

Hub-Extension Model and Access to Pediatric Behavioral Integrated Primary Care

Jessica R. Sevecke-Hanrahan, PhD, Tawnya J. Meadows, PhD, BCBA-D, & Carrie E. Massura, PhD

Geisinger Health System



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

Acknowledgements

The presenters would like to acknowledge the following authors who also contributed to this project:

- Rachel Lilly, PhD, Geisinger Health System
- Sean O'Dell, PhD, Geisinger Health System
- Maria Golden, PhD, Children's Hospital of Philadelphia

Faculty Disclosure



Conference Resources

Slides and handouts shared by our conference presenters are available on the CFHA website at 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 elements of the hub-extension model of care delivery developed within Geisinger integrated primary care settings
- Compare hub and extension sites in regard to access metrics, and consider how warm hand-offs impact these metrics
- Discuss strengths and limitations of the hub-extension model in terms of increasing access to behavioral health services

Bibliography / Reference

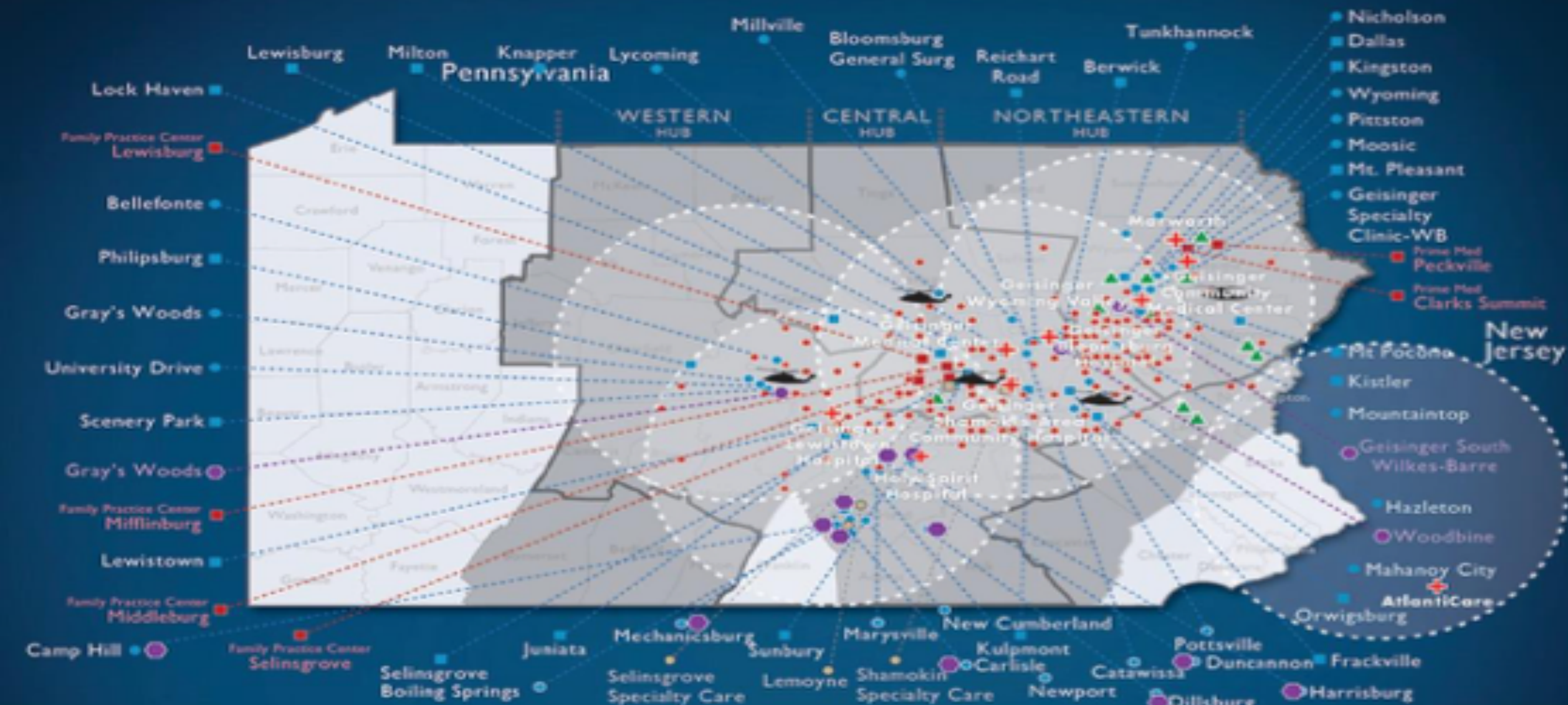
