

Beyond Burnout

Mental Health and Neurodiversity in Engineering

James Meickle

SREcon 2018

March 28, 2018

About me

- Site Reliability Engineer at Quantopian
- Organizer at DevOpsDays Boston
- Formerly:
 - Site Reliability Engineer, Harvard
 - Developer Evangelist, AppNeta
 - Release Engineer, Romney 2012
- My life before tech:
 - Psychology
 - Political science
 - Public policy



Email: eronarn@gmail.com

LinkedIn: <https://www.linkedin.com/in/eronarn/>

Twitter: <https://twitter.com/jmeickle>

Web: <https://permadeath.com>

Content warnings

- Mental illness
- Medication and the medical system
- Coercive treatment
- Crisis
- Legal system
- **It's OK to leave and watch/read this talk later!**

Disclaimers

- I'm here as an **activist**
- **I am not a mental health professional.**
- **I am not a lawyer or an expert on employment law.**
- Recommendations are **US-centric** (what I know best)

I'm not taking questions on stage, but
you can find me after the talk!

(or on Twitter/Slack)

Engineering problems are usually people problems

- Competing goals and incentives
- Communication and coordination
- Setting expectations
- **Managing stress and mental health**

Ops best practice: reduce mental health burden

- Blameless postmortems
- Empathy
- Impostor syndrome
- Hero/martyr culture
- Burnout
- #hugops

Mental health: the overall state of our system

- General condition of well-being
- Influenced by stress, coping strategies, etc.
- Can have poor mental health without anything specific being wrong
- Direct parallel to physical health

Mental health matters for everyone, but...

Mental health matters for everyone, but...

It's much harder with a mental disorder.

~25%

of people have a mental
disorder at any one time

~50%

of people will have a mental
disorder during their life

Mental illnesses

"Health conditions involving changes in thinking, emotion or behavior"

"Associated with distress and/or problems functioning in social, work or family activities"

- Depression
- Anxiety
- Bipolar disorder
- Schizophrenia
- Eating disorders
- **And dozens more.**

What ISN'T a mental illness?

- Grief
- Burnout
- Political views
- Having emotions
- Being upset

Neurodevelopmental disorders

Neurodevelopmental disorders are disabilities associated primarily with the functioning of the neurological system and brain.

...can experience difficulties with language and speech, motor skills, behavior, memory, learning, or other neurological functions

- Learning disorders
- Autism
- Attention deficit hyperactivity disorder
- Traumatic brain injuries
- Face blindness
- Childhood lead exposure

Medical model vs. Neurodiversity

Medical model:

- Disorders cause deficits
- We should treat them

Neurodiversity:

- *Everyone's* mind is different
- Everyone is valuable regardless of how their mind works
- Being different is something to be happy about!

"...neurological differences are to be recognized and respected as any other human variation..."

Mental disorders are a hidden diversity problem

- A distinct group with horrible statistics on employment, happiness, etc.
- One of the few legally protected groups where discrimination is not only accepted but encouraged in mainstream representation

Mental disorders aren't evenly distributed

- Race, gender, and sexuality impact rates of diagnosis
- They also impact *what* diagnoses you receive
- Poverty impacts diagnosis, too

And they also impact access to treatment.

Mental health and mental disorders are orthogonal...

Good mental health

Poor mental health

No
Disorder

I'm occasionally sad or frustrated, but I don't have any psychiatric diagnosis or symptoms.

These on-call shifts are killing me. I'm not getting enough sleep and I can't concentrate.

Has
Disorder

I have a learning disorder, but it doesn't come up much at work, so it's not causing me stress.

My depression makes everything feel pointless, and lately I can't even enjoy my friends.

