



# AUSINHEILER

physical therapy | personal training | bike fitting

@ausinheiler

[posturemovementpain.com](http://posturemovementpain.com)

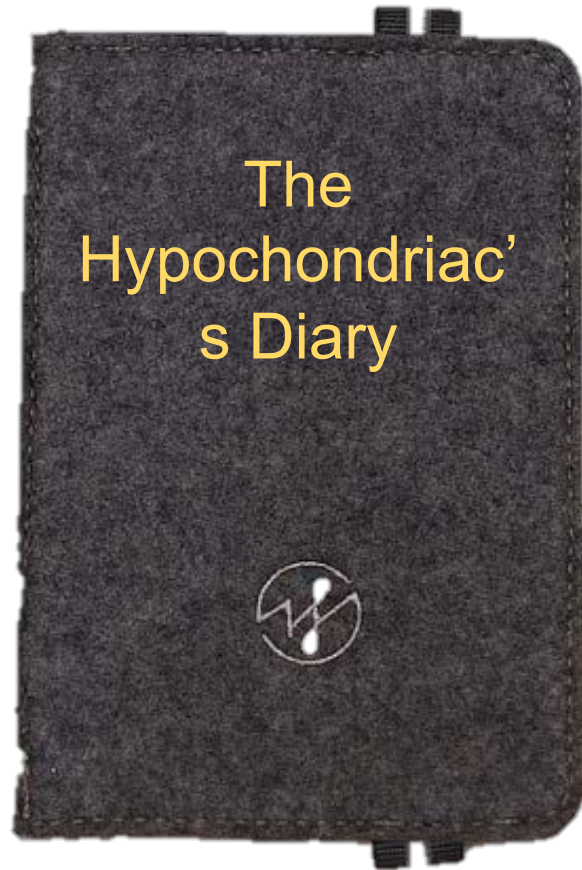




# The Hypochondriac's Diary: Using Self Tracking to Hack Musculoskeletal Pain

By Bryan Ausinheiler, DPT, CSCS

# Outline

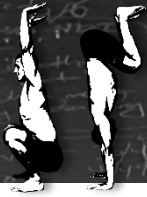


1. What is it?

2. How I have used it

3. Suggestions & Future Directions

# What is the Hypochondriac's Diary?



The Hypochondriac's Diary v3.0 Bryan

File Edit View Insert Format Data Tools Add-ons Help All changes saved in Drive

fx

	A	B	C	D	E	F	G
1	Date	Hip		Thigh		Knee	
2	4/13/2015 22:31:13	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
12	4/12/2015 7:18:27						
13	4/9/2015						
14	4/8/2015						
15	4/4/2015 20:00:00		felt R ant hip just				
16	3/30/2015 11:52:32		felt R ant hip like				
17	3/29/2015 15:00:00		feel R ant hip dur				
18	3/23/2015 8:17:23						
19	3/21/2015 13:00:00		R hip feels fine				Started feeling F
20	3/20/2015 19:00:00		I felt the same R				
21	3/19/2015 22:09:54		feels fine all the				
22	10/28/2014	Didn't feel anythi					
23	10/27/2014	Ache a littlw less					
24	10/26/2014	Mild ache in L ar					
25	10/10/2014						
26	10/8/2014						
27	5/24/2014 0:00:00						
28	2/1/2014 0:00:00		Just barely aware				
29	1/24/2014 0:00:00		Slightly perceptib				
30	1/23/2014 0:00:00		I didn't feel it at a				
31	1/20/2014 0:00:00		barely perceptibl				
32	1/17/2014 0:00:00		I had anne miche				
33	1/16/2014 0:00:00		reproduced with				
34	1/9/2014 0:00:00		I felt it more toda				
35	1/7/2014 0:00:00		I have been feeli				
36	12/27/2013 0:00:00		I feel an awarene				
37	10/17/2013 0:00:00	A very mild pinch					

A place to record injuries, illness pain and related **physical sensations** and the **context** in which they were felt all organized by **body region**.



# Desire for more accurate patient history

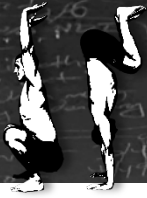




Testing it on myself



# Evolution of the Hypochondriac's Diary



- April 27<sup>th</sup> 2012 v1.0 started as an evernote file
- June 15<sup>th</sup> 2012 v1.1 transferred to a Numbers on ipad
- January 16<sup>th</sup> 2015 v2.0 Google sheets. One column per region for easier tracking over time

# Purpose of the Hypochondriac's Diary



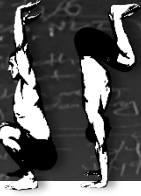
WH

Y?

