Improving Adolescent Depression Management in a Primary Care Clinic

Caley Hague, DNP, APRN, FNP-BC, CPN Masako Mayahara, PhD, RN Rush University

Background

- 3.2 million (13.3%) U.S. adolescents with depression
- Chicago adolescents heightened depressive symptoms
 - Low socioeconomic status
 - High stress living environment
- Consequences of depression:
 - Academic difficulty
 - Substance use
 - Risky behavior engagement
 - Physical illness
 - Suicide

Problem Statement

- Low-income adolescents at Breakthrough Clinic are at increased risk for depression
- USPSTF recommends annual depression screening and follow-up in adolescents
- However, a chart review from January 2015-2017 revealed only 45.5% of adolescents at Breakthrough are screened for depression and 23.1% with moderate-to-severe depression are referred to behavioral/mental health services



The purpose of this project was to <u>improve depression</u> <u>management</u> among Breakthrough adolescents

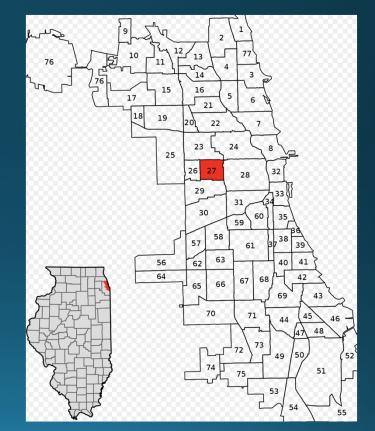
Sample and Setting

Target Population

- Adolescent clients
- Medical assistants (MAs)
- Providers

Setting

- Primary clinic in Chicago (535 adolescents per year)
- 93% Black
- Higher rates of crime: 15.51 per 1,000
- Households below poverty: 42.4%
- Age 0-19 years: 34.8%



Methods: Phase I – Protocol Development

Design:

Focus group

Sample:

- 2 physicians
- 1 counselor

Protocol Development

- Literature review
- Draft protocol
- Review and edit protocol
- Protocol approval

Protocol Implementation

• Three 20-minute training sessions

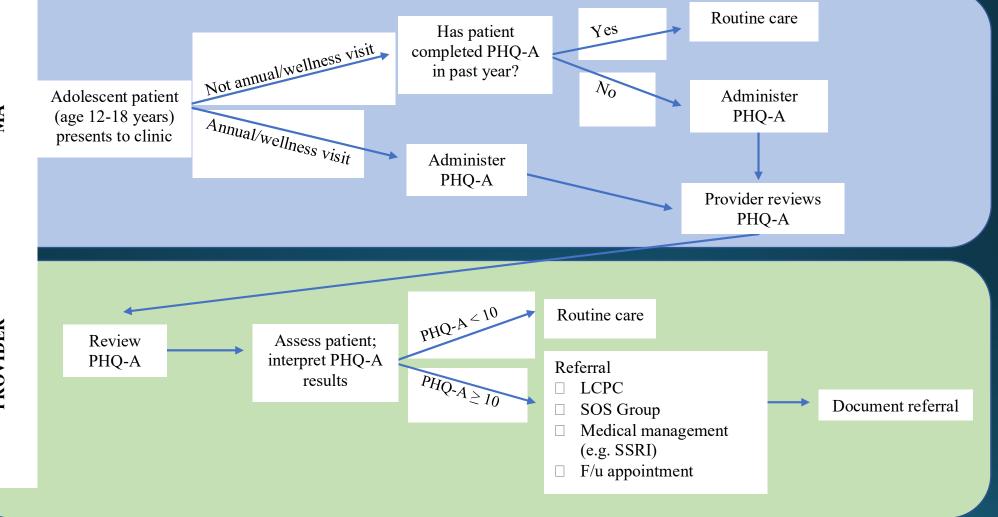
Protocol Evaluation

 Assess protocol adherence and usefulness

Results: Phase I – Protocol Development

Protocol
DevelopmentProtocol
ImplementationProtocol
Evaluation• Protocol developed
• Protocol approved• Three 20-minute
training sessions• Protocol adherence
and usefulnessJanuary 2018February 2018

