Hospital-Based Assessment of Depression and Suicide

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Objectives

- Why screen for depression?
- Why screen for depression in general medical hospitals?
- What are the regulatory requirements around depression and suicide?
- Case Example: Cedars-Sinai
- Future directions

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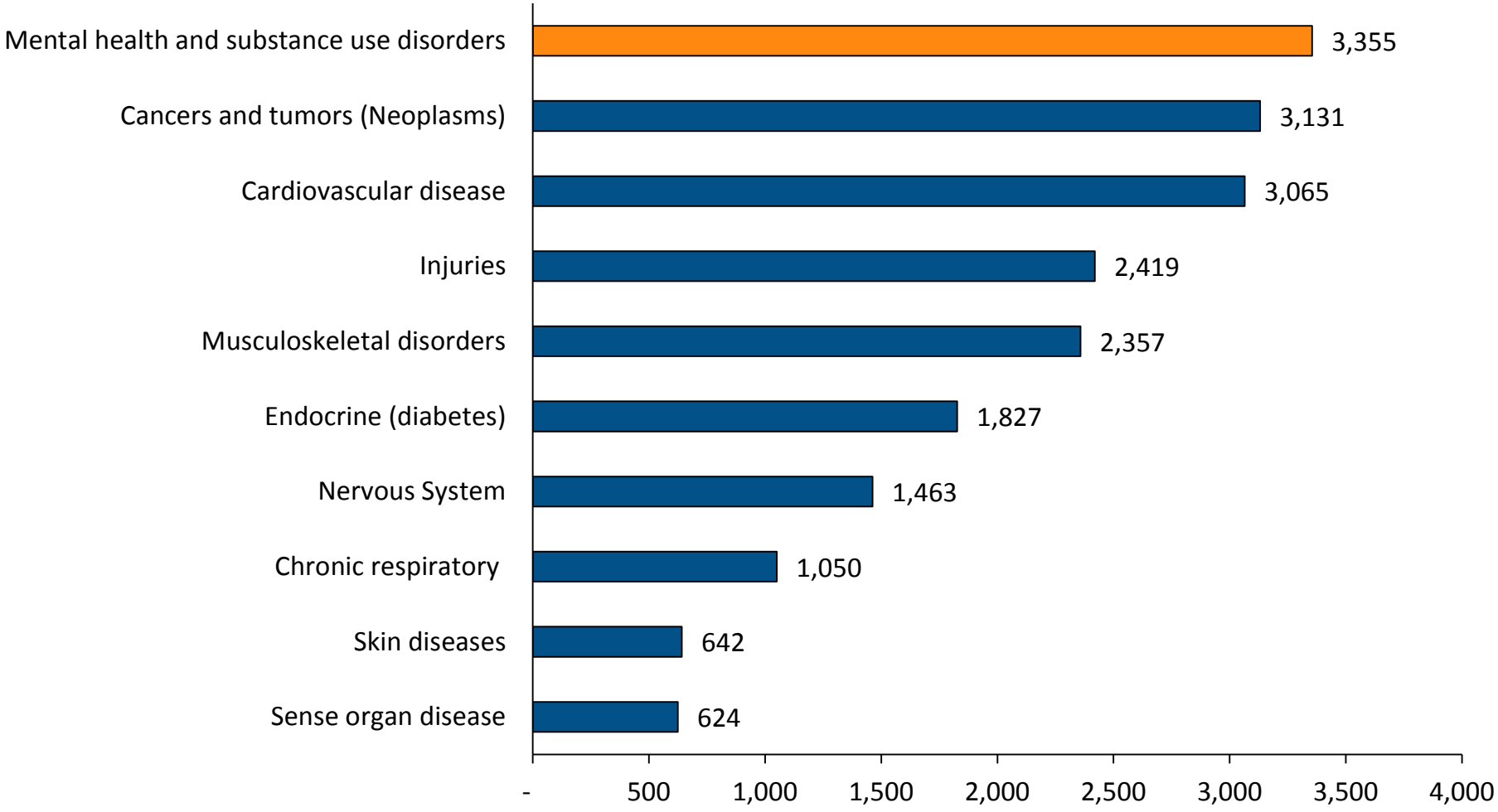
Mental health and substance use disorders are the leading cause of disease burden in the U.S.



Age standardized disability adjusted life years (DALYs) rate per 100,000 population, both sexes, 2015

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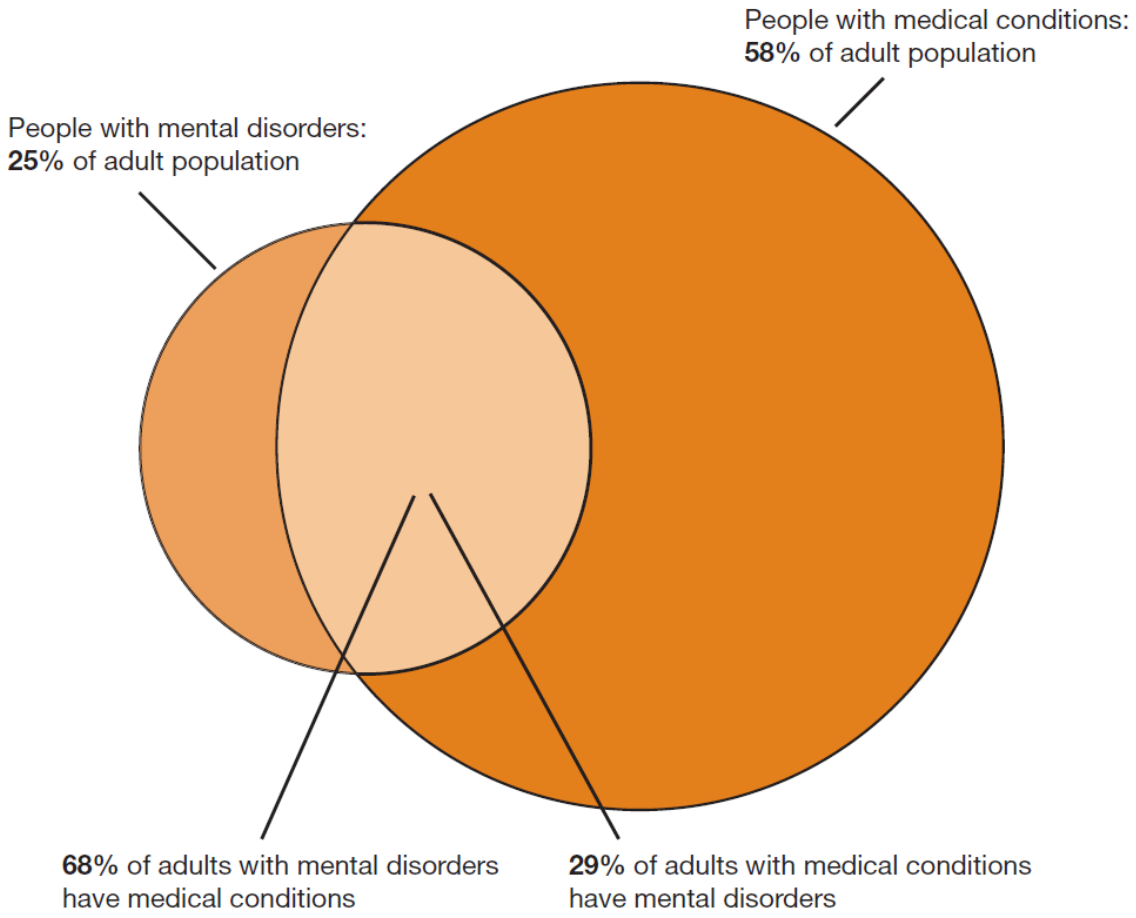
Source: Institute for Health Metrics and Evaluation. Global Burden of Disease Study 2015 (GBD 2015). Available at: http://ghdx.healthdata.org/gbd-2015