1. Njoroge, W. F. M., Hostutler, C. A., Schwartz, B. S., & Mautone, J. A. (2016). Integrated behavioral health in pediatric primary care. *Current Psychiatry Reports*, 18(106). doi: 10.1007/s11920-016-0745-7
2. Vogel, M. E., Kanzler, K. E., Aikens, J. E., & Goodie, J. L. (2017). Integration of behavioral health and primary care: Current knowledge and future directions. *Journal of Behavioral Medicine*, 40(1), 69-84. doi: 10.1007/s10865-016-9798-7
3. Torio, C. M., Encinosa, W., Berdahl, T., McCormick, M. C., & Simpson, L. A. (2015). Annual report on health care for children and youth in the United States: National estimates of cost, utilization, and expenditures for children with mental health conditions. *Academic Pediatrics*, 15(1), 19-35. doi: 10.1016/j.acap.2014.07.007
4. Hacker, K. A., Penfold, R. B., Arsenault, L. N., Zhang, F., Soumerai, S. B., & Wissow, L. S.. (2015). Effect of pediatric behavioral health screening and colocated services on ambulatory and inpatient utilization. *Psychiatric Services*, 66(11), 1141-1148. doi: 10.1176/appi.ps.201400315
5. Asarnow, J. R., Rozenman, M., Wiblin, J., & Zeltzer, L. (2015). Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: A meta-analysis. *JAMA Pediatrics*, 169(10), 929-937. doi: 10.1001/jamapediatrics