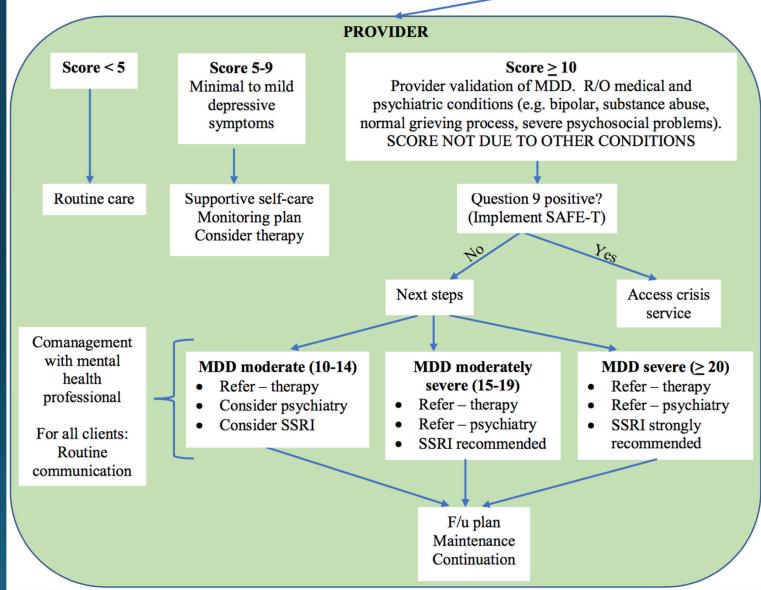
Initial Protocol



MA

PROVIDER

Revised Comprehensive Protocol



Methods: Phase II – Protocol Implementation

Design:

 One-group pretest/posttest

Sample:

• 3 MAs 2 providers

Protocol

Measures:

- Knowledge test
- Confidence survey \bullet

Analysis:

Descriptive statistics ullet

Protocol Development Implementation

 Three 20-minute training sessions

Protocol **Evaluation**

 Assess protocol adherence and usefulness

Draft protocol

Literature review

- Review and edit protocol
- Protocol approval

Results: Phase II – Protocol Implementation

	Effects of Project on Knowledge and Confidence						
		Provider (n=2)		MA (n=3)			
		Pre	Post	Pre	Post		
	Knowledge			60.0%	80.0%		
	Confidence	63.3%	80.0%	90.0%	73.3%		
	Protocol Development	t Im	Protocol plementat		Protocol valuation		
• F	 Protocol developed Three 20-minute Protocol adherend 						
Protocol approved training sessions and usefulness							
		Fe	ebruary 201	8			

Methods: Phase III – Protocol Evaluation

Design:

One-group pretest/posttest

Sample:

- Breakthrough adolescents
- Providers

Measures:

- Chart reports
- Program evaluation survey
 Analysis:
 - Descriptive statistics

Protocol Development

- Literature review
- Draft protocol
- Review and edit protocol
- Protocol approval

Protocol Implementation

• Three 20-minute training sessions

Protocol Evaluation

 Assess protocol adherence and usefulness

Results

Demographics				
	Clients (n=55)			
Gender				
Female	45.5%			
Race				
Black	78.0%*			
White	**			
Age (years)				
12-18	100%			
25-35	0%			
35-45	0%			
ulated from available data **Data not av				

*Calculated from available data, **Data not available

Results: Phase III – Protocol Evaluation

Depression Screening and Referral Rate							
	PRE	TARGET	POST				
Screening (PHQ-A)	45.5% (n=218)	54.6%	61.8% (n=34)				
< 5	56.0% (n=122)		58.8% (n=20)				
5-9	32.1% (n=70)		32.4% (n=11)				
<u>></u> 10	11.9% (n=26)		8.8% (n=3)				
Referral (PHQ-A <u>></u> 10)	23.1% (n=6)	27.7%	66.7% (n=2)				

Protocol Development	Protocol Implementation	Protocol Evaluation
 Protocol developed Protocol approved 	Three 20-minute training sessions	Protocol adherence and usefulness
		February-April 2018