...but mental disorders are strongly correlated with poor mental health

Mental disorders can harm mental health directly

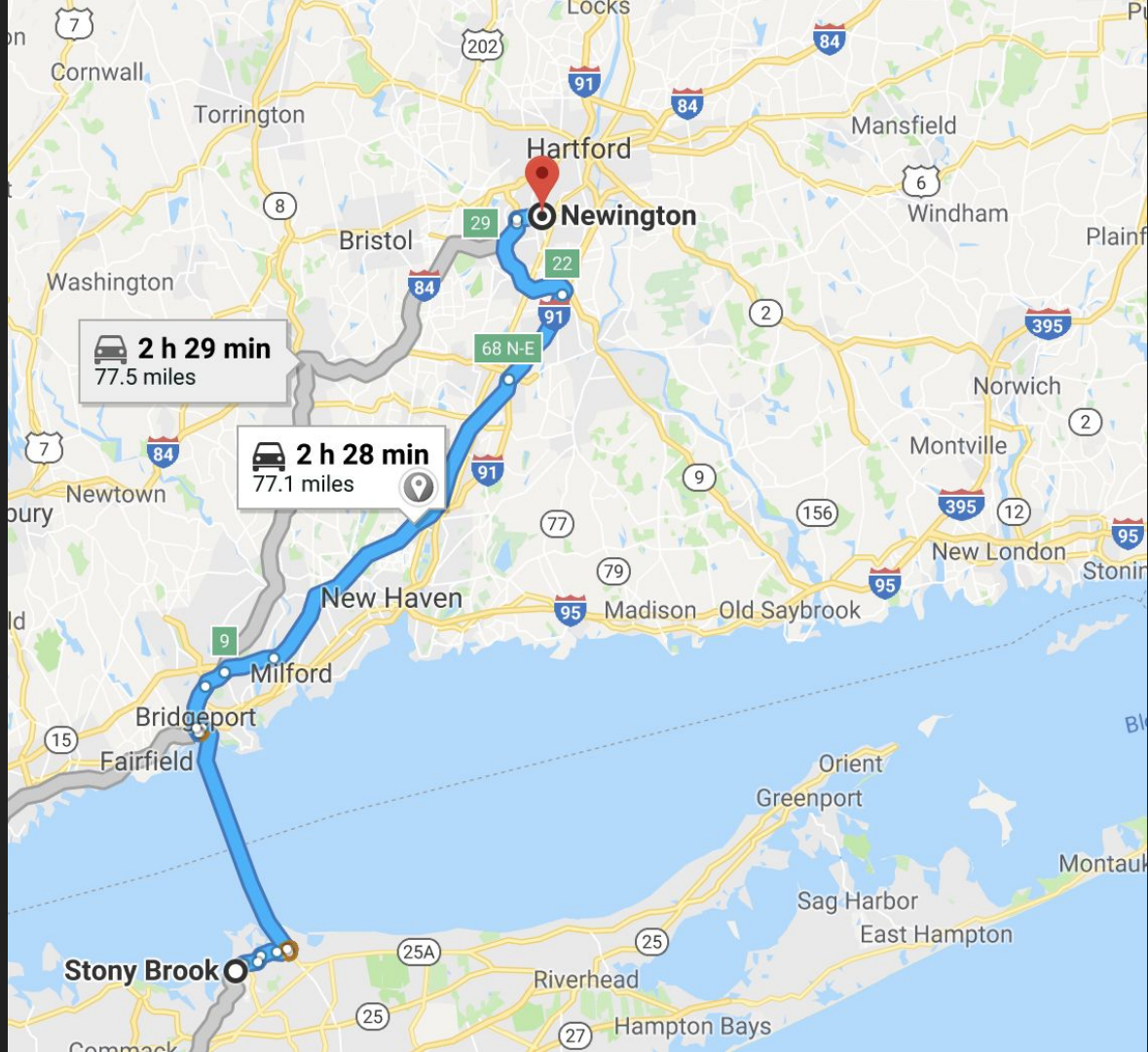
- Intrusive thoughts
- Uncontrollable behaviors
- Emotional dysregulation
- Difficulties with sleep, memory, attention
- Panic attacks, psychosis, and crisis

Mental disorder stigma can harm mental health

- Trouble making or maintaining friends
- Trouble maintaining employment
- Trouble explaining resume gaps
- Lack of professional credibility
- Having to stay "closeted"
- Lack of treatment

Treating mental disorders can harm mental health

- Time lost to managing condition
- Stress of dealing with insurance and appointments
- Side effects of medication and therapy
- Trauma from previous crises
- Trauma from previous treatment



SREs already make reliable systems
from unreliable components

Any "unreliability" from a mental disorder
is much smaller in scale than the
unreliability inherent in all humans

How do we care for engineers with
mental disorders?