Learning Assessment

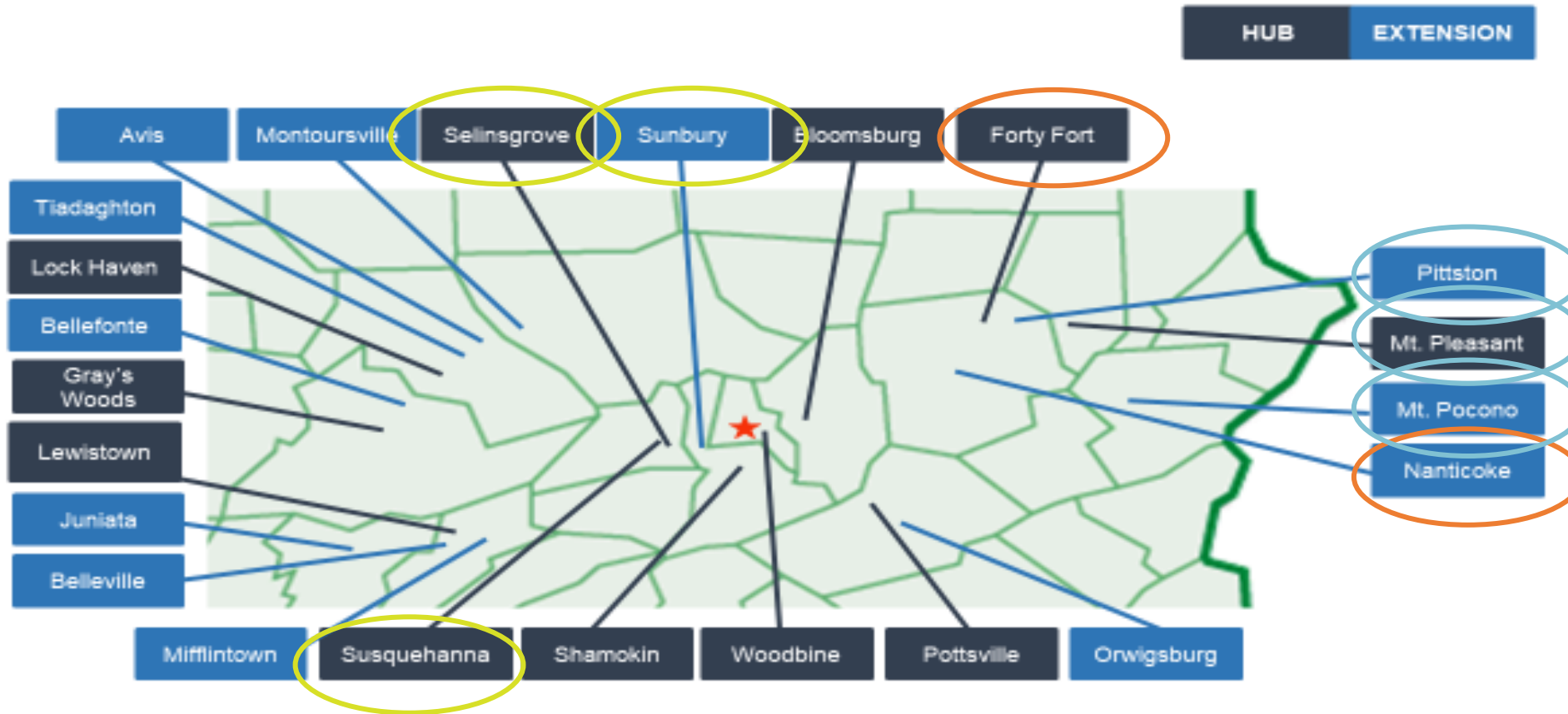
- A learning assessment is required for CE credit.
- A question and answer period will be conducted at the end of this presentation.



