

# Effects of Behavioral Medicine Training on Family Medicine Residents' Perceived Behavioral Medicine Skills and Clinical Documentation of Suicidality

Kaitlin Leckie, PhD, LMFT-S, Director of Behavioral Medicine  
Department of Family Medicine, University of Texas Medical Branch



CFHA Annual Conference  
October 17-19, 2019 • Denver, Colorado

# Faculty Disclosure

---

The presenters of this session have NOT had any relevant financial relationships during the past 12 months.

# Acknowledgments

---

- Bret Howrey, PhD
- Society of Teachers of Family Medicine (STFM) Behavioral Science and Family Systems Educator Fellowship mentors and faculty

# Conference Resources

Slides and handouts shared by our conference presenters are available on the CFHA website at [https://www.cfha.net/page/Resources\\_2019](https://www.cfha.net/page/Resources_2019) and on the conference mobile app.



# Learning Objectives

At the conclusion of this session, the participant will be able to:

- Describe how behavioral medicine training can impact physicians' clinical documentation of suicidality
- Describe key findings of a program evaluation of behavioral medicine teaching
- Discuss physician self-evaluations of their skills in behavioral medicine after training

# Bibliography / Reference

1. Baird MA, Hepworth J, Myerholtz L, Reitz R, Danner C. Fifty Years of Contributions of Behavioral Science in Family Medicine. *Fam Med* 2017;49(4):296-303.
2. Evidence Summary: Suicide Risk in Adolescents, Adults and Older Adults: Screening. U.S. Preventive Services Task Force. April 2013. <https://www.uspreventiveservicestaskforce.org>
3. Western Interstate Commission for Higher Education Mental Health Program (WICHE MHP) & Suicide Prevention Resource Center (SPRC). (2017). Suicide prevention toolkit for primary care practices. A guide for primary care providers and medical practice managers (Rev. ed.). Boulder, Colorado: WICHE MHP & SPRC
4. Spitzer, R. L., Williams, J. B. W., Kroenke, K., et al. (n.d.). Patient Health Questionnaire–9 (PHQ-9). Retrieved from [http://www.phqscreeners.com/pdfs/02\\_PHQ-9/English.pdf](http://www.phqscreeners.com/pdfs/02_PHQ-9/English.pdf)
5. StataCorp. 2017. Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC
6. Cross, W. F., West, J. C., Pisani, A. R., Crean, H. F., Nielsen, J. L., Kay, A. H., & Caine, E. D. (2019). A randomized controlled trial of suicide prevention training for primary care providers: a study protocol. *BMC medical education*, 19(1), 58.
7. Bodenheimer T, Sinsky C. (2014). From triple to quadruple aim: Care of the patient requires care of the provider. *Ann Fam Med*. 2014 Nov-Dec;12(6):573-6.
8. Ribeiro, J. D., Gutierrez, P. M., Joiner, T. E., Kessler, R. C., Petukhova, M. V., Sampson, N. A., . . . Nock, M. K. (2017). Health care contact and suicide risk documentation prior to suicide death: Results from the Army Study to Assess Risk and Resilience in Service members (Army STARRS). *Journal of Consulting and Clinical Psychology*, 85(4), 403-408. <http://dx.doi.org/10.1037/ccp0000178>

# Learning Assessment

- A learning assessment is required for CE credit.
- A question and answer period will be conducted at the end of this presentation.

## BACKGROUND AND OBJECTIVE

**Behavior** impacts every aspect of health and illness.

**A Behavioral Medicine Rotation (BMR)** can strengthen resident physicians' ability to help patients with issues such as suicidal ideation.<sup>1</sup>



## BACKGROUND AND OBJECTIVE

**Behavior** impacts every aspect of health and illness.

**A Behavioral Medicine Rotation (BMR)** can strengthen resident physicians' ability to help patients with issues such as suicidal ideation.<sup>1</sup>

### **People who died by suicide** <sup>2-3</sup>

- Twice as likely to have had contact with their PCP than mental health staff in the year and month prior to death
- Up to 90% had contact with their PCP in the year prior to death
- Up to 76% had contact with PCP in the month prior to death