Engineers are...

- Anxious
- Depressed
- Overworked
- Stressed
- Perfectionist
- Isolated
- Caffeine addicted
- Misanthropic



Engineers are doing just fine (on average)

- ~~Anxious~~
- ~~Depressed~~
- ~~Overworked~~
- ~~Stressed~~
- ~~Perfectionist~~
- ~~Isolated~~
- *Caffeine addicted?*
- ~~Misanthropic~~

The most stressful occupations are **low responsibility, low prestige, low pay, and low control.**

None of those apply to engineering *as an industry.*

There isn't a widespread mental health crisis among engineers.

There isn't a widespread mental health crisis among engineers.

There *is* a crisis in inclusivity for Americans with mental disorders, and engineers can fix our part of it.

Thoughts and prayers aren't scalable

- Attention and awareness always come at the cost of something else
- Personal experience doesn't transfer well to others
- Ending stigma doesn't address tangible barriers

Caring a lot about people with mental disorders isn't inclusive.

Evaluating your organization's systems to remove exclusionary policies and unintentional discrimination is inclusive.

~~How do we care for engineers with
mental disorders?~~

How can we make engineering
workplaces more inclusive for people
with mental disorders?

The Americans with Disabilities Act of 1990

- Defines disability and accommodations
- Tells employers how to handle accommodation requests
- Thousands of pages of documentation
 - Advisory rulings
 - Court briefs
 - Handbooks for managers
 - Handbooks for HR
 - Handbooks for employees

This includes mental disorders!

Accommodations are a *legal* obligation, not just a moral one!

Sanity isn't a business requirement, so
let's refactor and drop that dependency.

Let's talk SDLC:

Software Developer Life Cycle

Software Developer Life Cycle

- Application
- Interviewing
- Onboarding
- Compensation
- Benefits
- Job duties
- Working conditions
- Training
- Promotion

SDLC: Application

- Clearly identify essential functions
- Set expectations for hours worked and vacation schedule
- Describe the specifics of insurance and other benefits
- Use [joblint](#) on all postings

Antipattern: Cognitive and emotional requirements

- full stack developers
- with years of experience
- systems thinking and a security mindset
- and amazing communication skills
- who can deal with lots of internal customers
- in a way that demonstrates empathy
- while having lots of team cohesion
- even while everything is going wrong
- and also it's 2 AM

If you're wondering why SREs are hard to recruit - it's not just tech skills!

We need to draw boundaries between requirements for an *SRE team* vs. requirements for an *individual SRE*.

SDLC: Interviewing

- Minimize whiteboarding or other "exams"
- Avoid "puzzles" or artificially stressful situations
- Determine interview questions and success criteria in advance, and consistently apply them
- Avoid evaluations on "culture fit", awkwardness of social interactions, etc.
- Professional anti-bias training for hiring managers

SDLC: Onboarding

- Provide mental health rights and resource documents
- Maintain social aids: org/seat charts, lunch recs, in-jokes.
- Conduct post-hiring interviews and actively ask about needs and accommodations
- Avoid “exceptions” in accommodations by rewriting company policies to cover anyone in that situation

SDLC: Compensation

- Base salaries on objective criteria, not negotiation
- Don't base salaries on prior compensation
- Set compensation expectations for yearly reviews and bonuses in advance
- For large companies: create and publish reports on how mental disorders affect compensation

