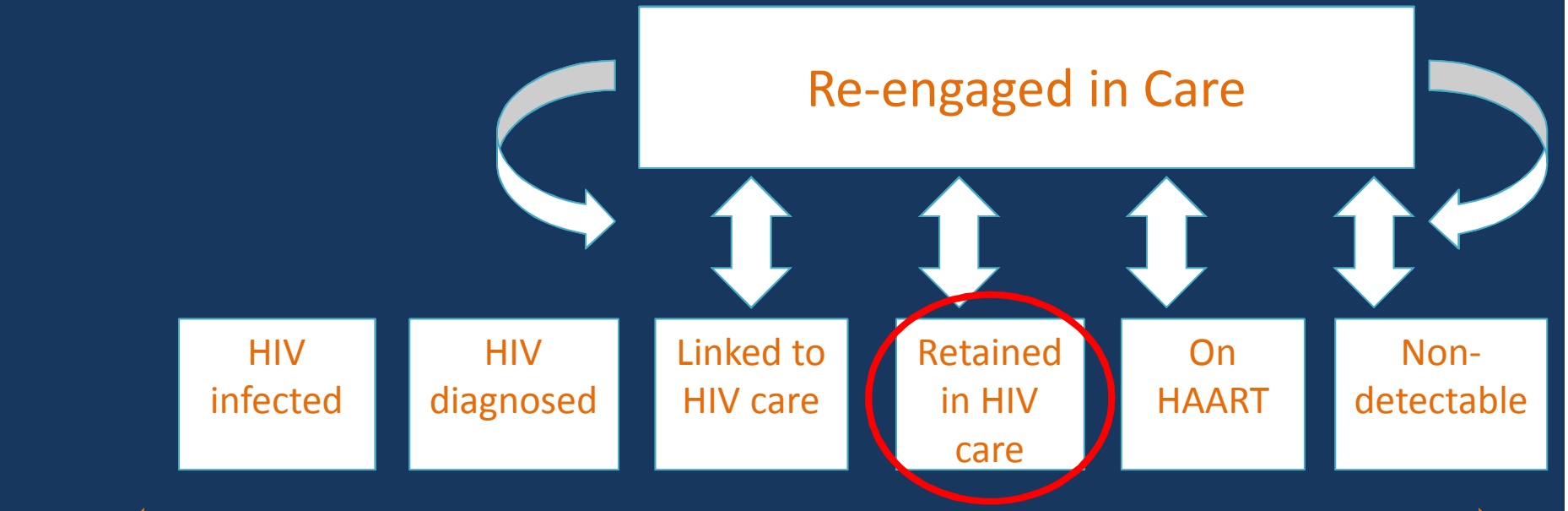
Hello, is it me you're looking for?

Impact of provider delivered phone calls on clinic attendance.

UVA Ryan White Clinic

Erin Wispelwey (Retention in Care Coordinator)
Rebecca Dillingham MD MPH

The continuum and churn of (re)engagement in care



Adapted from Ulett et. al

Previous research

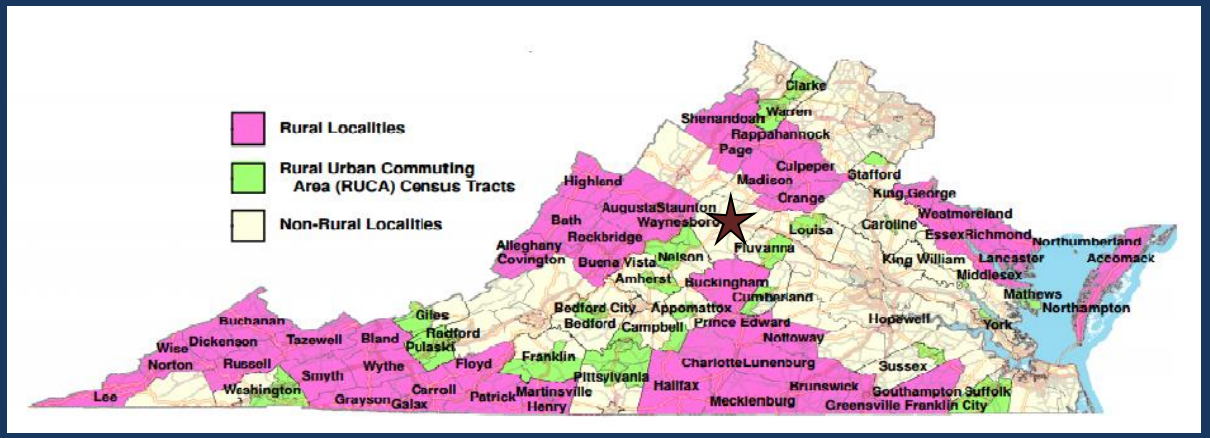
- Automated telephone reminder calls
  - Henry 2012; Perron 2010
- Consistent messages from provider about the importance of retention
  - Gardner et al. 2012
- Improved patient provider communication and patient satisfaction
  - Flickinger et al. 2013; Beach 2006; Dang 2013

Can provider phone calls improve clinic attendance by patients at high risk of non-attendance?