Geisinger Health System Coverage Area



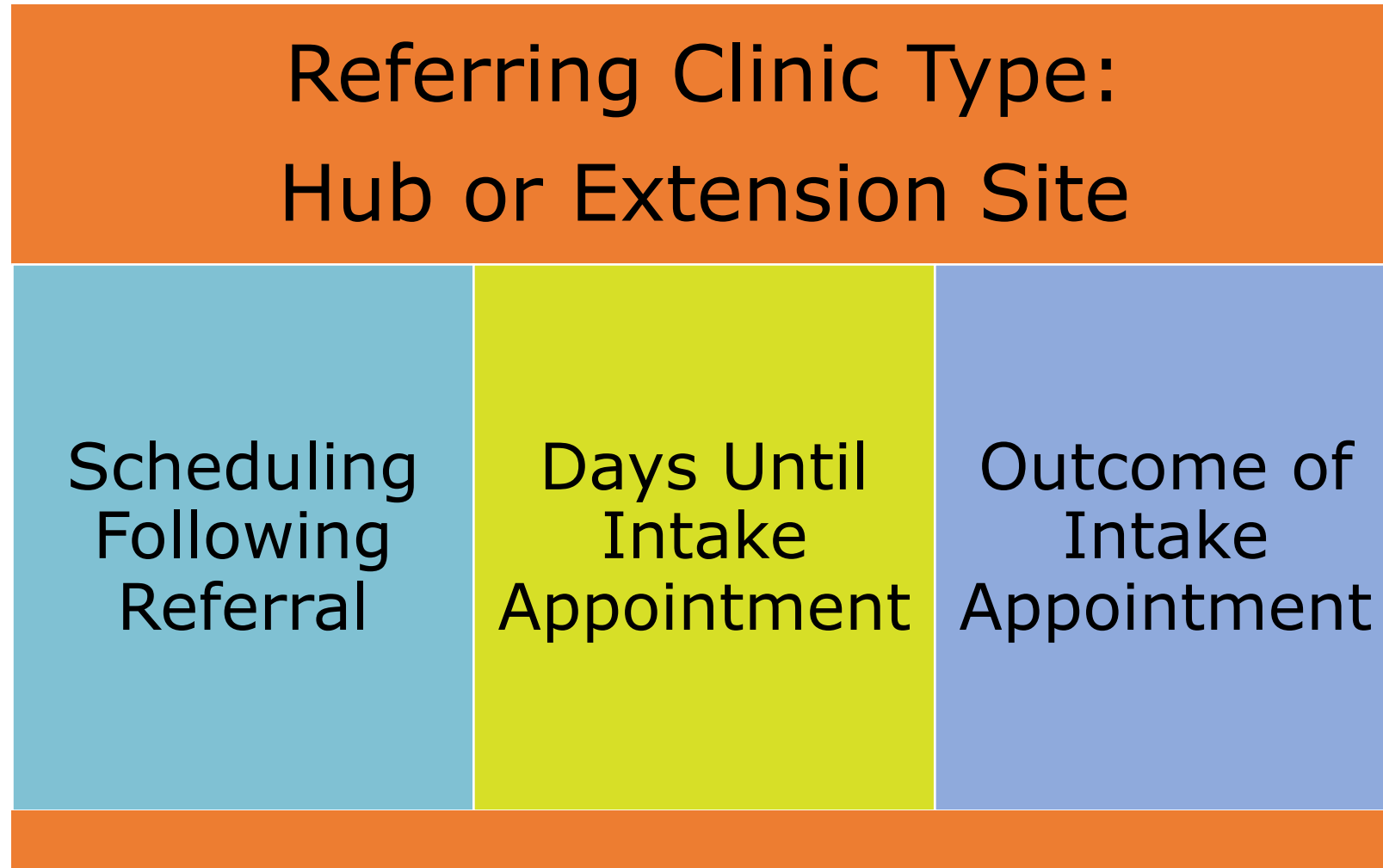
Hub-Extension Model



Hub-Extension Model




Method



Results: Descriptive Statistics



- 87.5% inter-rater agreement for random sample of 20% of cases
 - Referrals: 483 (Hub), 283 (Extension)
 - Never scheduled: 36 (Hub), 62 (Extension)
- 

Results: Patient Demographics

Race/Ethnicity	% of Sample	
	Hub	Extension
American Indian or Alaska Native	0.3	0.4
Asian	0.3	0.6
Black or African American	8.8	9.1
Hispanic	11	14.5
Native Hawaiian or Other Pacific Islander	0.7	0
Multiracial	1.8	3.1
White	76	71.6
Declined	0.7	0.6

Age	Mean (SD)	
	Hub	Extension
Age	9.7 (4.7)	9.5 (4.4)

