

# Identifying patients at risk of developing chronic postsurgical pain:

## results of a pilot perioperative mental health screening program

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# Disclosures

- Theresa Lii has documented that she has nothing to disclose.
- This presentation does not contain off-label or investigational use of drugs or products.



# Learning Objectives

- Postoperative complications associated with depression
- How to implement a validated depression screening tool in the perioperative setting

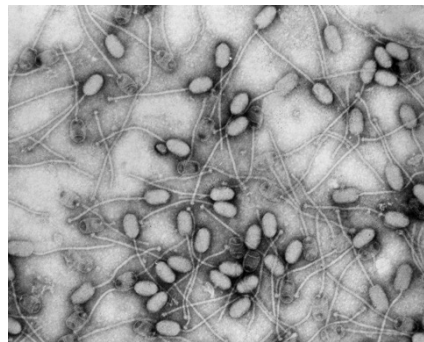


# Background: Why screen for depression?

- Depression is associated with numerous complications after



More postop delirium



More infections



More acute & chronic pain,  
higher/longer opioid use

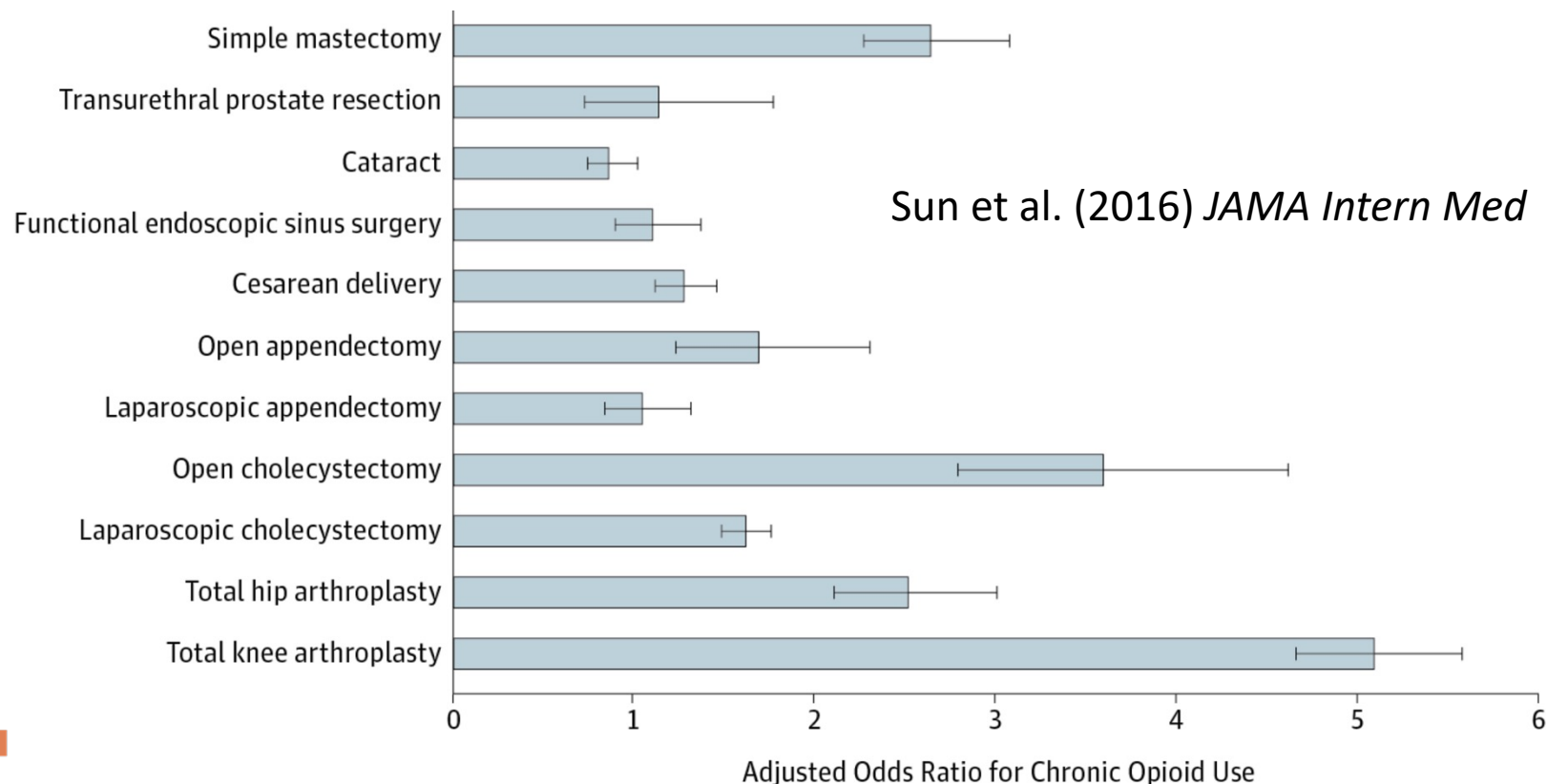


Longer hospital  
LOS

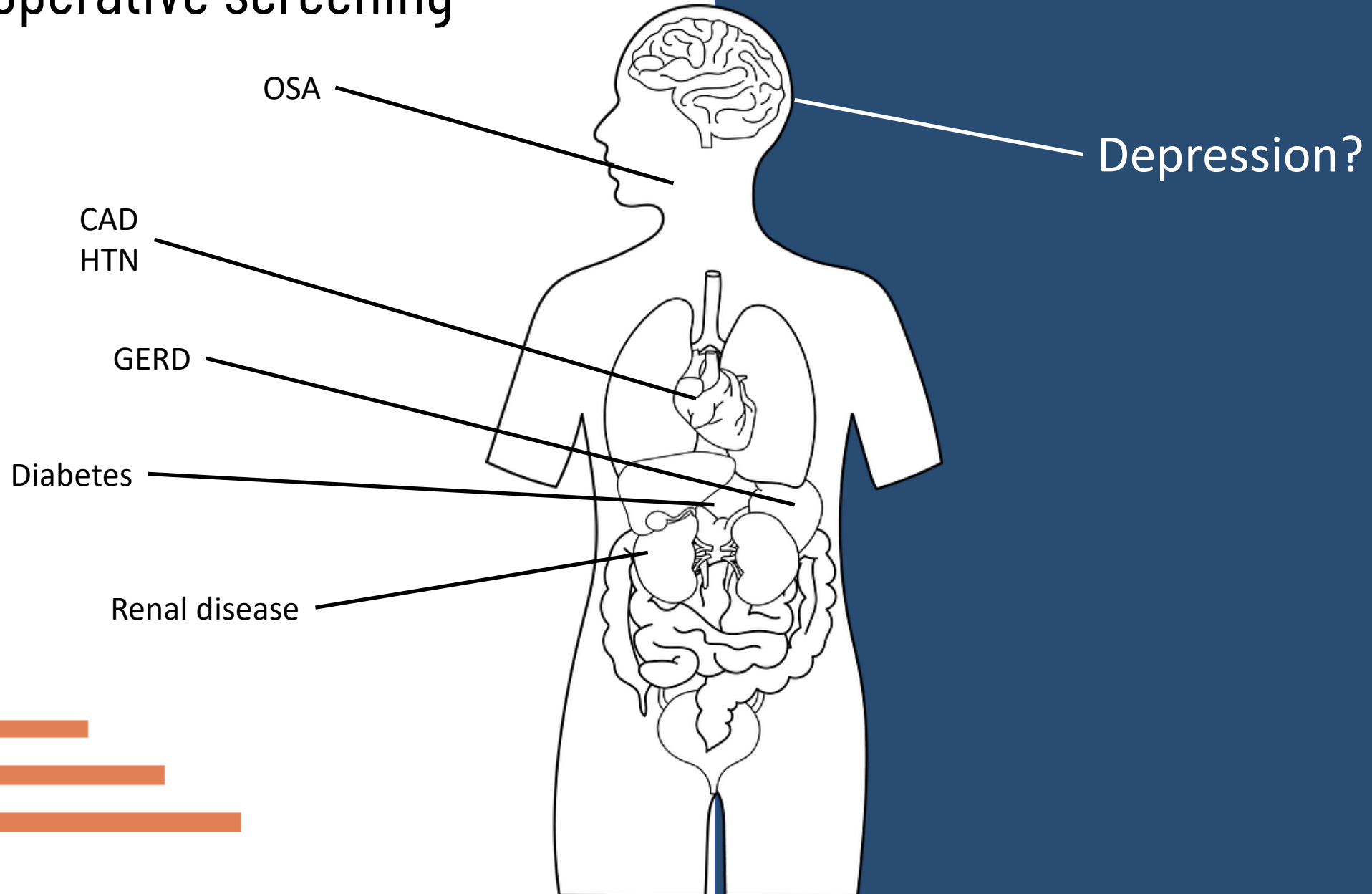


# Background: Why screen for depression?

Chronic opioid use is a well-described complication of surgery



# Perioperative screening



# Project aims

- Determine **feasibility** and **patient engagement** of a perioperative mental health screening program
- Estimate the **prevalence** of **symptomatic depression** in presurgical patients considered to be at **high risk** of having depression