UVA Ryan White Clinic

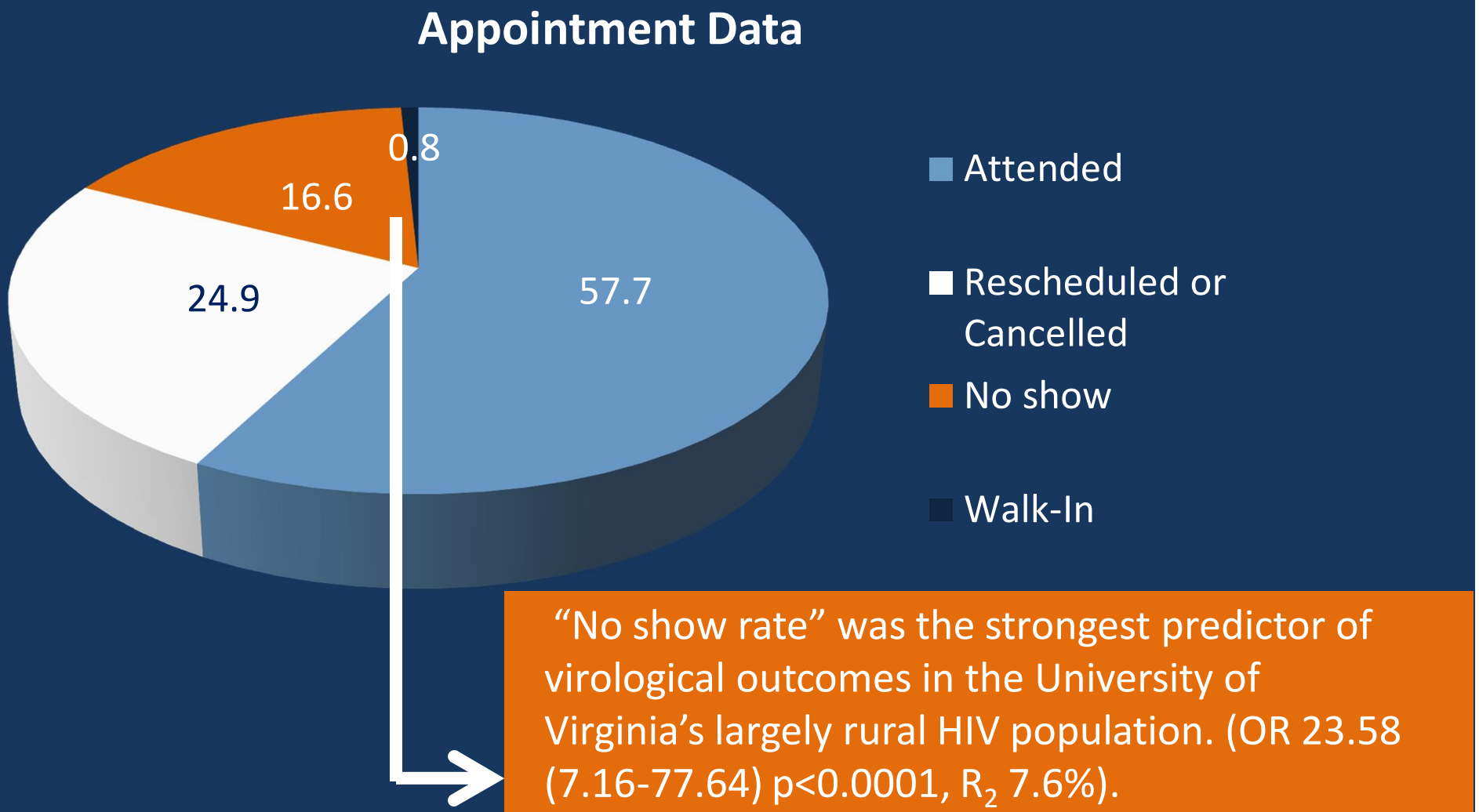
- 686 Active patients
- Sex: Male (71%), Female (28%), Transgender (1%)
- Race: White (55%) and Black /African American (44%)
- Risk Factors: MSM (46%); Heterosexual (40%); IDU (8%); MSM IDU (2%); Perinatal, hemophilia and unknown (4%)
- Insurance: Private : 36%, Public 21%, No insurance 43%

280 patients identified as “at risk” of falling out of care or out of care



Virginia Rural (Non-Metropolitan) Areas and Census Tracts within Metropolitain Areas (MAs) Designated as Rural based on their Rural Urban Commuting Area (RUCA) Scores.
(http://www.vdh.virginia.gov/OMHHE/primarycare/documents/rural/ORHPRuralLocalitiesandRUCA.pdf)

Appointment attendance and virologic outcomes



"No show rate" was the strongest predictor of virological outcomes in the University of Virginia's largely rural HIV population. (OR 23.58 (7.16-77.64) $p<0.0001$, R_2 7.6%).