1. See early warning signs of more serious problems



# Purpose of the Hypochondriac's Diary

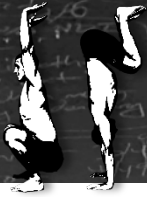


WH

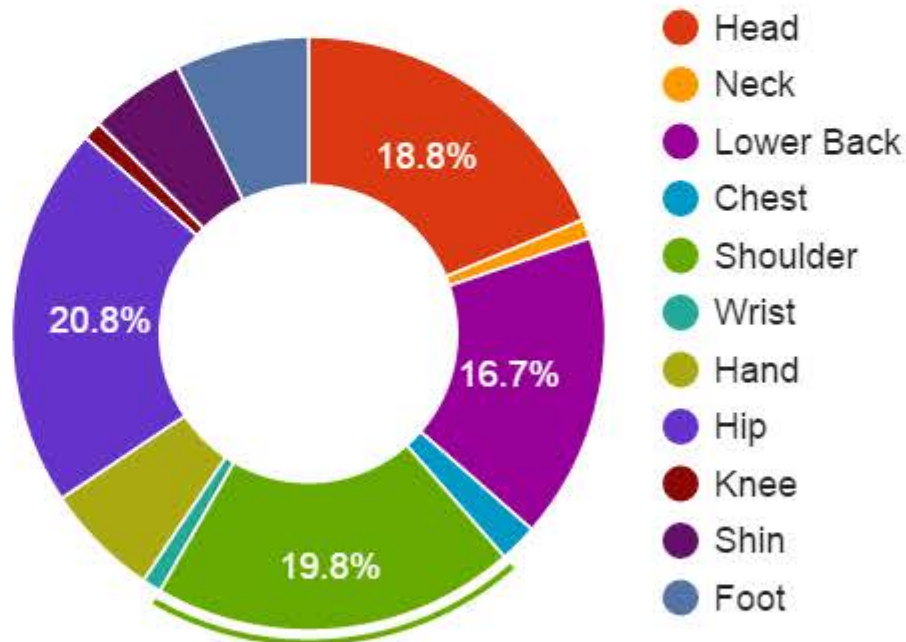
Y?

2. Unravel the causes of orthopedic issues with long latency between cause and effect.

# Use of the Diary: Left Shoulder pain



Entries by Region



19.8% of entries involve the shoulders

# History of Left Shoulder Pain

2012 April 25: Felt during **handstands**. Better in 2 days.



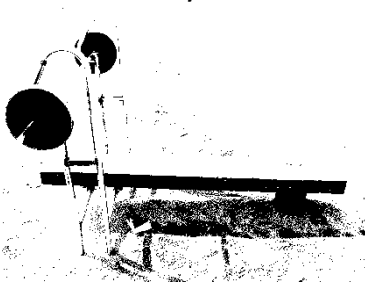
2014 Oct 11L: Felt the day after **overhead press** Felt during **dips**. Better in 11 days.



2015 Mar 23: Felt after bearcrawl. Better in 7 days.



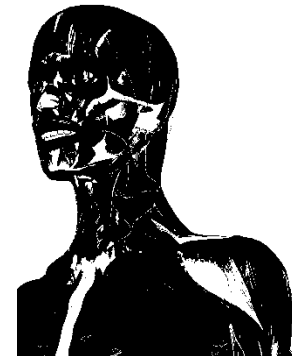
2014 Feb 26th: Felt after **bench press**. Better in 8 days.



2015 April 24: Felt during **ring pushups**. Better in 7 days.

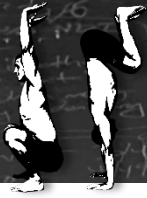


2015 April 28: Tender points in deltoid found. Changed pushup technique and used LAX ball before pushing. No sx since.



- Google image : [http://crossfitvicenza.blogspot.com/2011\\_07\\_01\\_archive.html](http://crossfitvicenza.blogspot.com/2011_07_01_archive.html)
- Flickr image "do you even lift" by Colin Jenkins(CC BY 2.0)
- Flickr image "bench press" by Craig Nagv(CC BY 2.0)

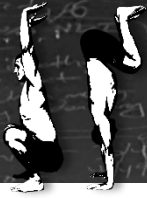
# What I learned about my shoulder



- No clear signs of a clinically recognized syndrome.
- Symptoms were delayed but were preceded by a similar motion: pressing.
- Consistent tracking will reveal the long term effectiveness of my interventions.