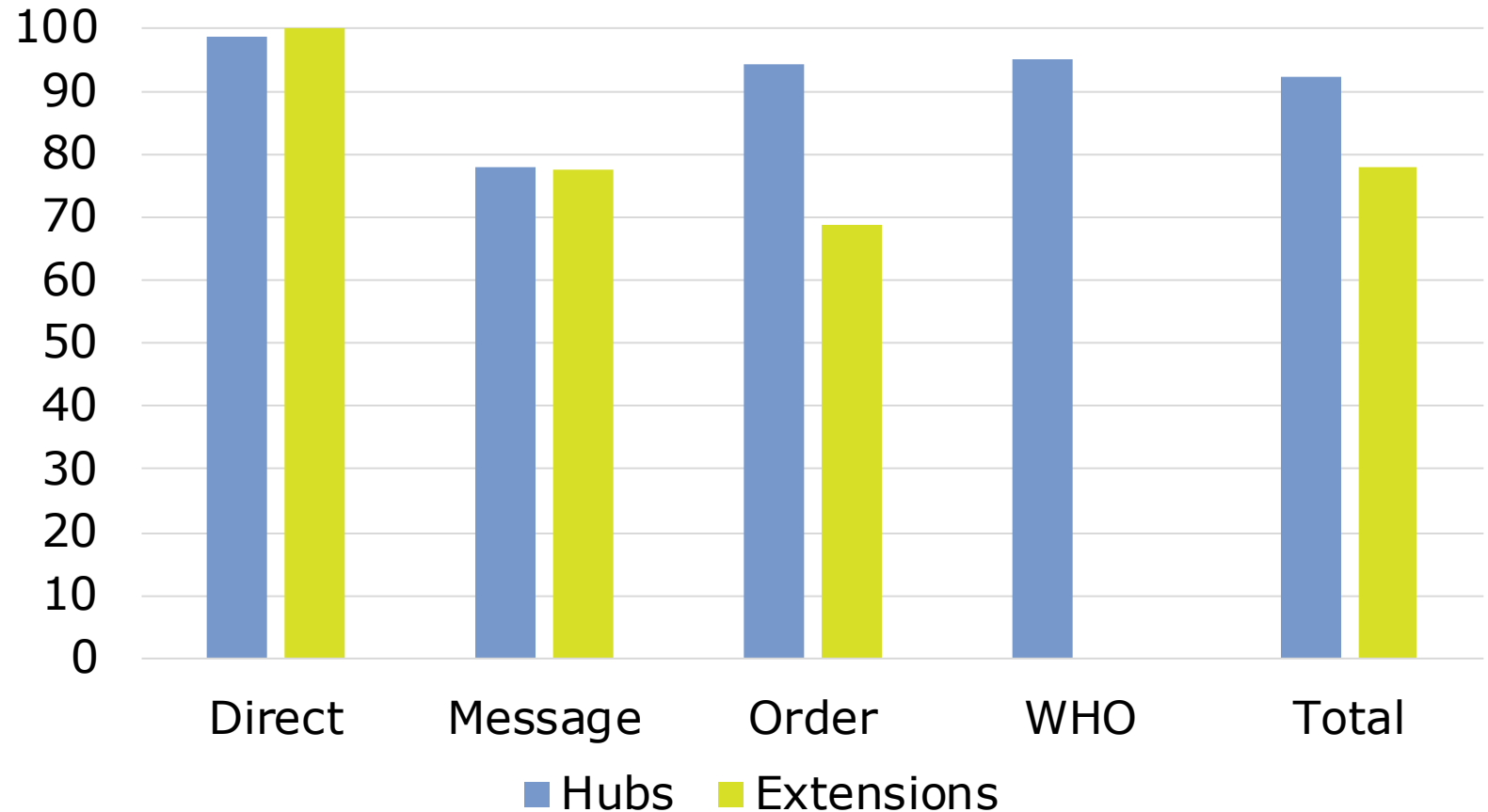
Gender	% of Sample	
	Hub	Extension
Female	48.8	51.6
Male	51.2	48.4

No difference in demographic characteristics between Hub and Extension patients

Results: Scheduling Following Referral

Hub patients were more likely to schedule an intake following referral, $\chi^2 = 32.2, p = 0$