## BACKGROUND AND OBJECTIVE

**Behavior** impacts every aspect of health and illness.

**A Behavioral Medicine Rotation (BMR)** can strengthen resident physicians' ability to help patients with issues such as suicidal ideation.<sup>1</sup>

### **People who died by suicide** <sup>2-3</sup>

- Twice as likely to have had contact with their PCP than mental health staff in the year and month prior to death
- Up to 90% had contact with their PCP in the year prior to death
- Up to 76% had contact with PCP in the month prior to death

### **As a result of a Behavioral Medicine Rotation, residents will:**

- Perceive increased competency in core behavioral medicine skills
- Improve their documentation of suicidal ideation and safety plans

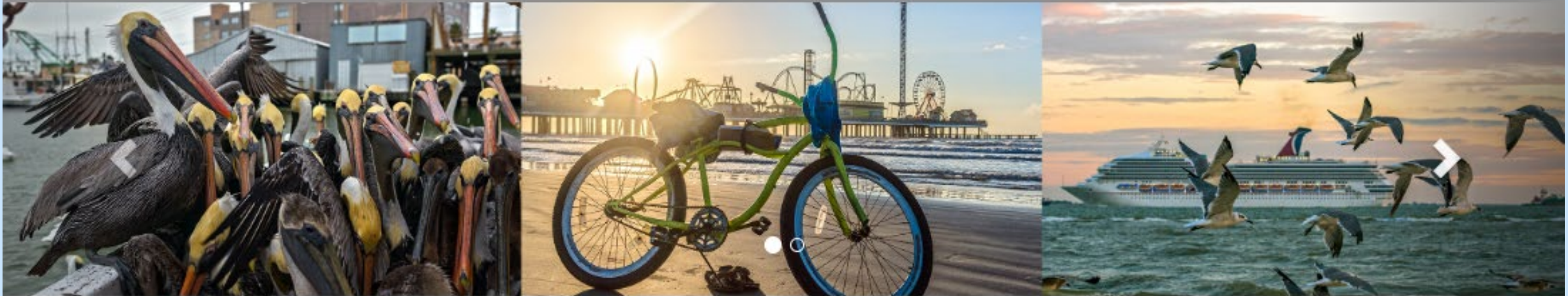
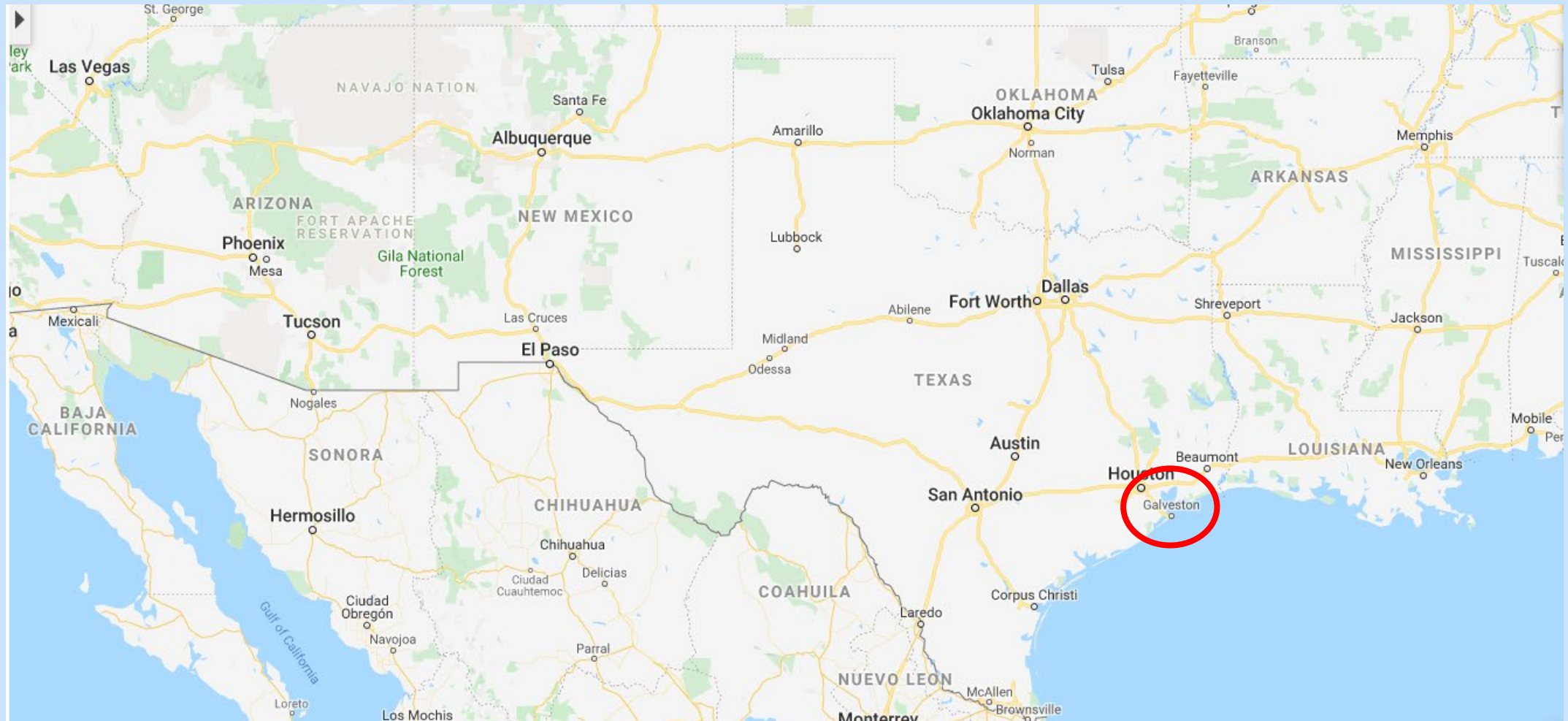