(Althoff A. Schectman J, **Dillingham RA**. "No Show Rate" Predicts Virologic Outcomes in a Largely Rural Population with HIV. Oral Abstract #62031. 5th International Conference on HIV Treatment Adherence. May 23-25, 2010. Miami, Fl)

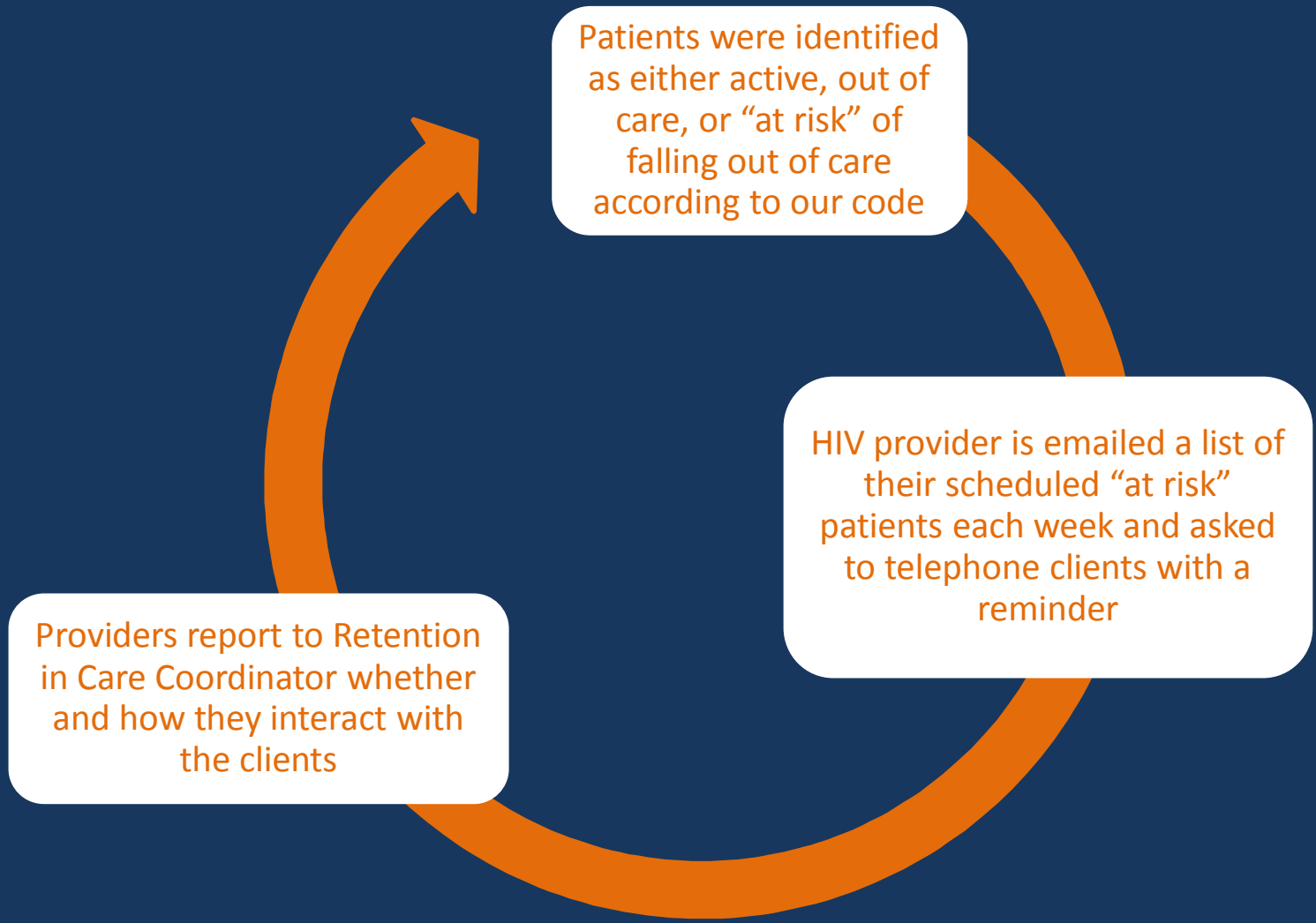
Reminder Process

- Standard: All UVa outpatients receive an automated phone call 3 days prior to their appointment and a written reminder of the appointment.
- Intervention: Provider- delivered reminder phone calls for clients at risk of poor engagement in care (in addition to standard reminder)