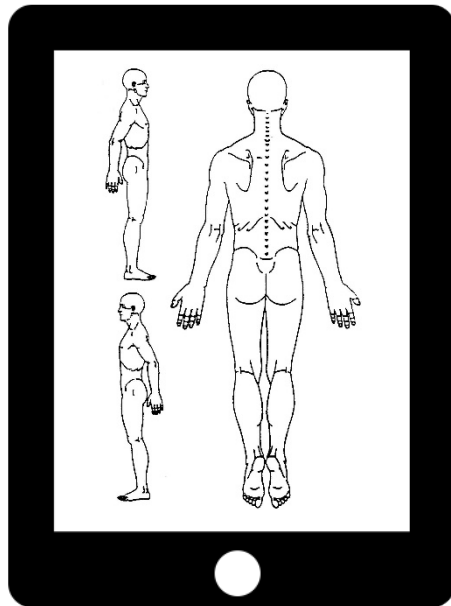
# What I have learned from using the diary



A lot of problems have come  
and gone

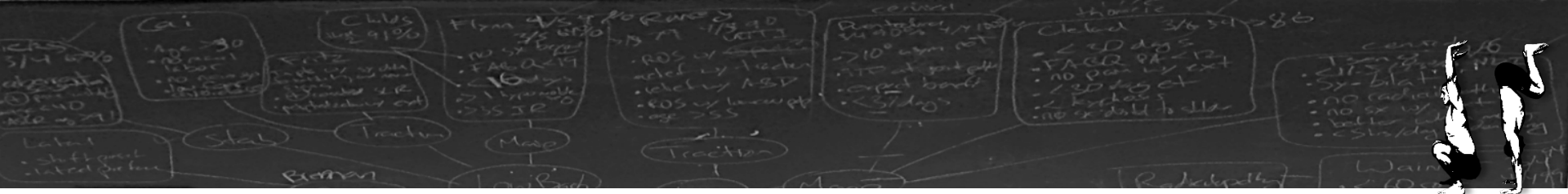
I have seen how my memory is  
confabulated

# Future Directions, mobile app?



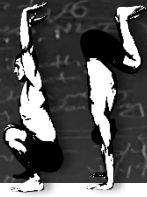
- Body Chart
- Quantifiable feature (ie pain scale)
- Recommendations to seek care
- Correlation with sleep, activity, mood etc
- Ability to capture non-regional symptoms





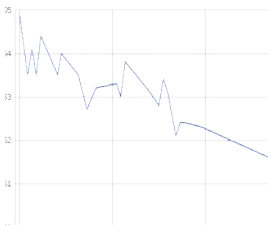
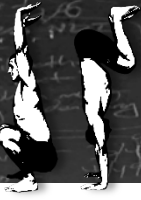


# Use of the Diary: Left Shoulder pain



- Entries: timeline
- Is this the same problem?
- What are the aggravating factors?
- Corroborating with other logs: workout log. Clear that aggravating factors are relatively consistent: pushing and pressing.
- Recent solution. (not discovered because of the log, but will allow me to test the effectiveness of the solution.)

# Goals & Outline



• Define the problem and goal

• Choose the data sources  
(devices & apps)

• Interpret the data & apply the  
findings



# When Data Can Help



## Treating Injury

### Finding Causes

- Data is particularly helpful in finding the cause when the effect is **small**, has a **gradual** onset or is **delayed**.

### Testing Solutions

- Data is particularly helpful in testing solutions that require behavior change

\* Davis 2014- Bone Stress Injury Clinical Commentary JOSPT

- Flickr image "laurel footstrike" by tdkrun (CC BY 2.0)
- Google image: <http://drlevy.ca/methylcobalamin-injections-for-chronic-low-back-pain/>



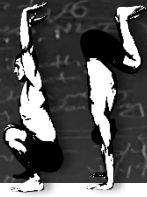
# Case Examples

- Ex 1: they are just curious about what is going on in their body, and would like to track what is going on.
- Ex 2: They have a specific problem and aren't sure what is causing it.

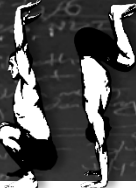




# Introducing the hypochondriac's diary



- Live demo
- Structure allows relatively quick data capture and qualitative analysis.
- Categorized by body regions with adjacent right/left to allow comparison.
- Can create a specific injury diary for a more persistent problem.



- Define the problem
- Identify things to monitor

# History of Left Shoulder Pain



2012 April 25: Insidious onset of L superior shldr pain 2 days after climbing for the first time in awhile. Felt during **handstands**. Better in 2 days.

2014 Oct 11L: L ant shld tender the day after **overhead press** and jumping to biceps stand. Felt during **dips**. Better in 11 days.

2015 Mar 23: Dull ache after bearcrawl and IR stretch. Better in 7 days.

2014 Feb 26th: L anterior shld pain the day after ab roller and **bench press**. Press motion hurt. Special test Negative. Better in 8 days.

2015 April 28: Tender points in deltoid found. Changed pushup technique and used LAX ball before pushing. No sx since.

2015 April 24: Sharp on top and dull ache inside. Noticed **ring pushups** were aggravating. Special test negative. Better in 7 days.