Photo credit: UTMB Family Medicine

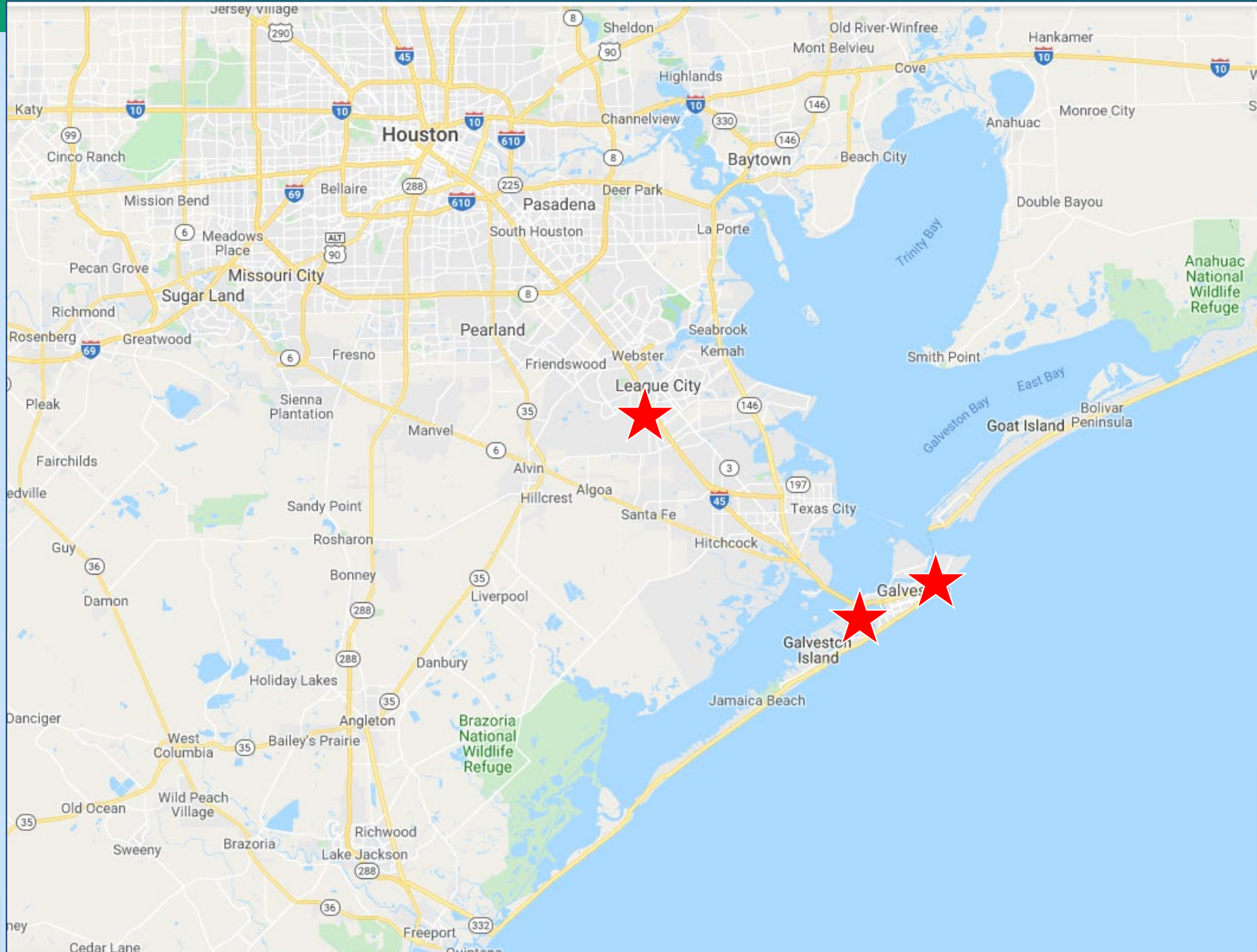
- 1<sup>st</sup> family medicine (FM) residency program in Texas; accepted first residents: 1971
- 3-year training program
- Innovative program focused on preparing physicians for future practice
- 10-10-10 FM residency (30 residents total)