Discussion

- Adolescent depression management protocol successfully developed and implemented
- Protocol implementation increased depression screening and referral
- MA knowledge increased, but confidence decreased
- A more comprehensive clinical decision support model was developed
- Provider confidence increased

Limitations

- One provider left clinic halfway through project
- Short implementation time frame
- Small sample size

Recommendations

- Continue provider and MA training on adolescent depression management
- Incorporate training in MA orientation
- Depression management protocol
- Depression in adolescents is common; therefore, use of a clinical decision support tool is effective in increasing screening and referral
- Incorporate into EMR

References

- 1. U.S. Preventive Services Task Force. (2016). *Final recommendation statement: Depression in children and adolescents: Screening*. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-children-and-adolescents-screening1
- 2. Lawndale Christian Health Center. (2017). Centricity [Computer Software]. General Electric Company. Chicago, IL.
- 3. Substance Abuse and Mental Health Services Administration. (2018). Key substance use and mental health indicators in the United States: Results from the 2017 national survey on drug use and health. Retrieved from https://www.samhsa.gov/data/sites/default/files/cbhsqreports/NSDUHFFR2017/NSDUHFFR2017.htm#mde
- 4. Centers for Disease Control and Prevention. (2018). Youth risk behavior surveillance United States, 2017. Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/ss6708.pdf
- 5. Tracy, M., Zimmerman, F. J., Galea, S., McCauley, E., & Vander Stoep, A. (2008). What explains the relation between family poverty and childhood depressive symptoms? *Journal of Psychiatric Research*, 42(14), 1163-1175. doi:10.1016/j.jpsychires.2008.01.011
- 6. Auerback, R. P. (2015). *Depression in adolescents: Causes, correlates and consequences.* Retrieved from http://www.apa.org/science/about/psa/2015/11/depression-adolescents.aspx
- 7. Ansell, D., Barnes, L., Bassett, J. S., Boyd, C., Buder, M., Bunyi, R., ... Zurakowski, M. (2016). *Rush community health needs assessment report*. Retrieved from https://www.rush.edu/sites/default/files/rush-chna-2016.pdf
- 8. Baker-Ericzen, M. J., Mueggenborg, M. G., Hartigan, P., Howard, N., & Wilke, T. (2008). Partnership for women's health: A new-age collaborative program for addressing maternal depression in the postpartum period. *Families, Systems & Health*, *26*(1), 30-43. doi:10.1037/1091-7527.26.1.30
- 9. Fallucco, E. M., Seago, R. D., Cuffe, S. P., Kraemer, D. F., & Wysocki, T. (2015). Primary Care Provider Training in Screening, Assessment, and Treatment of Adolescent Depression. Academic Pediatrics, 15(3), 326-332.doi:10.1016/j.acap.2014.12.004
- 10. HealthIT. (2015). *Benefits of electronic health records (EHRs)*. Retrieved from https://www.healthit.gov/providers-professionals/benefits-electronic-health-records-ehrs
- 11. Connelly, C. D., Baker-Ericzen, M. J., Hazen, A. L., Landsverk, J., & McCue-Horwitz, S. (2010). A model for maternal depression. *Journal of Women's Health*, *19*(9), 1747-1757. doi:10.1089/jwh.2009.1823
- 12. W. K. Kellogg Foundation. (2004). *Logic model development guide*. Retrieved from https://www.wkkf.org/resourcedirectory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide

Hi Caley. I thought you might find this helpful. I think these guidelines affirm the work you're doing with screening, and might help us further improve our practices.

https://www.jwatch.org/fw113891/2018/02/26/new-guidelines-managing-youth-with-depression-primary? guery=pfwTOC&jwd=000020000039&jspc=MPD

Thanks for the work you're doing to help us care for our adolescents! -Chris

Christopher Flinn, MD | Physician – Pediatrics/Internal Medicine 3219 W. Carroll Ave., Chicago, IL 60624 | p. 872-588-3589 ChristopherFlinn@lawndale.org | Please visit <u>www.lawndale.org</u>



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Comments/Questions?