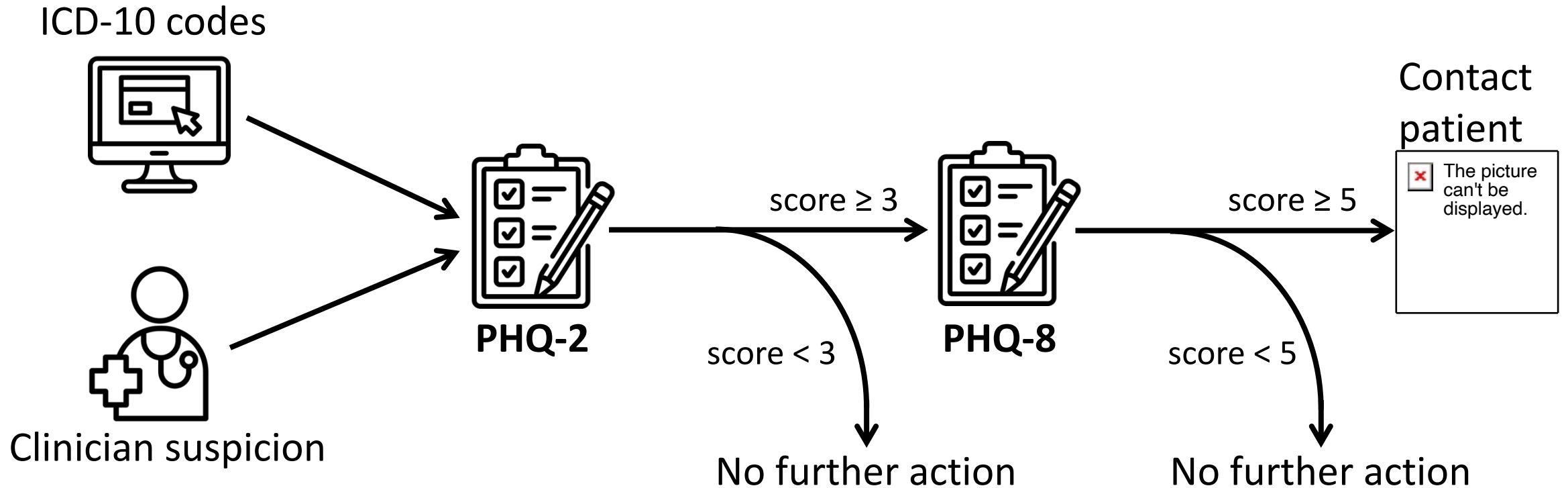
# Methods

- Retrospective analysis of an IRB-exempt QI project
- Screening took place over 11 months (11/23/2020-10/15/2021)
- 16,650 patients scheduled for eligible surgeries
- 1,921 adults screened for symptomatic depression using the Patient Health Questionnaire (PHQ)





# Screening pathway



# Patient Health Questionnaire



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# Depression screening results

## PHQ-2 Response Rate

**312 (16%)**  
No response



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## Score Breakdown



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**382 (24%)**  
PHQ-8  $\geq 5$

## Depression Diagnosis in Chart?



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No  
**131 (34%)**



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# Intervention pathways for depressed surgical patients



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Depressed: 382

(-) Diagnosis code: 125

Accepted referral: 58

Sought outside care: 31

Declined referral: 36

(+) Diagnosis code: 238

Accepted referral: 121

Sought outside care: 92

Unable to contact: 19

Declined referral: 25

# Patient responses to being contacted

- Overall, 47% of patients with symptomatic depression accepted mental health referrals
- 32% were satisfied with their current treatment
- 16% did not have any treatment and declined referrals
- 5% could not be contacted
- **26% were not receiving any treatment for depression**



# Key Findings

- **High level of engagement:** 84% response rate
- **High yield:** Of those screened, **24% had symptomatic depression**
  - 34% symptomatic patients did not carry any depression-related ICD codes (these were clinician identified)
- **26% of symptomatic patients were not being treated for depression** at time of screening
- The majority of symptomatic patients accepted some form of intervention, including mental health referrals

# Future directions

- ***Path 1: Targeted depression screening using the PHQ:***
  - Demonstrated feasibility in a busy surgical center
  - High patient engagement and high yield
  - Identifies untreated/under-treated patients
- ***Path 2: Universal depression screening:***
  - Substantial % have symptomatic depression ***in the absence of a documented diagnosis***



# Future directions

- Replicate/bolster findings with a larger clinical sample
- Consider piloting universal depression screening
- Hypothesis testing: **Does optimizing mental health in the perioperative period lead to improved postoperative outcomes?**





# Key references:

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# Thank you!



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