# BACKGROUND AND LOCATION





# BACKGROUND AND LOCATION



# BACKGROUND AND LOCATION

>40,000 patient visits annually

3 primary care clinic locations:



Family Medicine Clinic – Island East



Family Medicine Clinic – Island West



Family Medicine Clinic – Dickinson

Photo credit: UTMB Family Medicine

# BACKGROUND: Behavioral Medicine Rotation (BMR)



Behavioral\_Medicine\_Rotation

4-weeks  
Motivational role/real\_play  
evidence-based BMR  
small\_group Interviewing  
physician\_wellness  
healing\_relationship  
standardized\_patients  
direct\_observations  
didactic\_workshops  
patient-centered  
skill-building  
primary\_care





# BACKGROUND: Behavioral Medicine Rotation (BMR)

## INTERPROFESSIONALS INVOLVED:

- BMR for half 2nd year residents (5 at a time)
- Behavioral Science Faculty
- Physician Faculty co-teach when able
- Integrative and Behavioral Medicine Fellow
- Experts in Mind-body Techniques
- Behavioral Health Intern/Therapist-in-training





# BEHAVIORAL MEDICINE ROTATION: SAMPLE SCHEDULE

## Week 1: Primary Care Counseling Skills

## Week 2: Motivational Interviewing

## Week 3: Depression

## Week 4: Anxiety

Other topics include:  
Wellness  
Mind-Body Medicine  
Counseling for Pain

Monday	Tuesday	Wednesday	Thursday	Friday
Aug 19	Aug 20	Aug 21	Aug 22	Aug 23
8:30AM-12:00PM <u>Orientation; Integrated Care; Establishing Focus, BPSS Care</u>	8:30AM-12:00PM <u>Clinical Feedback; Offering Advice;</u>	AM – Clinic / Individual Assignments <u>Beh Faculty at West clinic (direct obs. &amp; co-visits)</u>	8:30-12:00 <u>Continue PC Counseling skills; debrief/feedback video review</u>	8:30AM-12:00 <u>Intro to wellness project and Mind-Body Medicine</u>
PM – Individual Assignments/Clinic <u>Beh Faculty at Island East (direct obs. &amp; patients)</u>	1:00 PM – 5:00 – <u>Primary Care Counseling Skills; Recorded skills practice (no SP); debrief;</u>	PM – Individual / Clinic Assignments <u>Beh Faculty at West clinic</u>	PM – Didactics	1:00- 5:00 PM – <u>Wellness (3-4 LGBTQ+ group IE*)</u>
KW all day Aug 26	KW all day Aug 27	Aug 28	Co-faculty: KW Aug 29	Co-faculty: VS (AM) Aug 30
8:30AM-12:00 <u>Intro to Motivational Interviewing (MI)</u>	8:30AM-12:00 <u>Workshops: MI (II)</u>	AM –Ind. / Clinic Assignments <u>Beh Faculty at Dickinson clinic (direct obs. &amp; co-visits only)</u>	8:30AM-12:00 <u>Workshop: Intro to Mood;</u>	8:00 AM-12:00 – <u>Practice w/ Standardized patient –MI</u>
1:00- 5:00 <u>Workshop: MI I</u>	1:00- 5:00 <u>Workshop: Counseling for Pain; Mind-Body Medicine (cont)</u>	PM –Ind. / Clinic Assignments <u>Beh Faculty at Dickinson clinic</u>	1 PM – Didactics 1-2 KW & KL didactic	1-5 PM <u>Finish debrief SP; Wellness</u>
Sept 2	Sept 3	Sept 4	Sept 5	Sept 6
Holiday	8:30AM-12:00PM <u>Wellness</u>	AM – Clinic / Ind. Assignments <u>Beh Faculty at West clinic (direct obs. &amp; co-visits only)</u>	Co-faculty: SM 8:30AM-12:00PM <u>Workshop: Counseling for Depression (II)</u>	Co-faculty: MK (AM) 8:00 AM-12:00 <u>Practice w/ Standardized patient – Depression</u>
	1 PM – 5:00PM <u>Workshop: Counseling for Depression (I)</u>	PM – Clinic / Ind. Assignments <u>Beh Faculty at West clinic</u>	PM – Didactics	1-5– <u>Finish debrief SP; Wellness</u>
Sept 9	Sept 10	Sept 11	Sept 12	Sept 13
AM – Clinic/Individual Assignments <u>Beh Faculty at Island East (direct obs. &amp; patients)</u>	8:30 AM-12 <u>Wellness</u>	AM – Ind. / Clinic Assignments <u>Beh Faculty at Dickinson clinic (dir. obs. &amp; co-visits)</u>	Co-faculty: SM 8:30AM – 12PM <u>Workshop: Counseling for Anxiety (II)</u>	Co-faculty: JI (AM) 8:00 AM-12:00 <u>Practice w/ Standardized patient – Anxiety</u>
PM – Clinic / Individual Assignments <u>Beh Faculty at Island East (direct obs. &amp; patients)</u>	1 PM – 5:00 <u>Workshop: Counseling for Anxiety (I)</u>	PM – Ind. / Clinic Assignments; <u>Beh Faculty at Dickinson clinic</u>	PM – Didactics	1-3 <u>Potluck lunch; Debrief SP; &amp; Wrap up</u>
				<u>(3-4 LGBTQ+ group IE)*</u> 4-5– <u>Wrap up; Evaluations</u>

Physician Co-Faculty Key: KW=Karen Welch; SM=Sam Mathis; MK=Madiha Khan; VS=Vic Sierpina; JI=Jamal Islam

