients who haven’t considered dietary changes
- Many Resources Available (Passport pg 150)

**Common Trigger Elimination**

- Eliminates foods that have high suspicion (dairy, gluten, etc)
- Good if there is a high index of suspicion
**Elimination Diets**

- **Classic Elimination Diets** (Whole Health Education website, “Digestive Health”)
  - Several variations, but eliminate multiple foods at once
  - Higher chance of success initially at identifying triggers
- **Simple**: wheat, dairy, eggs
- **More Restrictive**: again, several variations.
  - Wheat, dairy, eggs, soy, corn, tomatoes, shellfish, peanuts, grapefruit, caffeine, additives, high sugar foods
  - FODMaP
- Foods avoided for 3 weeks
- Reintroduced 1 food at a time, every 3 days. Most suspicious foods first.

**Supporting the Microbiome**

- Diets high in fruits, vegetables and fiber
- Avoiding highly sugared and processed foods
- Including probiotic foods: yogurt, kombucha, sauerkraut, many others
- Consider probiotic supplements

**Dietary Supplements**

The “Supplements for Pain” on Whole Health Education website

Passport Chapter 15
Supplements for Inflammation

- Omega 3 fatty acids
- Food-based anti-inflammatories
  - Turmeric
  - Ginger
- Herbal anti-inflammatories
  - Boswellia
  - Devil's Claw
  - Willow Bark

Avoiding Death by PowerPoint...

Let's Practice!

- Your task: create a dietary plan or goal for Frank
- Work together at your table
- Get a better dietary history from Frank (Passport, pg. 129)
- Come up with initial recommendations: AID, elimination, or smart-goal based (be specific!)

Frank’s Personal Health Plan

- Focus on Food & Drink
  - Consider role of inflammation
  - Smart Goal focused on adding fruits and vegetables
- Focus on Working the Body
  - Exercise prescription that works for him
  - Array of activities (tai chi, yoga, etc. worth considering)
  - Tie in his love of the outdoors (Surroundings)
- Other self-care areas
- Professional care
  - Consider acupuncture
  - Consider massage
  - PT a given
Jennifer

Subjective: 37 yo female diagnosed with fibromyalgia seven years ago, approximately six months after returning from an Air Force deployment to Afghanistan. Developed neck, back and leg pain on deployment which persisted. Ongoing fatigue. Non-restorative sleep.

Past Medical History: Mild depression, that resolved w/o meds. Frequent migraine headaches.

Meds: Gabapentin, amitriptyline, nonsteroidal anti-inflammatory drugs (NSAIDs), Tylenol, and intermittent short-acting opioids.

Social History: Divorced, two children. Medically retired from the Air Force five years ago and unable to keep her job as an air traffic controller. No tobacco. Limited exercise, fair nutrition.
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Jennifer Completes the PHI

- What REALLY matters to you in your life?
  My two kids and parents are important to me.

- What brings you a sense of joy and happiness?
  Spending time with my two kids, swimming, solving problems.

- What brings you a sense of sadness or sorrow?
  Since leaving my job, my life does not have much purpose. I wish I could return to work.

- What do you want your health for?
  Being a good role model for my kids. I feel great whenever I’m spending time with them.

What else are you curious about?

- Take 3 minutes to discuss Jennifer’s PHI with your table

Potential Causes – A Circle Perspective

Green Circle

- Food & Drink
  - Pro-inflammatory diet
  - Food intolerance
  - Disordered microbiome
  - Missing nutrient (D, Mg)
  - Dehydrated
- Recharge
  - Not enough
  - Poor sleep environment
- Working Your Body
  - Hormone balance
  - Inactive
  - Over-exercising
- Personal Development
  - No outlets, no fun

- Family, Friends & Coworkers
  - Abusive relationship
  - Isolation

- Surroundings
  - Toxins
  - Temperature
  - Ergonomics

- Power of the Mind
  - Stress, muscle tension
  - Addiction
  - Fear of pain
  - Neurotransmitter balance

- Spirit & Soul
  - Moral injury
  - Trauma
Self-Care: Around the Green Circle

What self-care strategies should we explore with Jennifer?

Some suggestions for Jennifer:

• Walking five minutes per day
• Took a class on mindfulness meditation
• Join a fibromyalgia support group
• Scheduled time with her children in the mornings when her energy level was better
• A trial of magnesium supplementation

Recharge: Sleep to reduce pain!