Difference exists even when controlling for WHOs

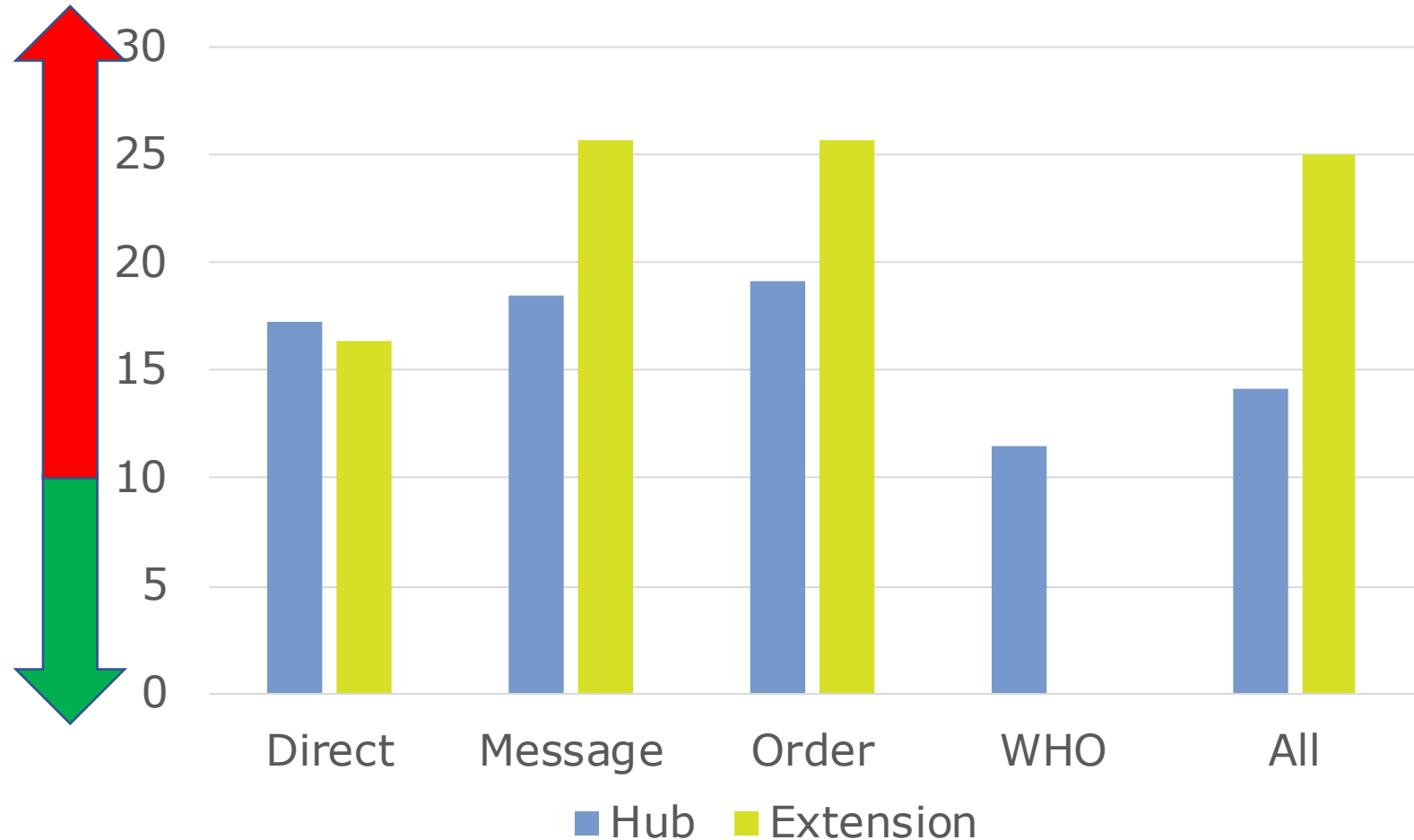


Results: Days Until Intake Appointment

Hub patients were scheduled for sooner appointments than Extension patients, $F(1, 660) = 4.5$, $p = .03$.