Guest Instructor: ABK=Amy Barrera-Kovach, LCSW

# BEHAVIORAL MEDICINE ROTATION: SAMPLE SCHEDULE

## Key Components

Workshops

Clinic Assignments

Standardized patient visits

Wellness

## Behavioral Medicine Rotation\* Aug. 19-Sept. 15, 2019 BLOCK 3

Monday	Tuesday	Wednesday	Thursday	Friday
Aug 19	Aug 20	Aug 21	Aug 22	Aug 23
8:30AM-12:00PM <u>Orientation; Integrated Care; Establishing Focus, BPSS Care</u>	8:30AM-12:00PM <u>Clinical Feedback; Offering Advice;</u>	AM – Clinic / Individual Assignments <i>Beh Faculty at West clinic (direct obs. &amp; co-visits)</i>	8:30-12:00 <u>Continue PC Counseling skills; debrief/feedback video review</u>	8:30AM-12:00 <u>Intro to wellness project and Mind-Body Medicine</u>
PM – Individual Assignments/Clinic <i>Beh Faculty at Island East (direct obs. &amp; patients)</i>	1:00 PM – 5:00 – <u>Primary Care Counseling Skills; Recorded skills practice (no SP); debrief;</u>	PM – Individual / Clinic Assignments <i>Beh Faculty at West clinic</i>	PM – Didactics	1:00- 5:00 PM – <u>Wellness (3-4 LGBTQ+ group IE*)</u>
KW all day Aug 26	KW all day Aug 27	Aug 28	Co-faculty: KW Aug 29	Co-faculty: VS (AM) Aug 30
8:30AM-12:00 <u>Intro to Motivational Interviewing (MI)</u>	8:30AM-12:00 <u>Workshops: MI (II)</u>	AM –Ind. / Clinic Assignments <i>Beh Faculty at Dickinson clinic (direct obs. &amp; co-visits only)</i>	8:30AM-12:00 <u>Workshop: Intro to Mood;</u>	8:00 AM-12:00 – <u>Practice w/ Standardized patient –MI</u>
1:00- 5:00 <u>Workshop: MI I</u>	1:00- 5:00 <u>Workshop: Counseling for Pain; Mind-Body Medicine (cont)</u>	PM –Ind. / Clinic Assignments <i>Beh Faculty at Dickinson clinic</i>	1 PM – Didactics 1-2 KW & KL didactic	1-5 PM <u>Finish debrief SP; Wellness</u>
Sept 2	Sept 3	Sept 4	Co-faculty: SM Sept 5	Co-faculty: MK (AM) Sept 6
Holiday	8:30AM-12:00PM <u>Wellness</u>	AM – Clinic / Ind. Assignments <i>Beh Faculty at West clinic (direct obs. &amp; co-visits only)</i>	8:30AM-12:00PM <u>Workshop: Counseling for Depression (II)</u>	8:00 AM-12:00 <u>Practice w/ Standardized patient – Depression</u>
	1 PM – 5:00PM <u>Workshop: Counseling for Depression (I)</u>	PM – Clinic / Ind. Assignments <i>Beh Faculty at West clinic</i>	PM – Didactics	1-5– <u>Finish debrief SP; Wellness</u>
Sept 9	Sept 10	Sept 11	Co-faculty: SM Sept 12	Co-faculty: JI (AM) Sept 13
AM – Clinic/Individual Assignments <i>Beh Faculty at Island East (direct obs. &amp; patients)</i>	8:30 AM-12 <u>Wellness</u>	AM – Ind. / Clinic Assignments <i>Beh Faculty at Dickinson clinic (dir. obs. &amp; co-visits)</i>	8:30AM – 12PM <u>Workshop: Counseling for Anxiety (II)</u>	8:00 AM-12:00 <u>Practice w/ Standardized patient – Anxiety</u>
PM – Clinic / Individual Assignments <i>Beh Faculty at Island East (direct obs. &amp; patients)</i>	1 PM – 5:00 <u>Workshop: Counseling for Anxiety (I)</u>	PM – Ind. / Clinic Assignments; <i>Beh Faculty at Dickinson clinic</i>	PM – Didactics	1-3 <u>Potluck lunch; Debrief SP; &amp; Wrap up</u>
				<u>(3-4 LGBTQ+ group IE)*</u> 4-5– <u>Wrap up; Evaluations</u>

Physician Co-Faculty Key: KW=Karen Welch; SM=Sam Mathis; MK=Madiha Khan; VS=Vic Sierpina; JI=Jamal Islam

Guest Instructor: ABK=Amy Barrera-Kovach, LCSW

# BACKGROUND AND OBJECTIVE

## What have residents said about the BMR?

*“Excellent experience. Reinvigorated me in my reason for becoming a physician. Essential rotation that makes this program worth it. Shaped how I will be for the next decade.”*

*“It was one of the top 3 training experiences I have attended during medical school and residency. It transformed the way I think about interacting with patients and gave me specific practical skills to become a much more effective physician.”*