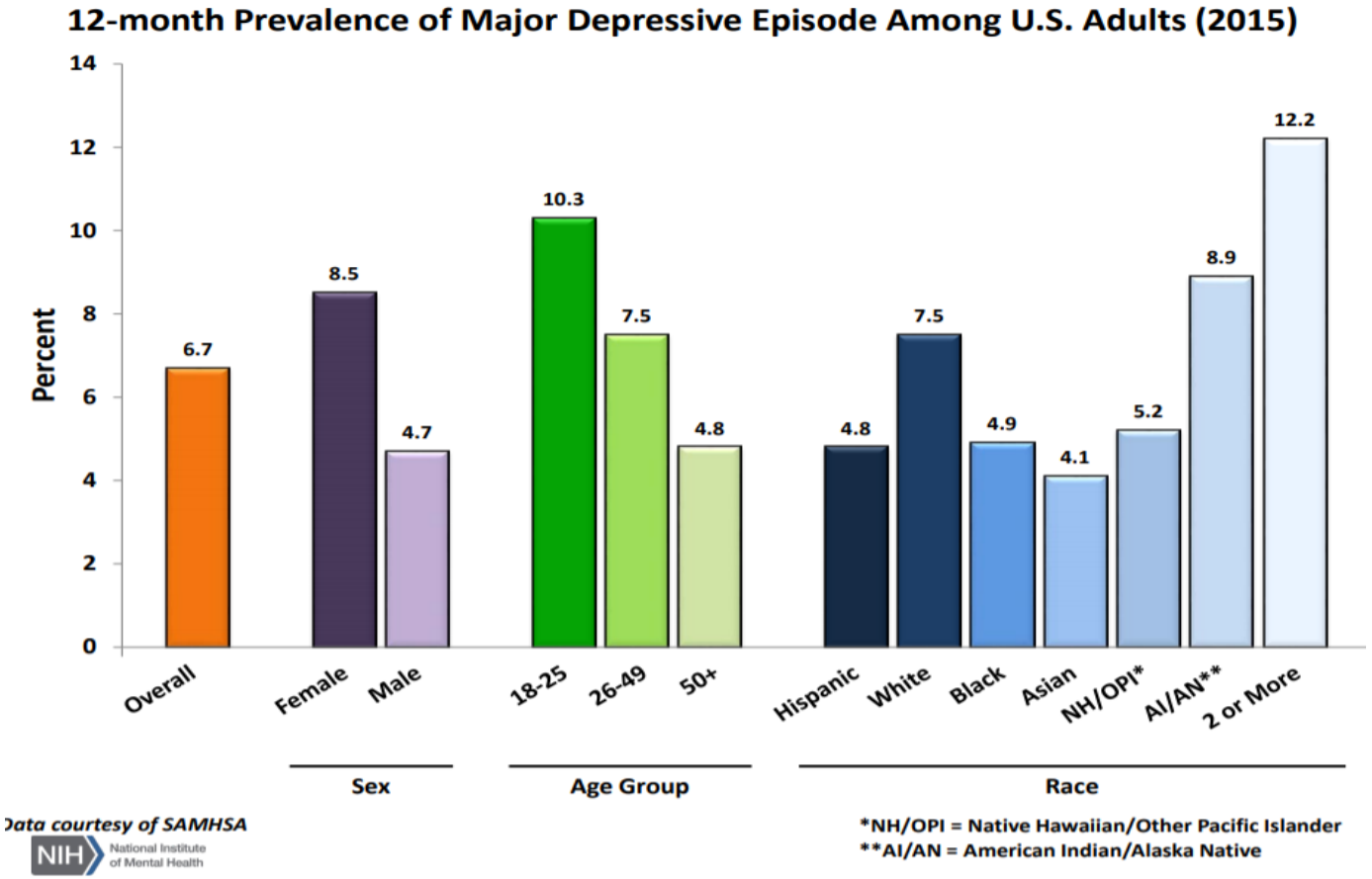
Comorbidity is common



Source: Adapted from the National Comorbidity Survey Replication, 2001–2003 (3, 83)

Prevalence of Depression in the US

6.7% of all US adults experienced at least one MDD episode in 2015.



Source: Major Depression Among Adults. (n.d.). Retrieved Oct 31, 2017, from https://www.nimh.nih.gov/health/statistics/prevalence/major-depression-among-adults.shtml

Impact of Depression

Disabling	• #2 cause of disability (WHO)
Exacerbating	• Symptom burden; Course of illness; Clinical outcome • Adherence to self care; Satisfaction
Costly	• Outpt visits; ED; Hosp; Pharm; LOS; Readmission • 50-100% higher health care costs
Deadly	• Over 30,000 suicides / year • (38-76% of completers saw their PMD in prior mo)
Treatment Works	• Therapy; Medications • Behavioral interventions; Self-Care

Screening for Depression in Adults
US Preventive Services Task Force Recommendation Statement

DESCRIPTION Update of the 2009 US Preventive Services Task Force (USPSTF) recommendation on screening for depression in adults.

METHODS The USPSTF reviewed the evidence on the benefits and harms of screening for depression in adult populations, including older adults and pregnant and postpartum women; the accuracy of depression screening instruments; and the benefits and harms of depression treatment in these populations.

POPULATION This recommendation applies to adults 18 years and older.

RECOMMENDATION The USPSTF recommends screening for depression in the general adult population, including pregnant and postpartum women. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up. (B recommendation)

JAMA. 2016;315(4):380-387. doi:10.1001/jama.2015.18392

*Grade B: The USPSTF recommends the service. There is high certainty that the net benefit is moderate, or there is moderate certainty that the net benefit is moderate to substantial.

Albert L. Siu, MD, MSPH; and the US Preventive Services Task Force (USPSTF). JAMA. 2016;315(4):380-387. doi:10.1001/jama.2015.18392

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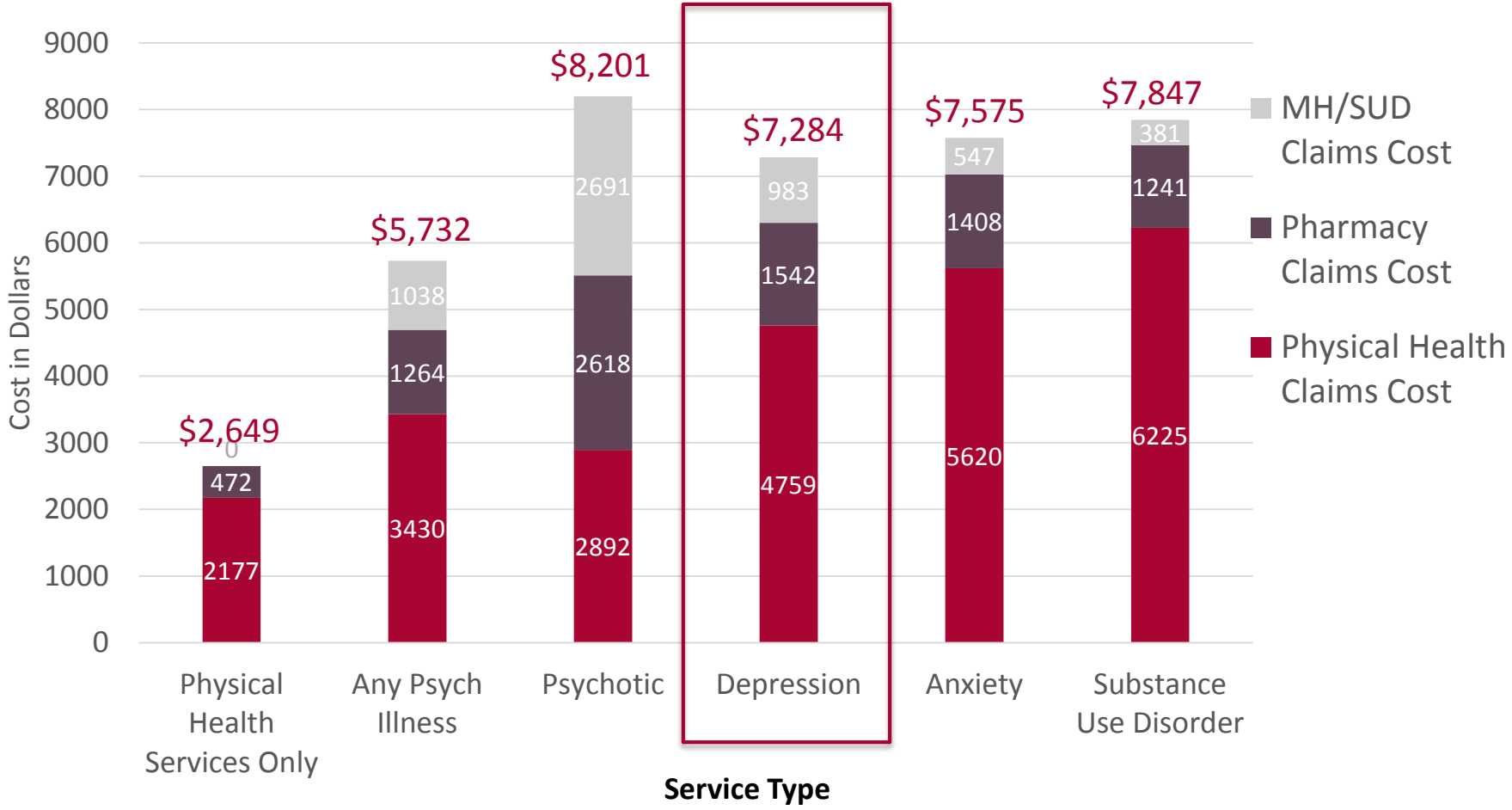
Depression is over-represented in general medical inpatients

	Community	Primary Care	General Hospital
Any Disorder	**16%**	**21-26%**	**30-40%**
Major Depression	2-6%	5-14%	8-18%
Panic	0.5%	11%	***
Somatization	0.1-0.5%	2.8-5%	2-9%
Delirium	1%	***	15-30%
Substance Use	2.8%	10-30%	20-50%

SOURCE: Cole S, Saravay SM, 1997, et al, Kendall Hunt Publishing Co. , Dubuque Iowa, 1997 Hansen MS et al, 2001; J Psychosomatic Res. Maldonado JR, Crit Care Clin 2008. Boettger S et al Psychosomatic Med. Blumenfield&Strain 2006