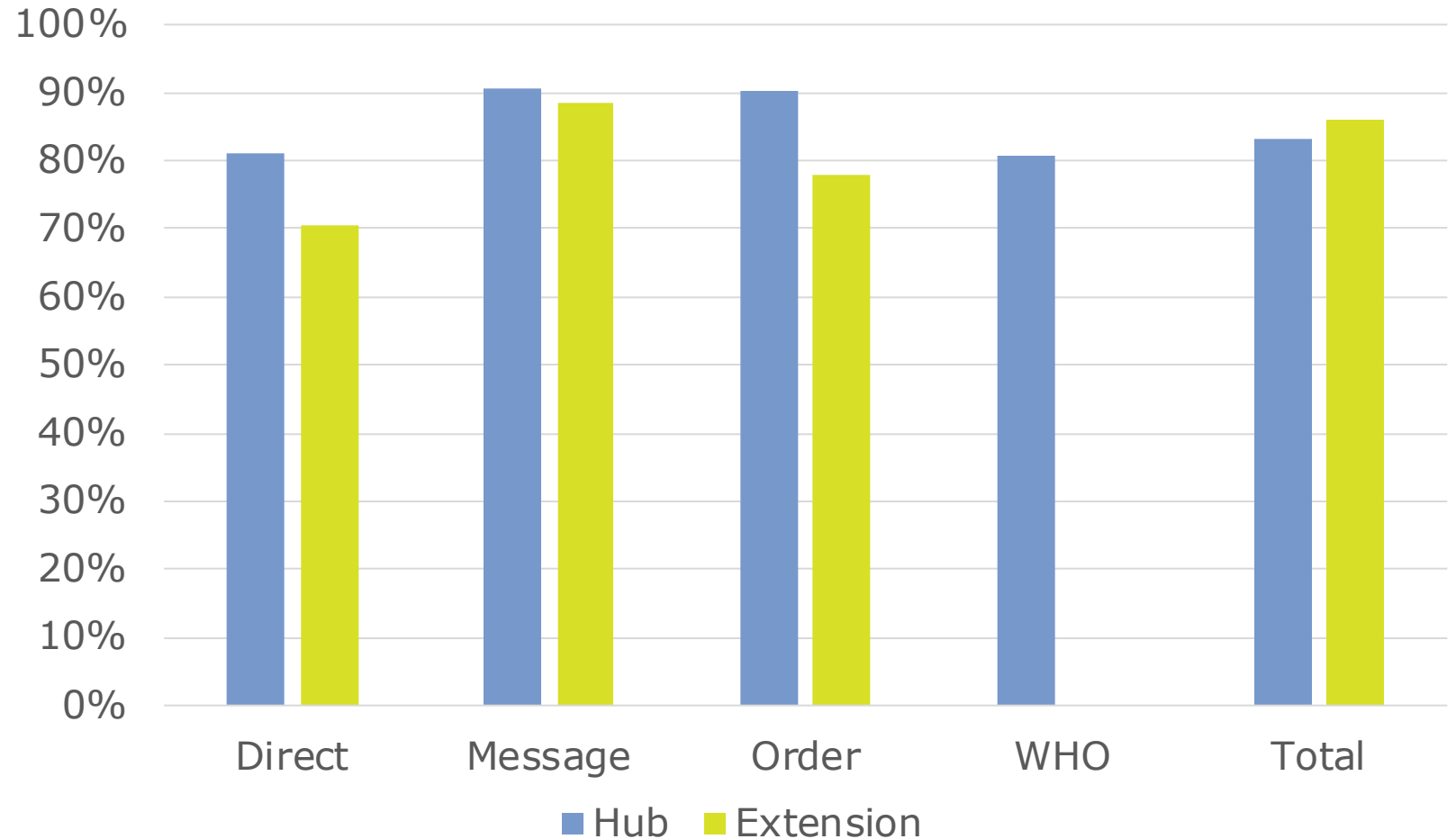
When controlling for WHOs, there was no difference in time to be seen across referral method types, $F(2, 406) = 1.2$, $p = .30$

If you can't do a WHO, let patients schedule at checkout



Results: Outcome of Intake Appointment

- Attended:
 - Hub = 75.6%
 - Extension = 78.7%
- No-Shows:
 - Hub = 15.4%
 - Extension = 12.7%
- Cancellations:
 - Hub = 8.9%
 - Extension = 8.6%