*“Important documentation such as GAD-7, PHQ, STORM, with proper documentation of patient safety plans were discussed.”*

# METHODS

## 1. Pre/post self-evaluations of residents' competence with core behavioral medicine skills

Sample question:

Clinical Feedback/Advice – C2				
Lectures or gives unsolicited advice/feedback. No exploration of thoughts/feelings of patient.	Explores what patient knows or wants to know. Offers concise and clear advice/feedback. Uses visual data to give feedback. Explores what pt. thinks/feels.	Explores what patients knows/wants to know. Shows insight and understanding (attunement). Advice/feedback is clear, concise, and use of visual aids. Explores thoughts/feelings of patient.		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2. Chart review

Residents' patients' from 3 months prior to and 3 months after BMR.

Selected patients by PHQ-2 score  $\geq 3$ .

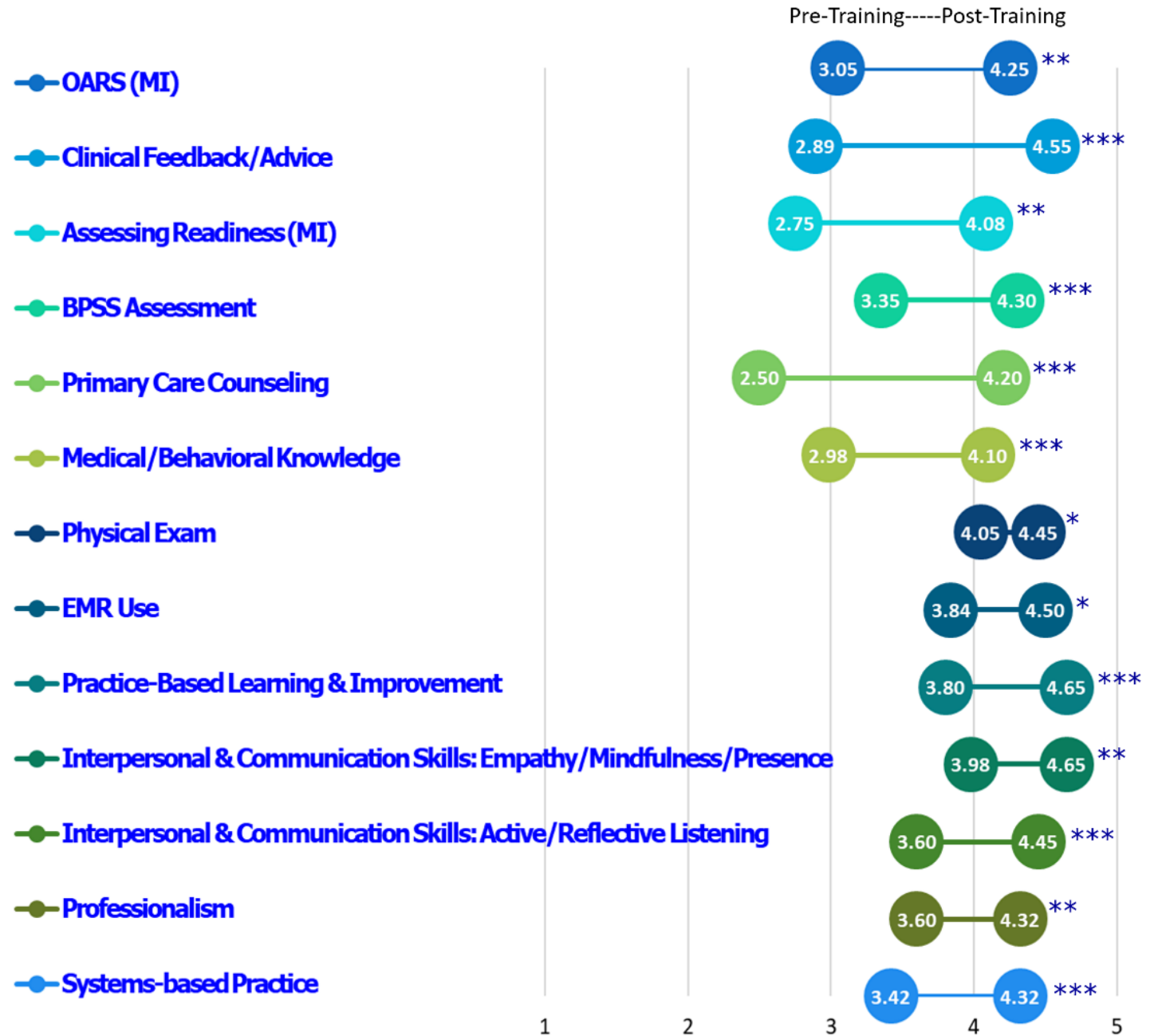
Documentation of:

- **Suicidality** and
- **Crisis/safety plan** for patients who endorsed suicidal ideation\*

\*determined by  $>0$  on "thoughts of being better off dead or of hurting yourself" on PHQ-9

# RESULTS

## Resident Self-rated Behavioral Medicine Skill Competence



\*  $p \leq 0.05$  \*\*  $p \leq 0.01$  \*\*\*  $p \leq 0.001$  using Wilcoxon Signed Rank z

# RESULTS

Is suicidal ideation (SI) documented in note?			
	<i>Pre – Training</i>	<i>Post – Training</i>	<i>Total</i>
Yes	25.2% (32)	47.2% (60)	72.4% (92)
No	12.6% (16)	15.0% (19)	27.6% (35)
Total	37.8% (48)	62.2% (79)	(127)
Pearson chi2(1) = 1.29 Pr = 0.26 Fisher's exact = 0.31 1-sided Fisher's exact = 0.18			

For patients endorsing suicidal ideation, is a safety plan documented in note?			
	<i>Pre – Training</i>	<i>Post – Training</i>	<i>Total</i>
Yes	25.0% (4)	13.2% (5)	16.7% (9)
No	75.0% (12)	86.8% (33)	83.3% (45)
Total	(16)	(38)	(54)
Pearson chi2(1) = 1.14 Pr = 0.29 Fisher's exact = 0.43 1-sided Fisher's exact = 0.25			

# DISCUSSION

## **After the BMR,**

- ✓ residents' self-assessment ratings of competency in behavioral medicine skills increased.
- ✓ clinical documentation of suicidal ideation and safety plans increased but not significantly.

## **Limitations:**

- small sample size
- limited and uneven number of chart observations for some residents

**Future quality improvement projects** can address these limitations and test enhancements to the Behavioral Medicine curriculum.



# DISCUSSION

**Lessons Learned**

**Future QI**

**Shared Learning:** *What are you doing in your setting?*

**Questions?**

# REFERENCES

1. Baird MA, Hepworth J, Myerholtz L, Reitz R, Danner C. Fifty Years of Contributions of Behavioral Science in Family Medicine. Fam Med 2017;49(4):296-303.
2. Evidence Summary: Suicide Risk in Adolescents, Adults and Older Adults: Screening. U.S. Preventive Services Task Force. April 2013. <https://www.uspreventiveservicestaskforce.org>
3. Western Interstate Commission for Higher Education Mental Health Program (WICHE MHP) & Suicide Prevention Resource Center (SPRC). (2017). Suicide prevention toolkit for primary care practices. A guide for primary care providers and medical practice managers (Rev. ed.). Boulder, Colorado: WICHE MHP & SPRC
4. Spitzer, R. L., Williams, J. B. W., Kroenke, K., et al. (n.d.). Patient Health Questionnaire–9 (PHQ-9). Retrieved from [http://www.phqscreeners.com/pdfs/02\\_PHQ-9/English.pdf](http://www.phqscreeners.com/pdfs/02_PHQ-9/English.pdf)
5. StataCorp. 2017. Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC

## Acknowledgements

- **Bret Howrey, PhD, for his statistical expertise and general help with research design and project development.**
- Society of Teachers of Family Medicine (STFM) Behavioral Science and Family Systems Educator Fellowship mentors and faculty for their guidance and consultation.
- Alexander Cantu for help with chart review.

# Session Survey

Use the CFHA mobile app to complete the survey/evaluation for this session.



**Join us next year in Philadelphia, Pennsylvania! Thank you!**