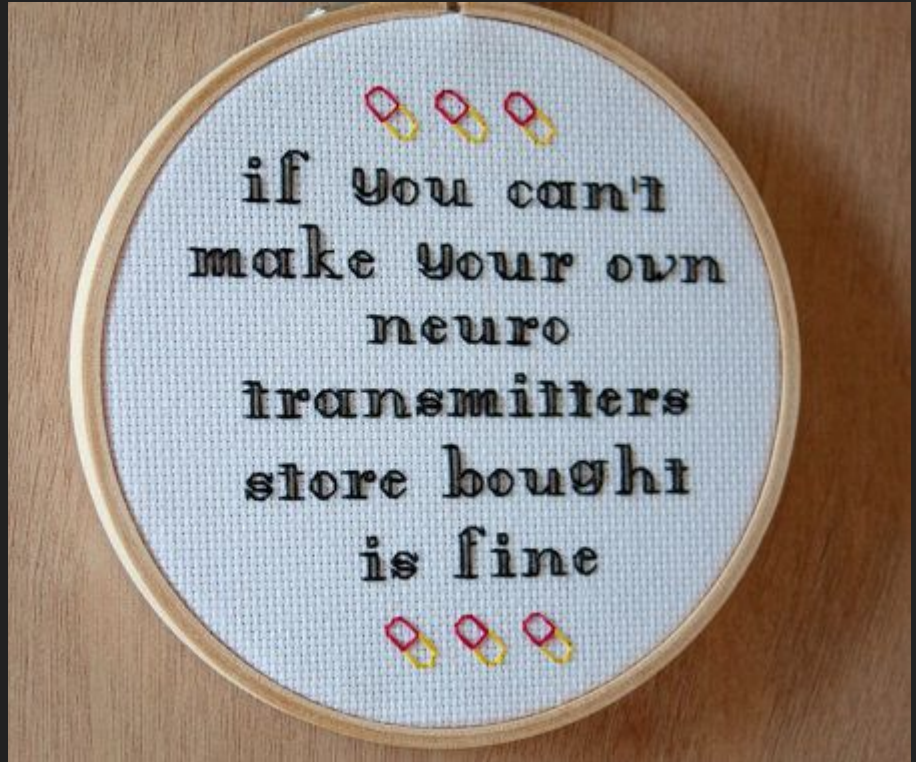
SDLC: Benefits

- Provide comprehensive mental health coverage
 - Including trans inclusive coverage!
- Switch from "unlimited vacation" to mandatory vacation
- Document sick days for mental health
- "Health benefits" should include mental health
- Hire professionals to help navigate benefits with employees, rather than expecting "professional patients"

Antipattern: Expectation of getting better

There are many legitimate reasons to avoid any kind of treatment, including therapy

- Expensive
- Time-consuming
- Limited efficacy
- Side effects
- Traumatic



SDLC: Job Duties

- Make most meetings and presentations optional
 - Preferably stream/record them
- Find alternatives to adversarial decision-making
- Value and promote many forms of contribution
- Don't expect every SRE to perform every SRE team duty

SDLC: Working Conditions

- Minimize unnecessary noise and distractions
- Have private offices available
- Have a formal flexible scheduling and remote work policy
- Don't require socializing on the company's terms
- **Don't tolerate jokes about mental disorders**
 - *except* from people who have them, because they're an **important coping mechanism**

SDLC: Training

- Provide training material in multiple formats
 - Consider a site-wide subscription service
- Establish a mentorship program
- Provide mental health education for managers, or an alternate way to regularly check in

Antipattern: Have you tried yoga?

- My aunt's friend's brother's niece says that it was great for her depression
- Dr. Phil had a great episode about it
- I think I read about it in a book, can't remember the name though. But it was really good! You should totally read it.
- Actually, I did a detox cleanse once, and I felt sooo much better