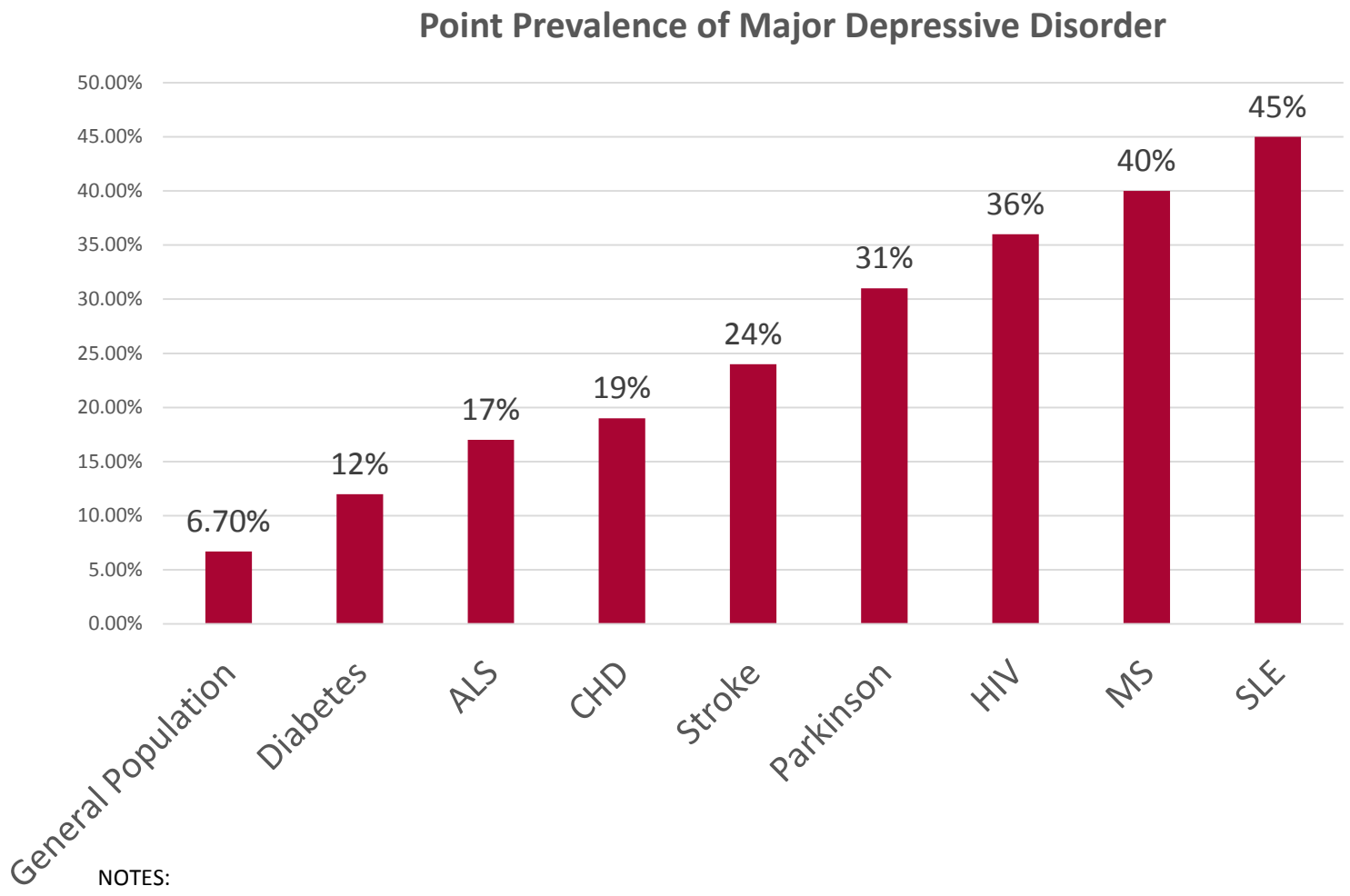
Depression is associated with increased cost of care

Claims expenditures for 6,500 Medicaid patients with and without MH/SUD service use



SOURCE: Thomas et al, Psych Serv 56:1394-1401, 2005

Prevalence of depression across other medical conditions



NOTES:
ALS = amyotrophic lateral sclerosis; CHD = coronary heart disease; HIV = human immunodeficiency virus; MS = multiple sclerosis; SLE = systemic lupus erythematosus

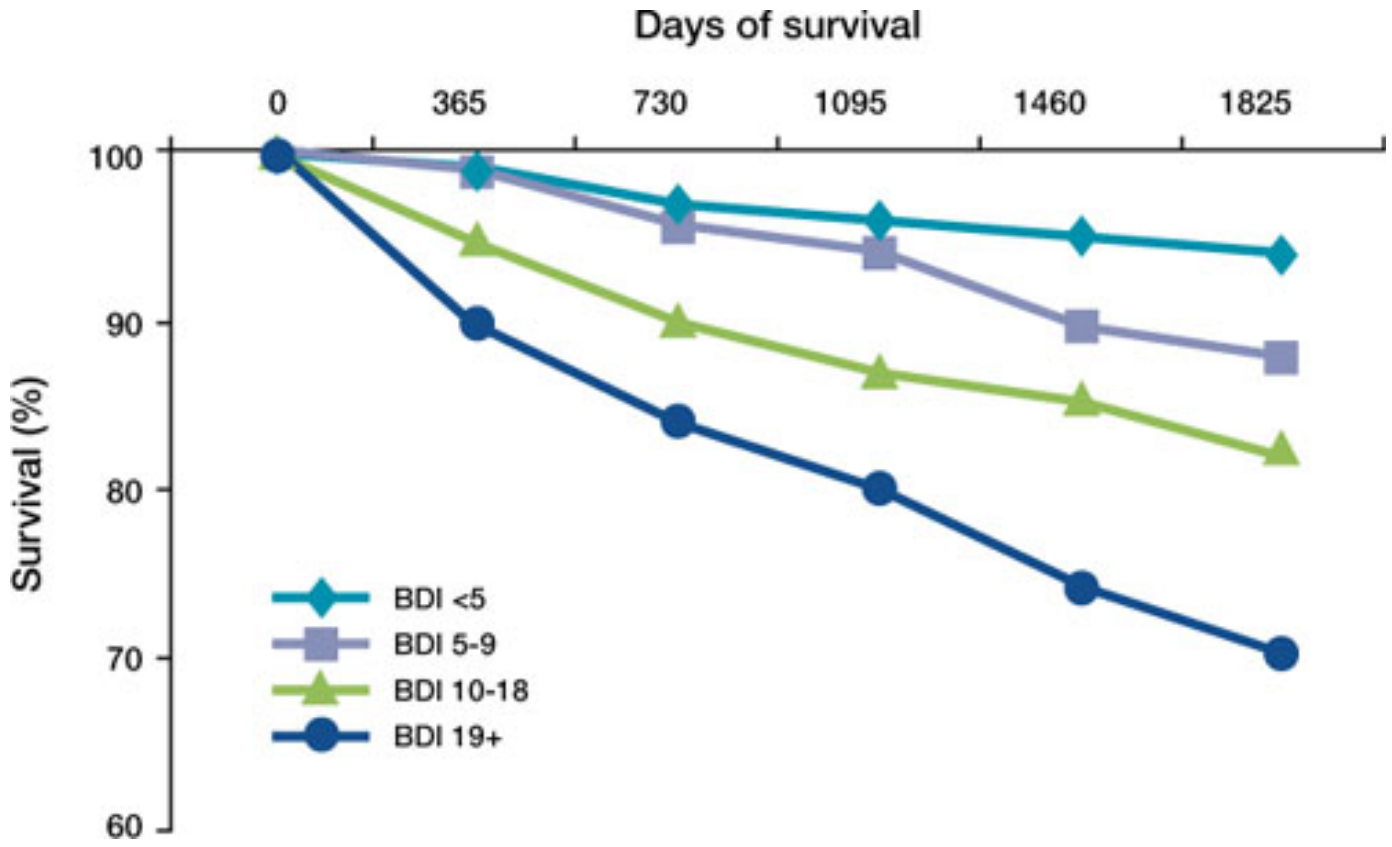
SOURCE: Sadock BJ et al. Kaplan and Sadock's Comprehensive Textbook of Psychiatry (9th ed.) Lippincott Williams & Wilkins: 2009; Psychosomatic Medicine; Sg2 Analysis, 2010

Ex. Impact of depression on outcomes in CV disease

Cardiovascular Illness	Impact of Depression
Coronary artery disease	40% ↑ risk of cardiac events
Unstable angina	3x ↑ of cardiac death at 1year
Post-MI	4-6x ↑ mortality
Congestive heart failure	50% survival vs. 78% survival

SOURCE: Frasure-Smith, et al., Circulation; 1995:999; Lesperance, et al. J. Am Coll Cardiol. 1998; Freedland. Psychosom Med.. 1998

Single greatest predictor of cardiac death over 5 years is depression score in hospital after heart attack



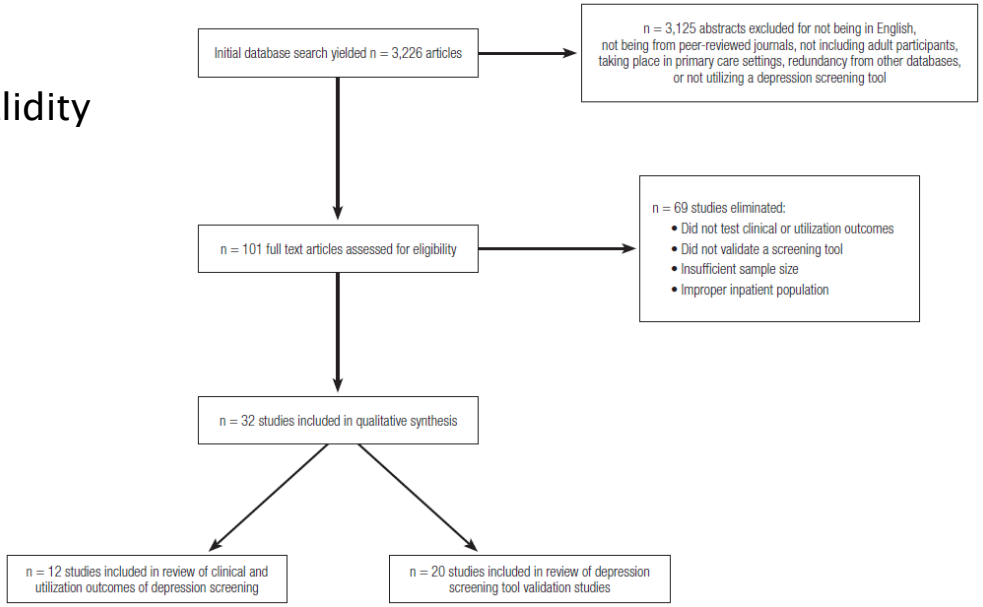
Long-term survival (days post-discharge) after myocardial infarction (MI) in relation to Beck Depression Inventory (BDI) score during hospitalization