• Sleep and pain are bidirectional. With more pain, sleep quality suffers. As sleep quality suffers, people often experience more pain.
• Improving sleep quality may also be associated with long-term improvements in pain.
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Recharge: Tips for the Patient

- Recommend:
  - Cognitive-behavioral training
  - Exercise
  - Relaxation training (e.g., PMR)
  - Create a bedroom sanctuary
  - Blue filters on electronics
  - Melatonin and Valerian

Family, Friends & Coworkers
Connection = Life

- 2015 meta-analysis of 70 studies
  - Social isolation led to a 29% higher likelihood of dying
  - Loneliness = 26% higher likelihood
  - Living alone = 32%
  - Results “…consistent across gender, length of follow-up, and world region…”

- 2014 summary: Interviews with 23 Veterans who had attempted suicide
  - Social support
  - More compassion and empathy from care providers

- Loneliness and poor social connection cause inflammation and chronic disease

Social Environment and Stress

The same stressor that, when given to an animal who is alone increases plasma cortisol by 50%, does not increase the cortisol level at all when the animal is surrounded by familiar companions.

Levine S., Lycios DM, Schatzberg AF. Ann NY Acad Sci. 1997; 807:210-218
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How do we help Jennifer connect?

• Support groups
• Hobbies with others
• Pain management group
• Volunteering
• Ask social workers for help
• Involve family and friends (including visits)
• Encourage regular contact with social network

Loving Kindness Compassion Practice

Spirit & Soul

Aspects of Spirituality
• Religious
• Humanistic
• Nature
• Experiential
• Cosmos
• Mystery
Spirit & Soul: Growing and Connecting

Spiritual practices can improve a person’s sense of control, enhance coping skills, decrease the impact of stress, provide a network of social support, contribute to a sense of purpose or connectedness and can improve a person’s pain experience.

Ask your patients:
• What gives you a sense of meaning or purpose?
• What is it that makes you feel a part of something bigger than yourself?

Spirituality and Health

• Lowers systolic and diastolic BP
• Greater compliance with medication
• Exercise more
• Eat healthier
• Quit smoking more readily

Religion and Health

• Lowers mortality, especially in women
• Predicts social connections, better mental health
• 19x higher risk of death from all causes if no service versus weekly services over 8 years
  — And 7.5 longer life expectancy
• Lower stress hormones and lipids
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Power of the Mind
A Spectrum of Techniques

- Biofeedback
- Progressive muscle relaxation
- Meditation
- Breathing exercises
- Cognitive behavioral therapy
- Eye movement desensitization and reprocessing
- Therapeutic disclosure
- Hypnosis
...and many others

Psychotherapies

- A meta-analysis of psychological interventions was supportive of cognitive-behavioral therapy for pain reduction in fibromyalgia, with a moderate effect noted.

- Controlled trials of mindfulness-based stress reduction have shown improvements in quality of life, coping skills, and depressive symptoms, although the trial results have been mixed.


Small incremental benefit over control interventions in reducing pain, negative mood and disability at the end of treatment and at long-term follow-up.

Cognitive Behavioral Therapies for Fibromyalgia

THE COCHRANE COLLABORATION®
### Pain Symptoms and Abuse History

| Pain Symptoms Among Nonabused, Physical Abuse, Sexual Abuse, and Multiple Abuses | Percent “Yes” in Each Group |
| --- | --- | --- | --- |
| | Nonabused (n=47) | Physical (n=33) | Sexual (n=16) | Multiple (n=12) |
| Pelvic | 13 | 10 | 31 | 41 |
| Abdominal | 11 | 10 | 38 | 44 |
| Stomach | 11 | 10 | 25 | 42 |
| Back | 26 | 80 | 73 | 76 |
| Head | 17 | 70 | 73 | 94 |


### Emotional Trauma

- Significant physical or emotional stressors such as physical trauma or deployment have been implicated as potential syndrome triggers along with other types of trauma.

- Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE) have been found to produce clinically significant improvement in PTSD symptoms in multiple randomized controlled trials.

- Although these treatments share many common factors, the focus of CPT is on changing maladaptive thoughts while the main mechanism of PE is exposure exercises.

### For Tomorrow...

- Consider a principle of PHP you would like to try with a patient
- How about an area to work on yourself?
- Consider how you can take implementation to the next phase