wiki How to Find Things to Talk About

[@jmeickle](#) after

- I feel great after I exercise

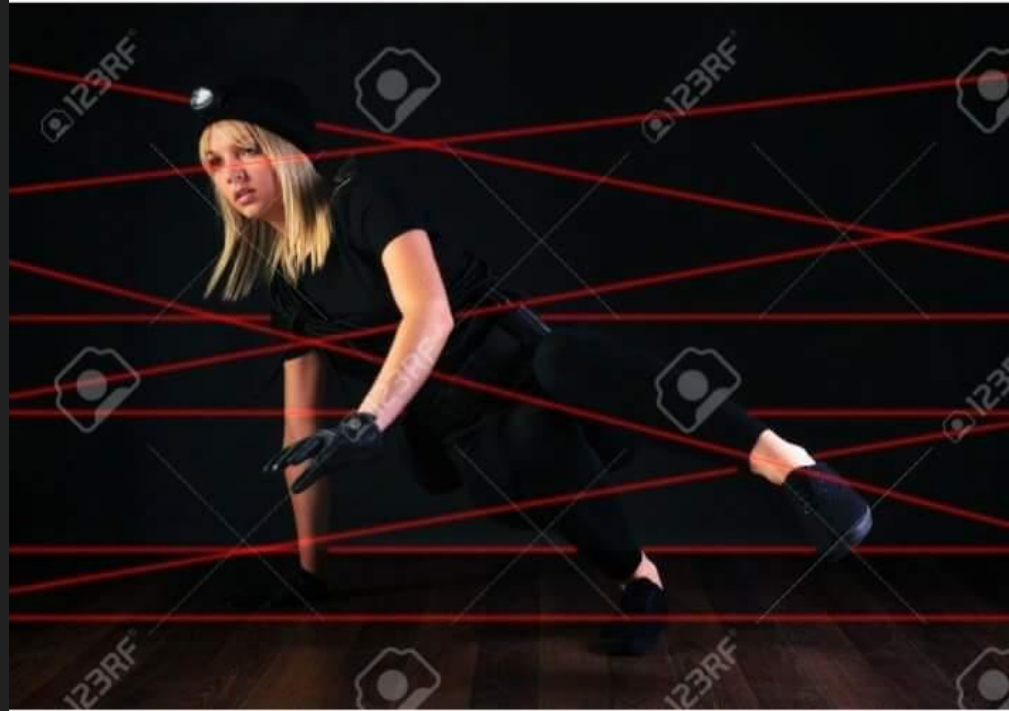
SDLC: Promotion

- Don't require increasing responsibility over time
- Have multiple promotion tracks for different skillsets
- Examine whether the criteria for advancement have implicit ability requirements
 - Coordinating or managing people
 - Presenting at conferences or traveling
 - Long hours or on-call shifts
- Don't "protect" people from career-enhancing work

Antipattern: Paternalism

- Don't try to protect people from themselves
- At best, it's humiliating
- At worst, it can reduce someone's capabilities

trying to be honest with my therapist but not so honest that get involuntarily hospitalized



Pattern: Consent Culture

- People should decide what happens to them
- Find out their goals and constraints
- Make offers, not impositions
- Avoid coercion

"Don't assume when you can ask!"

...and if it's not safe to ask, how can you change that?

"Do you want suggestions or do you want sympathy?"

A final note on crisis

- Provide training to managers on mental health crisis
- Regularly provide phone and digital help lines
- Ask about emergency mental health contacts in advance
- Weigh all of your options before coercing someone into leave or treatment
- **Don't call the police unless you are comfortable with the consequences, up to and including death.**

Always keep consent and autonomy in mind, even when it's not convenient.

If we all become inclusive, we all benefit!

- Remote workers
- People experiencing grief
- New parents
- Disabled employees
- Junior employees
- Women in engineering
- Hiring managers
- **You!**

Next steps

- Get your boss to watch this talk. (Apply recursively.)
- Have them get your HR department to watch this talk.
- Buy them copies of OSMI's books: <https://osmihelp.org>
- **Let's build inclusive systems together!**

Organizations to follow

- Open Sourcing Mental Illness: <https://osmihelp.org>
- mhprompt: <http://mhprompt.org>
- burnout.io: <http://burnout.io/en/latest/furtherReading.html>
- Trans Lifeline: <https://www.translifeline.org>
- NAMI: <https://www.nami.org>
- National Institutes of Mental Health:
<https://www.nimh.nih.gov/health/topics/index.shtml>

April is Autism Awareness Month!

TBD at



Thank you!

(Find me later for questions!)