Source: Lespérance F, et al. Five-year risk of cardiac mortality in relation to initial severity and one-year changes in depression symptoms after myocardial infarction. Circulation. 2002

Screening for depression in hospitalized medical patients (Review of publications)

- **Addressed two questions:**
  - Performance of depression screening tools in gen hospital
  - Associations between depression and patient outcomes
    - PRISMA Guidelines; 1990-2016

- **Findings**
  - 20 Studies Assessed prevalence and validity
    - Prevalence 34% (15-60% range)
    - Sensitivity 78%; Specificity 80%
  - 12 Studies Assessed outcomes
    - Increased 30d readmission
    - Increased LOS
    - Increased morbidity/mortality
    - Decreased QOL



- **Overall**
  - Diverse instruments used; Brief instruments had good performance
  - Mental health training not necessary
  - Screening not particularly burdensome to patients or staff

IsHak WW, Collison K, Danovitch I, Shek L, Kharazi P, Kim T, Jaffer KY, Naghdechi L, Lopez E, Nuckols T. Screening for depression in hospitalized medical patients. J Hosp Med. 2017 Feb;12(2):118-125.

General Medical Hospitals represent a significant opportunity to identify and treat depression

Failure to Detect, Diagnose, and Treat

- Only 13% of eligible patients have antidepressants begun in the hospital
- Only 11% of untreated depressions will begin treatment during the year after discharge

Post-Discharge Impact

- Increased risk of all-cause re-hospitalization
- Increased mortality in MI; Stroke

Sentinel Events

- Suicide is among the Top 5 sentinel events in The Joint Commission's database

Koenig et al 1997 Saravay SM, et al, 1996; Lustman et al, 1997. Glassman and Shapiro, 1998.Eaton WW, ed., Medical and Psychiatric Comorbidity Over the Course of Life, 2006, American Psychiatric Publishing

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Regulatory Requirements around Depression and Suicide

The Joint Commission

ZERO SUICIDE

Joint Commission requirements related to detecting and treating patients with suicide ideation	Hospital	Ambulatory	Behavioral health	Home care	Nursing care center	Office-based surgery
Care, Treatment, and Services						
CTS.02.01.01			✔			
Environment of Care						
EC.02.01.01			✔			
EC.02.06.01	✔					
National Patient Safety Goal						
NPSG.15.01.01, EPs 1, 2, 3	✔		✔			
Performance Improvement						
PI.01.01.01			✔			
Provision of Care, Treatment, and Services						
PC.01.01.01 EP 24	✔					
PC.01.02.01	✔					
PC.01.02.13	✔					
PC.04.01.01	✔	✔		✔	✔	✔

- **Suicide is among the Top 5 sentinel events in The Joint Commission's database.**
- "The Joint Commission will place **added emphasis on the assessment of ligature, suicide and self-harm observations** in…inpatient psychiatric patient areas in general hospitals" (March 1, 2017)

https://www.jointcommission.org/assets/1/6/SEA_suicide_TJC_requirements.pdf
Accessed December 5th, 2017

Actions suggested by The Joint Commission

Detecting SI in Acute Care Settings

Review each patient's personal and family medical history for suicide risk factors.	Screen all patients for suicide ideation, using a brief, standardized, evidence-based screening tool.	Review screening questionnaires before the patient leaves the appointment or is discharged.

Taking Immediate Action and Safety Planning

Use assessment results to implement specific safety measures	Establish a collaborative, ongoing, and systematic assessment and treatment process with the patient involving the patient's other providers, family and friends as appropriate.	To improve outcomes for at-risk patients, develop treatment and discharge plans that directly target suicidality.

Education and Documentation

Educate all staff in patient care settings about how to identify and respond to patients with suicide ideation.	Document decisions regarding the care and referral of patients with suicide risk.

Source: Sentinel Event Alert, Issue 56, February 24, 2016 (https://www.jointcommission.org/assets/1/18/SEA_56_Suicide.pdf)

Risk Factors for Suicide in Hospitals

Patient Risk Factors	• Mental or emotional disorders • Previous Suicide attempts or history of self-inflicted injury • Suicidal thoughts or behaviors • History of Trauma • Drug or alcohol abuse • Chronic or intense acute pain; Chronic medical disability • Prescribed medications, including those known to cause behavioral changes • Social isolation or antisocial behavior • Social stressors
Physical Environment	• Unsecured environment, such as access to stairways and unsecured windows • Ability of visitors to bring in contraband • Opportunities to be alone without supervision (e.g. bathrooms, closets) • Access to anchor points for hanging • Access to materials that can be used for self-harm (e.g. sharps, sheets, plastic bags, etc.)
Systemic Care	• Inadequate care planning and observation • Inadequate screening and assessment • Insufficient staff orientation and training • Inadequate staffing, including lack of one-on-one sitters for suicidal patients when necessary • Lack of information about suicide prevention and referral resources • Poor staff communication

Source: Lippincott Advisor (http://advisor.lww.com/lna/document.do?bid=33&did=558497&hits=suicide,suicides)

HEDIS Depression Measures

HEDIS Depression Measures – Electronic Clinical Data

Depression Screening and Follow-up for Adolescents and Adults (DSF)

- NQF 0418, 0418:3132

Utilization of the PHQ-9 to Monitor Depression Symptoms for Adolescents and Adults (DMS)

- NQF 0712

Depression Remission or Response for Adolescents and Adults

- NQF 0711 and 1884

**All measures are found in HEDIS 2018 Volume 2*

Depression CMS Quality Measures

Merit-based Incentive Payment System (MIPS) Quality Measures

Preventative Care and Screening: Screening for Depression and Follow-Up
- eMeasure ID: CMS2v6, Quality ID: 134, High Priority Measure: No

Depression Remission at Six Months
- eMeasure ID: N/A, Quality ID: 411, High Priority Measure: Yes

Depression Remission at Twelve Months
- eMeasure ID: CMS159v5, Quality ID: 370, High Priority Measure: Yes

Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance
- eMeasure ID: CMS169v5, Quality ID: 367, High Priority Measure: No

Depression Utilization of the PHQ-9 Tool
- eMeasure ID: CMS160v5, Quality ID: 371, High Priority Measure: No

Maternal Depression Screening
- eMeasure ID: CMS82v4, Quality ID: 372, High Priority Measure: No

Source: American Psychiatric Association (https://www.psychiatry.org/psychiatrists/practice/quality-improvement/quality-measures-for-mips-quality-category)

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Case Example: Depression Screening at Cedars-Sinai

Need: In Spring 2014, Cedars-Sinai launched a hospital-wide depression screening initiative. This was prompted by recognition that untreated depression leads to poorer health outcomes and affects treatment compliance for patient with medical illnesses, as well as a reorganization of mental health services within the medical center.

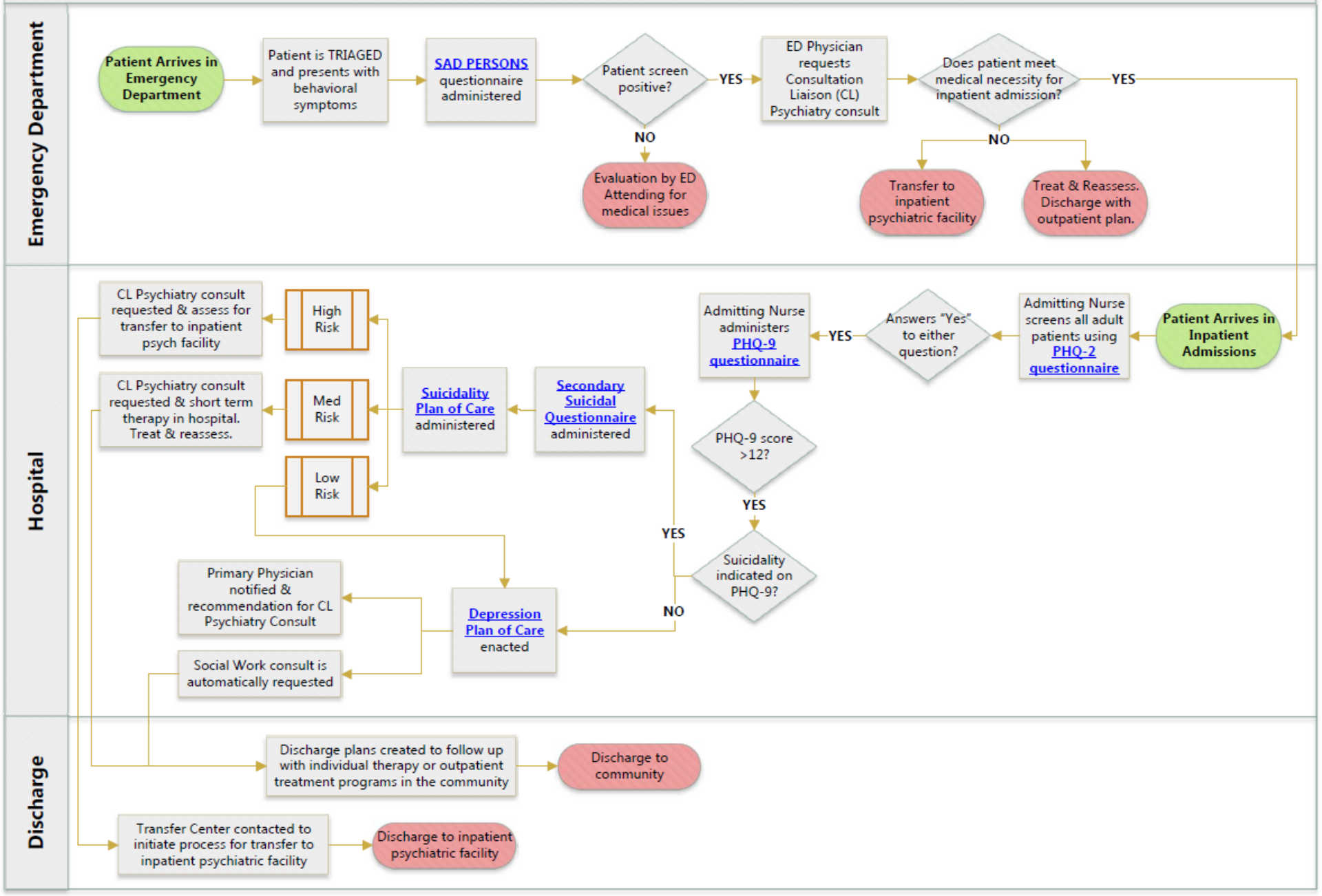
Cedars-Sinai Medical Center by the numbers:

- 886 licensed beds
- 58,000 inpatient admissions
- 90,000 emergency visits
- 254,668 patient days
- Over 15,000 employees
- 2,758 nurses
- 2,156 medical staff

Cedars-Sinai Units where Behavioral Health Patients are Treated

Emergency Department Pavilion	Designated Inpatient Unit (Safety Quad)	Non-Designated Inpatient Units
• 3 bed unit within the Emergency Department • Staff: dedicated nurse, mental health worker, and security guard • Patients who require constant observation are placed in this unit	• 4 bed unit on our inpatient floors • Staff: dedicated security guard and nursing staff that are trained and experienced to treat patients with behavioral disorders • Patients who exhibit assaultive behaviors are placed in this unit due to the skilled staff in the unit	• Patients with secondary behavioral health diagnosis may be placed in any other unit within the hospital • Special safety precautions are enacted for individuals who screen for suicidal ideation

Depression Screening Work Flow: Cedars-Sinai



Case Example: Cedars-Sinai

ED
(behavioral)

- SADPERSONS
- 2° Risk Assessment

S: Male sex
A: Age (<19 or >45 years)
D: Depression
P: Previous attempt
E: Excess alcohol or drug use
R: Rational thinking loss
S: Social supports lacking
O: Organized plan
N: No spouse
S: Sickness

Hospital
(all admissions)

- PHQ2
- PHQ9
- 2° Risk Assessment

Nursing Depression Risk Screen: PHQ2

Upon admission, the RN is presented with 2 primary screening questions related to depression:

Depression Screen (PHQ-2)	
During the past month, have you often been bothered by having little interest or pleasure in doing things?	No Yes
During the past month, have you often been bothered by feeling down, depressed, or hopeless	No Yes

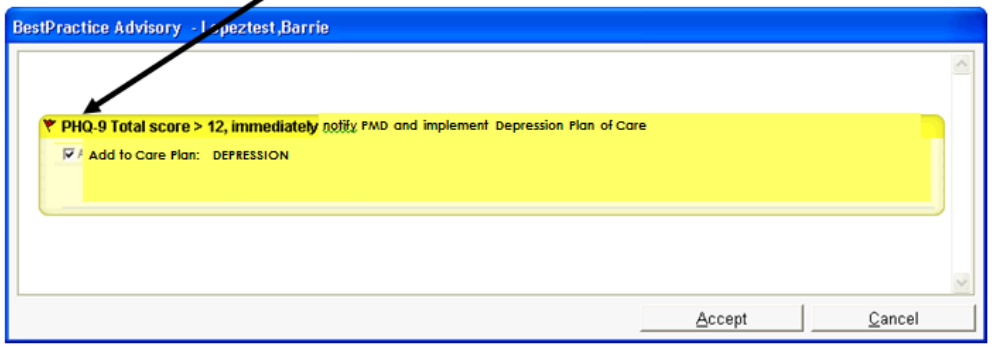
- A “No” answer to both questions would end the screen.
- A “Yes” answer to either question would cascade to the PHQ-9 depression screening questions (next slide).

Nursing Depression / Suicide Risk Screen: PHQ9

Depression / Suicide Risk Screen (PHQ-9)

In the last 2 weeks have you had little interest or pleasure in doing things.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you been feeling down, depressed or hopeless.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you had trouble falling asleep, staying asleep or sleeping too much.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you been feeling tired or having little energy.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you have you had a poor appetite or been overeating.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you been feeling bad abouit yourself – or that you'r a failure or have let yourself or family down.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you had trouble concentrating on things, such as reading the newpaper or watching television.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you been moving or speaking so slowly that other people could have noticed. Or, the opposite – been so fidgety or restless that you have been moving around a lot more than usual.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
In the last 2 weeks have you had thouths that you would be better off dead or of hurting yourself in some way.	0 = Not At All	1 = Several Days	2 = More than Half the Days	3 = Nearly Every
	For any response other than "Not At All", immediately initiate suicide precautions and initiate a Suicide Risk Plan of Care, notify physician and recommend consideration of a psychiatry consult.			
PHQ-9 Score				

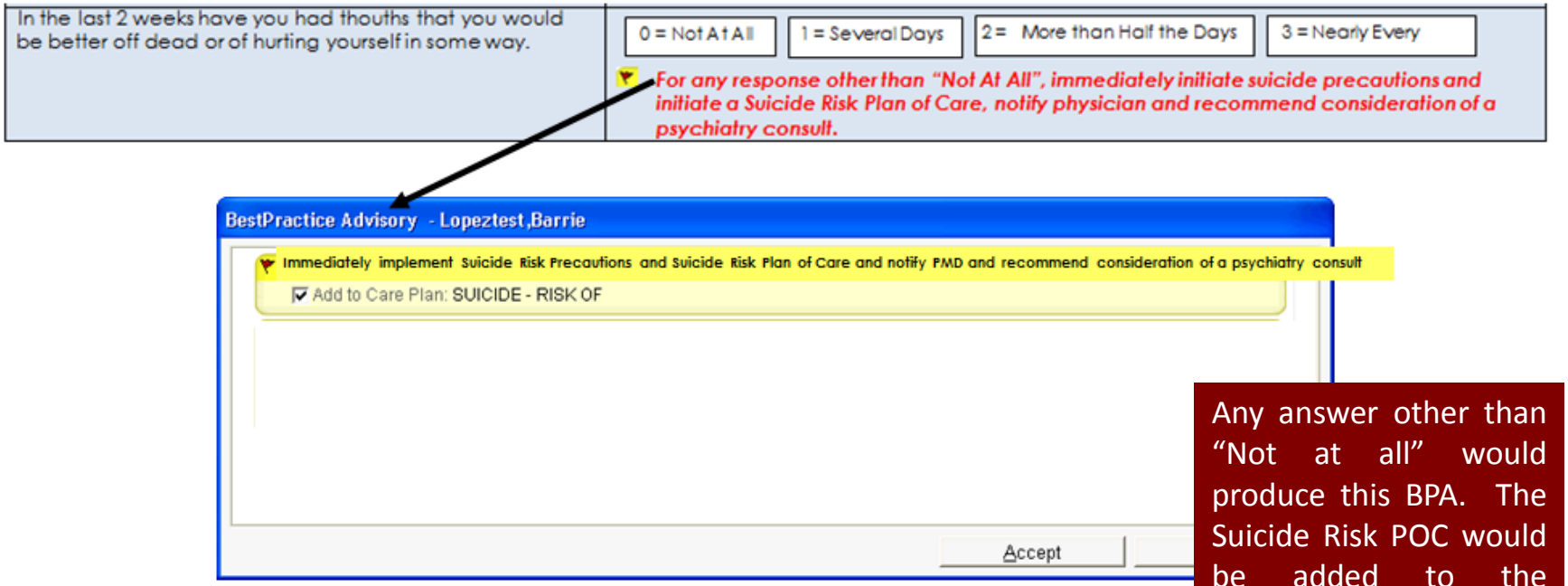
If score > 12, contact PMD. A score > 10 has great validity for depression; a score > 12 is indicative and sensitive to suicidality.



A PHQ-9 score would be calculated. A score > 12 would produce this BPA. The Depression POC would be added to the patient's care plan.

Nursing Suicide Risk Screen: PHQ9—question 9

Suicide Risk Screen – "In the last 2 weeks, have you had thoughts that you would be better off dead or of hurting yourself in some way?"