Implications and Future Directions



Model
Evolution



Point of
Care
Scheduling



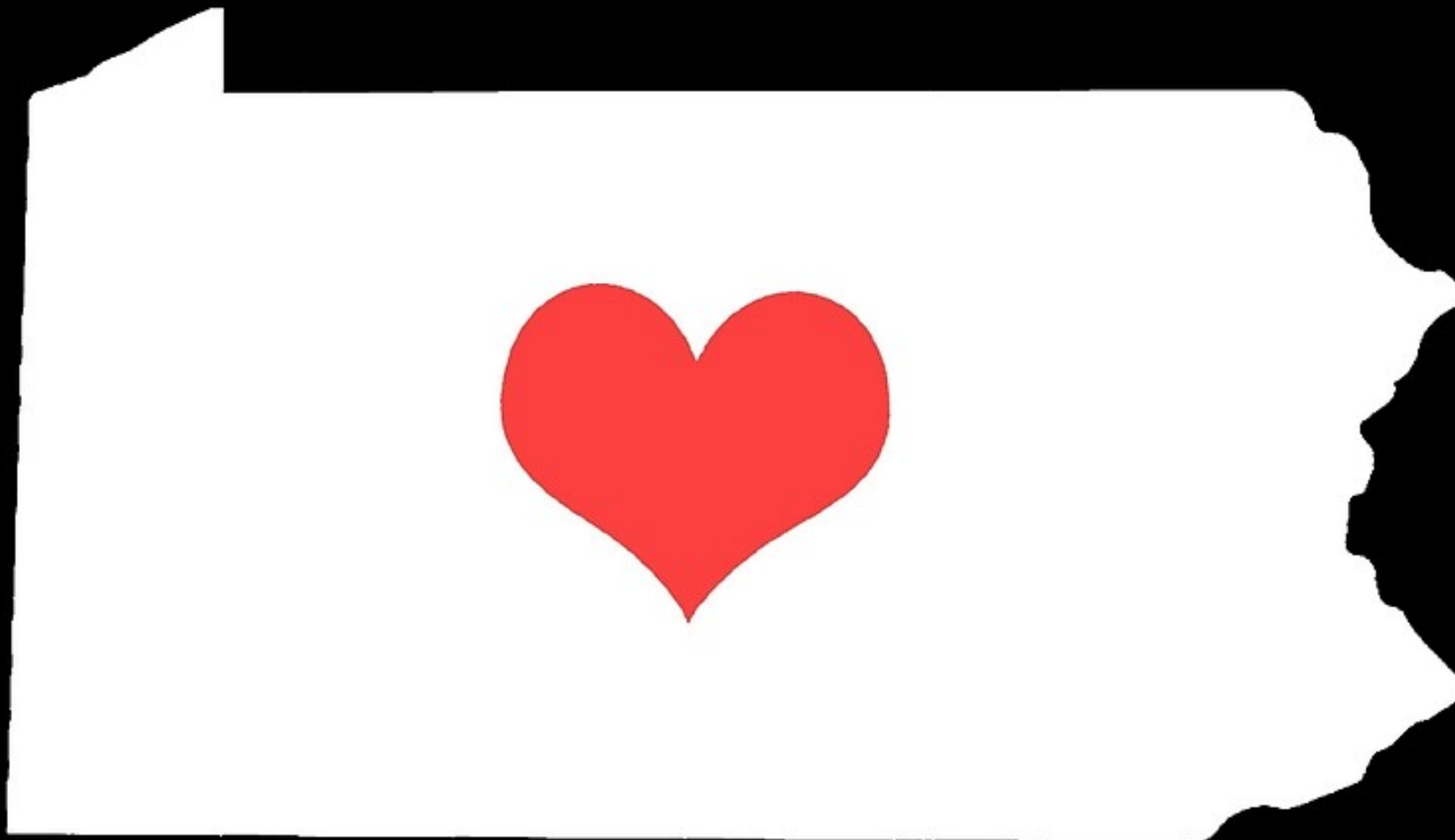
Not
scheduled?



Impact on
distance



Replication



Join us next year in Pennsylvania! Thank you!