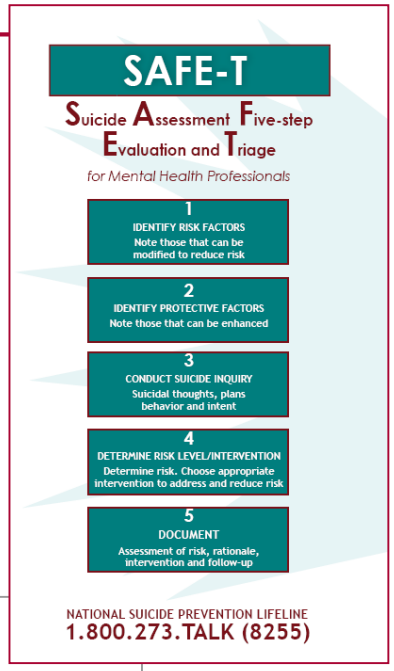
Any answer other than "Not at all" would produce this BPA. The Suicide Risk POC would be added to the patient's care plan.

Secondary Suicide Risk Assessment: 1) Suicide inquiry; 2) Risk Factors; 3) Protective Factors

Secondary Suicide Risk Assessment and Documentation

- Clinical Assessment
  - –Suicide Inquiry; Risk Factors; Protective Factors;
  - –Risk Determination; Intervention

- **SAFE-T** (**S**uicide **A**ssessment **F**ive-step **E**valuation and **T**riage)
- **C-SSRS** (**C**olumbia-**S**uicide **S**everity **R**ating **S**cale)



RISK LEVEL/INTERVENTION

- **Assessment** of risk level is based on clinical judgment, after completing steps 1-3
- **Reassess** as patient or environmental circumstances change

RISK LEVEL	RISK / PROTECTIVE FACTOR	SUICIDALITY	POSSIBLE INTERVENTIONS
High	Psychiatric disorders with severe symptoms, or acute precipitating event; protective factors not relevant	Potentially lethal suicide attempt or persistent ideation with strong intent or suicide rehearsal	Admission generally indicated unless a significant change reduces risk. Suicide precautions
Moderate	Multiple risk factors, few protective factors	Suicidal ideation with plan, but no intent or behavior	Admission may be necessary depending on risk factors. Develop crisis plan. Give emergency/crisis numbers
Low	Modifiable risk factors, strong protective factors	Thoughts of death, no plan, intent or behavior	Outpatient referral, symptom reduction. Give emergency/crisis numbers

(This chart is intended to represent a range of risk levels and interventions, not actual determinations.)

DOCUMENT Risk level and rationale; treatment plan to address/reduce current risk (e.g., setting, medication, psychotherapy, E.C.T., contact with significant others, consultation); firearm instructions, if relevant; follow up plan. For youths, treatment plan should include roles for parent/guardian.

Adapted from: SAMHSA SAFE-T (Suicide Assessment Five-step Evaluation and Triage) www.sprc.com

Special Precautions for Patients Identified with Suicidal Ideation

DATE:
TIME:

Behavioral Health Room Safety Checklist

*This patient has been identified to be **high risk for suicidal behavior**, and the following steps listed below have been taken to modify the patient's direct environment of care:*

Completed	Responsible Party	Item
	Security & Nursing	Patient searched and all belongings removed from patient
	Security & Nursing	Patient belongings have been labelled, itemized and safely stored in Security's patient belonging locker
	Nursing	**Notified EVS / Housekeeping** of high risk patient by calling **x3-4444** & indicate to complete behavioral health room safety checklist
	Nursing	**Notified nutritional services** of high risk patient by calling **x3-4528** for disposable tray order. (Leave message if not answered.)
	Nursing	Patient's clothes, shoes / laces, and jewelry removed and dressed in hospital gown. If patient is wearing a bra, must be removed also. Send valuable items (jewelry, money wallet, narcotic medication brought from home) to Security. Lock regular items in the patient belonging lockers.
	Nursing	Placed door designation signage
	Nursing	Removed unnecessary IV poles
	Nursing	Removed any unnecessary medical equipment
	Nursing	Removed telephone & telephone cord o Supervised phone calls only with either sitter or nurse
	Nursing	Locked all cabinets with zip ties
	Nursing	Requested safety soap from supply management
	Clinical Partner	Change bed linens to flat sheets only
	Sitter / MHW	Disposable Utensil Counts: **BEFORE** entering the room
	Sitter / MHW	Disposable Utensil Counts: **AFTER** entering the room
	EVS	Removed plastic trashcan liners & replace with paper liners
	EVS	Removed any extra items from closets
	EVS	Removed rubber gloves from cage
	EVS	Removed hand sanitizer from cage & soap in bathroom
	EVS	Removed any extra bed linen from the room
	EVS	Removed any extra chairs
	EVS	Removed bottom of the privacy curtain

Nursing is responsible for ensuring that all items listed above are complete prior to patient rooming. Checklist is to be incorporated into the change of shift report.

version 10/2017

Nursing Role

ASSESS

- Secondary risk assessment
- Environmental assessment (behavioral room checklist)

ADVISE

- Notify attending; Recommend consultation
- Notify social worker

ASSIST

- Nursing care plan; Monitoring level
- Education; Intervention

Social Work Role

ASSESS

- Psychosocial assessment; Collateral
- Depression and suicide risk assessment

ADVISE

- Supportive interventions; Education; Counseling
- Recommend consultation

ASSIST

- Case management; Resources
- Care coordination; Linkage to aftercare

Physician Role

ASSESS

- Ask about depression? Is patient distressed? Is depression interfering with care? Is there imminent danger?
  - *Work-Up?: CBC, Lytes, LFTs, TSH, B12, RPR, HIV, toxicology*

ADVISE

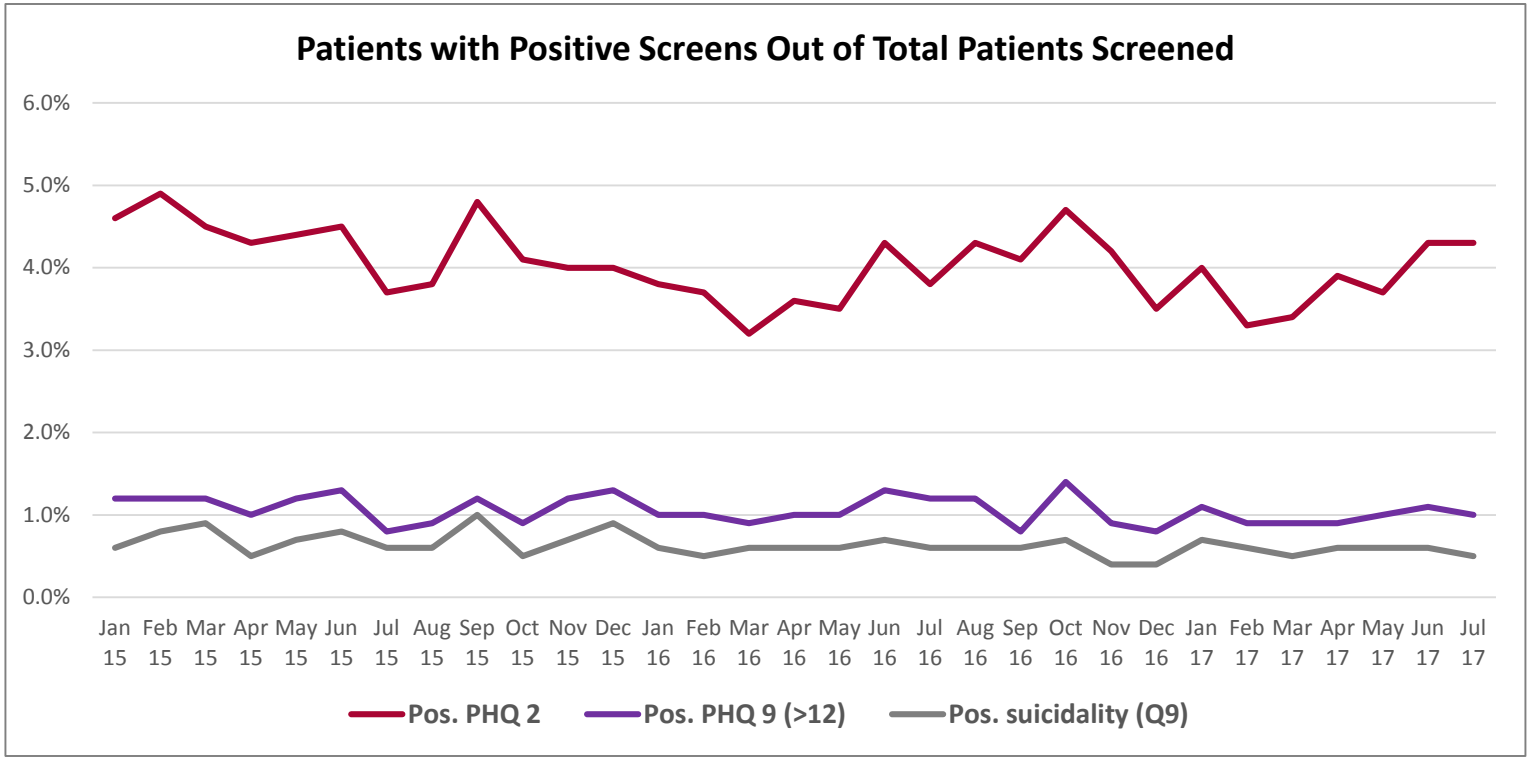
- Discuss findings of screen/interpretation with pt and team
  - *Present diagnosis if appropriate; Psych consultation if indicated*

ASSIST

- Educate; Monitor; Treat &/or Refer for follow-up
  - *Brief counseling; Lifestyle recs; Medications*

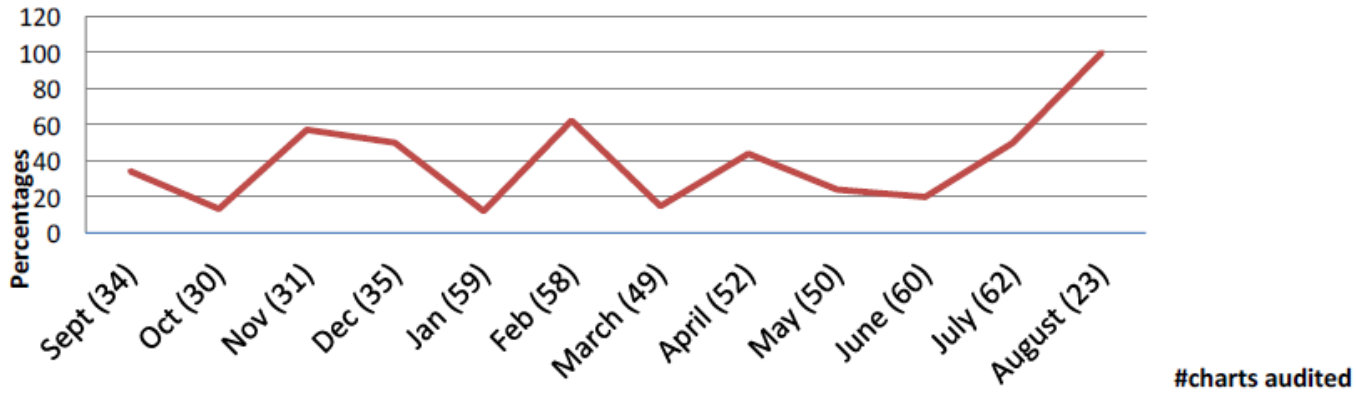
Implementation Metrics & Positive Screening Volumes

- Since tracking in January 2015, every month has consistently had **93%-95%** complete depression screenings of total admissions.
  - There is a small percentage of "unable to assess" due to circumstances where the patient is unable to provide answers (ie. Trauma, delirium, etc.)



Secondary suicide assessment

- Goal: Documentation of 2˚ risk assessment on every patient with +SI



- *July 18th flowsheet rows were added for nursing documentation of additional questions for patients who screen positive for suicidality.
- Compliance with documentation or risk assessment had been 15-62%. (Nurses were expected to document in a progress note). After addition of flowsheet rows compliance increased to 100%

Implementation Challenges

- **False negatives**
  - Some patients screen negative on admission and are identified later in their hospital stay when they present with depressive symptoms
- **Timing of screening**
  - Admission not always optimal time to screen (Ex: L&D moved screening to after delivery, and saw improvement in fidelity)
- **Workflows**
  - Short LOS cases may be discharged without a SW consult even though there is an order due to timing of discharge; Obs; Weekends
  - 2˚suicide risk assessments not done on all patients until automation in EMR last year
- **Heterogeneity of assessment and intervention**
  - Comfort/training RN administering tool
  - Variability of MD & SW skills/approach
- **Care coordination**
  - After-care arrangements; Level of care transfers

What is the "ROI"?

Mission

- Provide high-quality, compassionate, patient-centered, holistic health care

Value

- ALOS for PHQ9+ patients had experienced a **6.2% reduction** in days over 3 fiscal years
- Reduction in 30 & 90 day **readmission rates**

Intangibles

- No sentinel events
- Patient and provider experience

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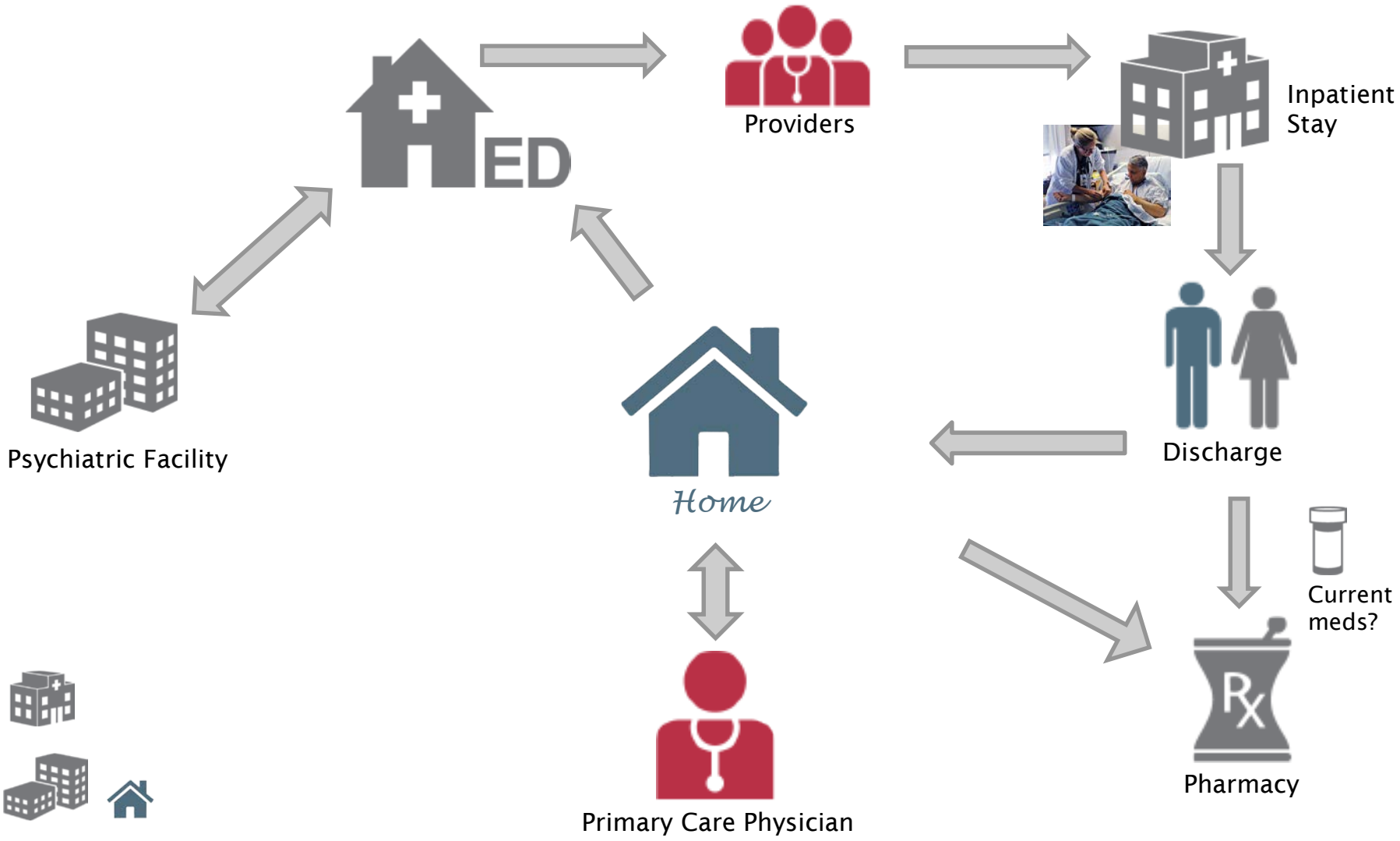
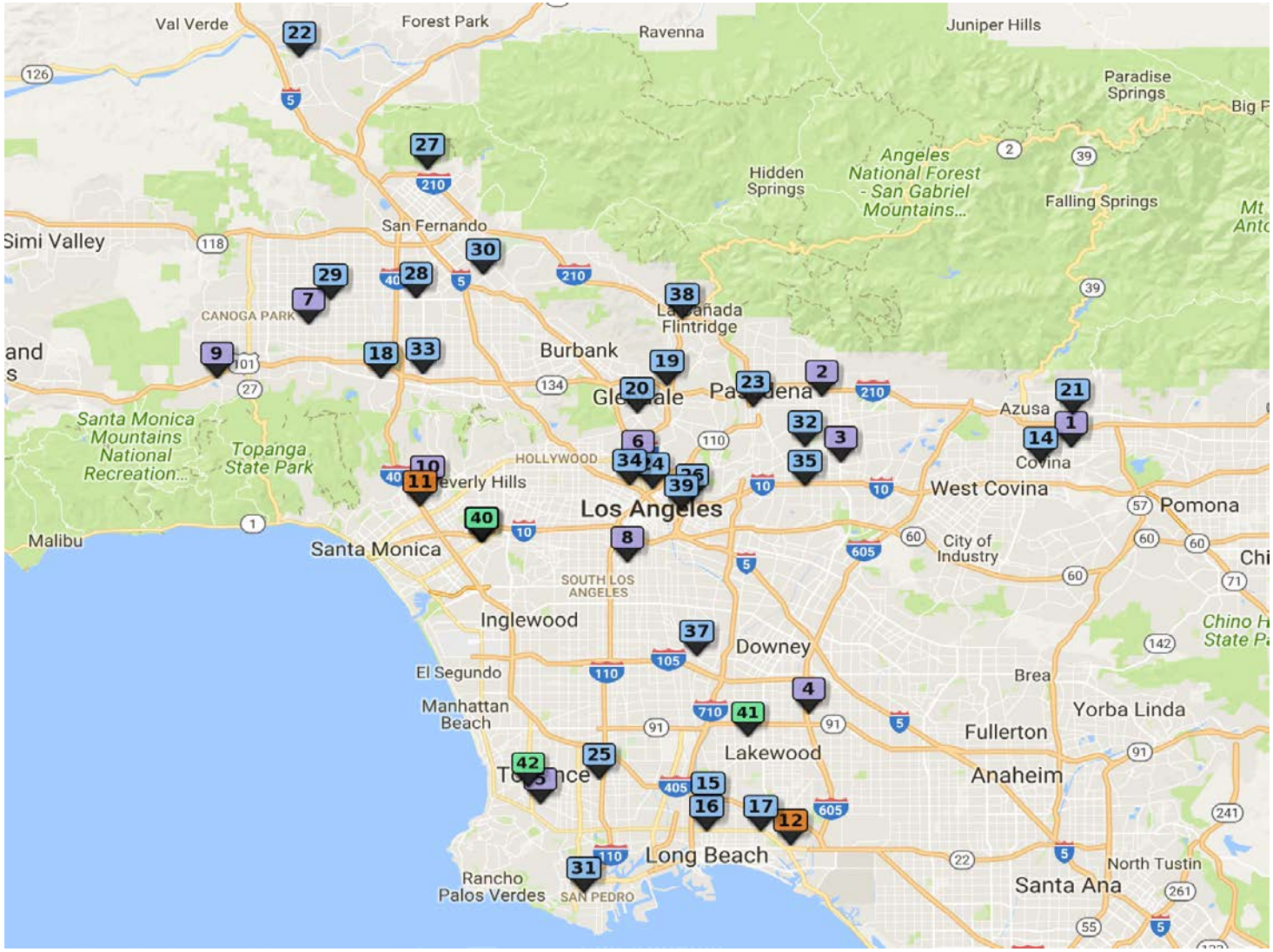
- **Future directions**

How to deliver coordinated care across a system?




CSHS Locations
VIM
CSMG Robertson Offices
California Rehabilitation Institute
ECSM
SCOP
SMOG
Angeles
SM GI
THO
Cal Heart
Culver UCC/IM
LACA
Kerlan Jobe
KJSC
Marina Del Rey Hospital
Del Rey Surgical
Access
Playa Vista
Pierce College
Sepulveda Basin Recreation Area
SHERMAN OAKS
Universal City
Glendale
Griffith Observatory
Westridge-Canyonback Wilderness Park
Topanga State Park
Topanga
The Getty Villa
West Hollywood
Paramount Pictures
Beverly Hills
HOLLYWOOD
CENTURY CITY
WEST LOS ANGELES
Santa Monica
Culver City
MAR VISTA
OCEAN PARK
CULVER - WEST
Marina Del Rey
Playa Vista
STAPLES Center
Los Angeles
California Science Center
Dodger Stadium

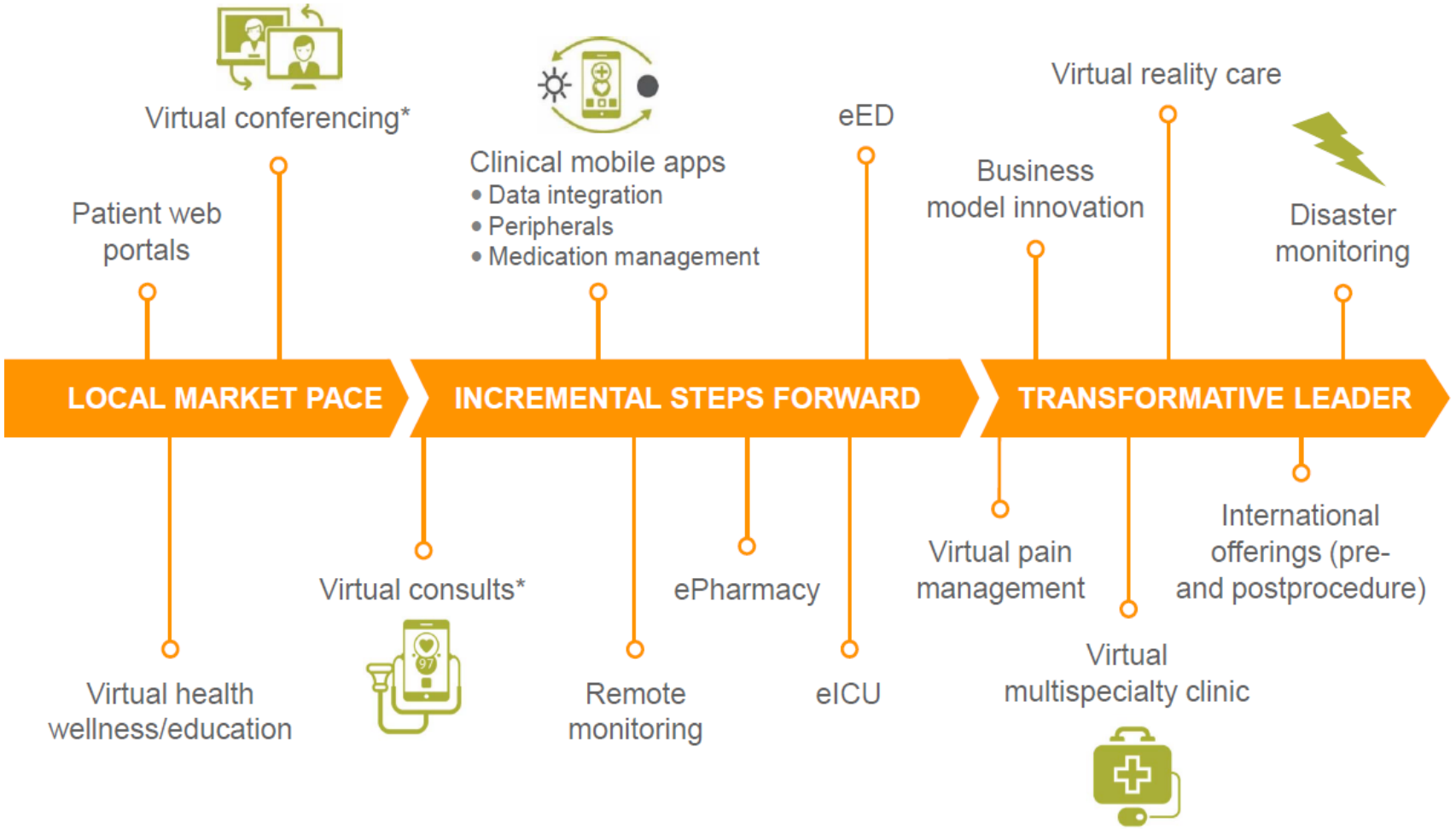
How to deliver a continuum of care? (Community Partnerships)



- Acute Psych Facilities
- Fed Gen Acute Care Hosp
- General Acute Care Hosp
- Psych Health Facility

Integrating Care is as important as Delivering Care

Emerging technological solutions

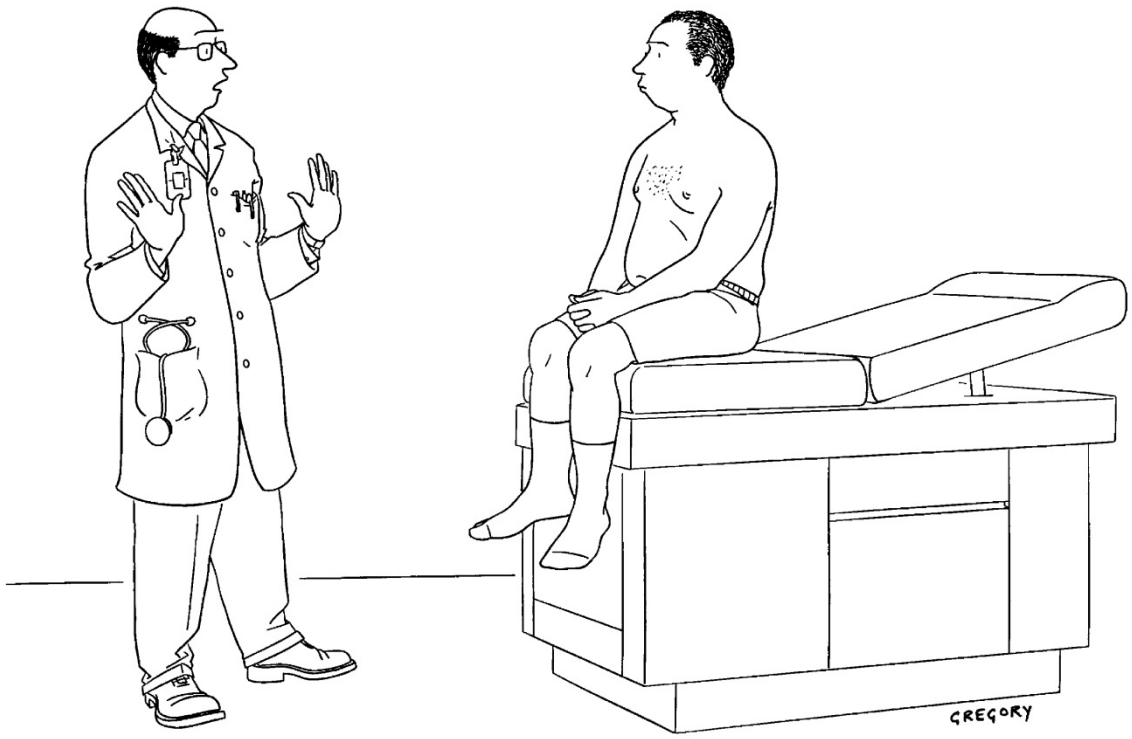


NOTE: Virtual conferencing is defined as clinician-to-clinician consults, whereas virtual consults are provider-to-patient consults.

SOURCE: Sg2 Analysis, 2016

Support at Your Fingertips?

Innovation in the behavioral health technology space has increased with the advent of mobile apps for a wide range of mental health disorders.



"Whoa—way too much information."

Questions?

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