Retention in Care Risk Coding

Code	Reason for being “at risk”
1	1 “no show”
2	2 consecutive “no shows”
3	3 consecutive “no shows”
4	6 months + without a visit
5	New to Care at UVA (within 1 year)
6	Other reason
7	History of “no shows”
8	Stretches time between visits
9	Previously out of care (codes 3 or 4)

“At Risk” Reminder Process and Feedback



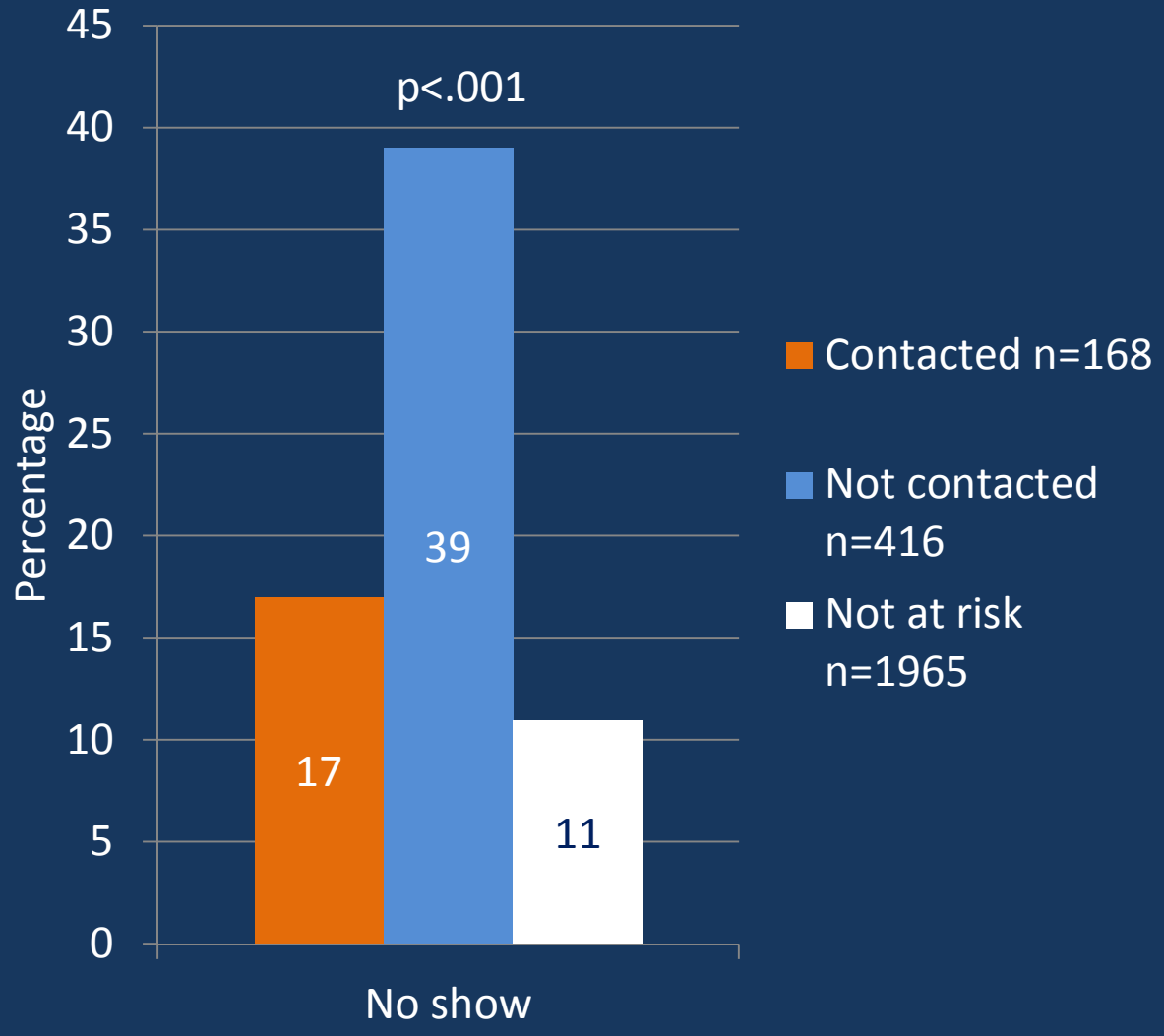
Provider-delivered phone calls reduced no show rates

From October 16,2012-April 30, 2013

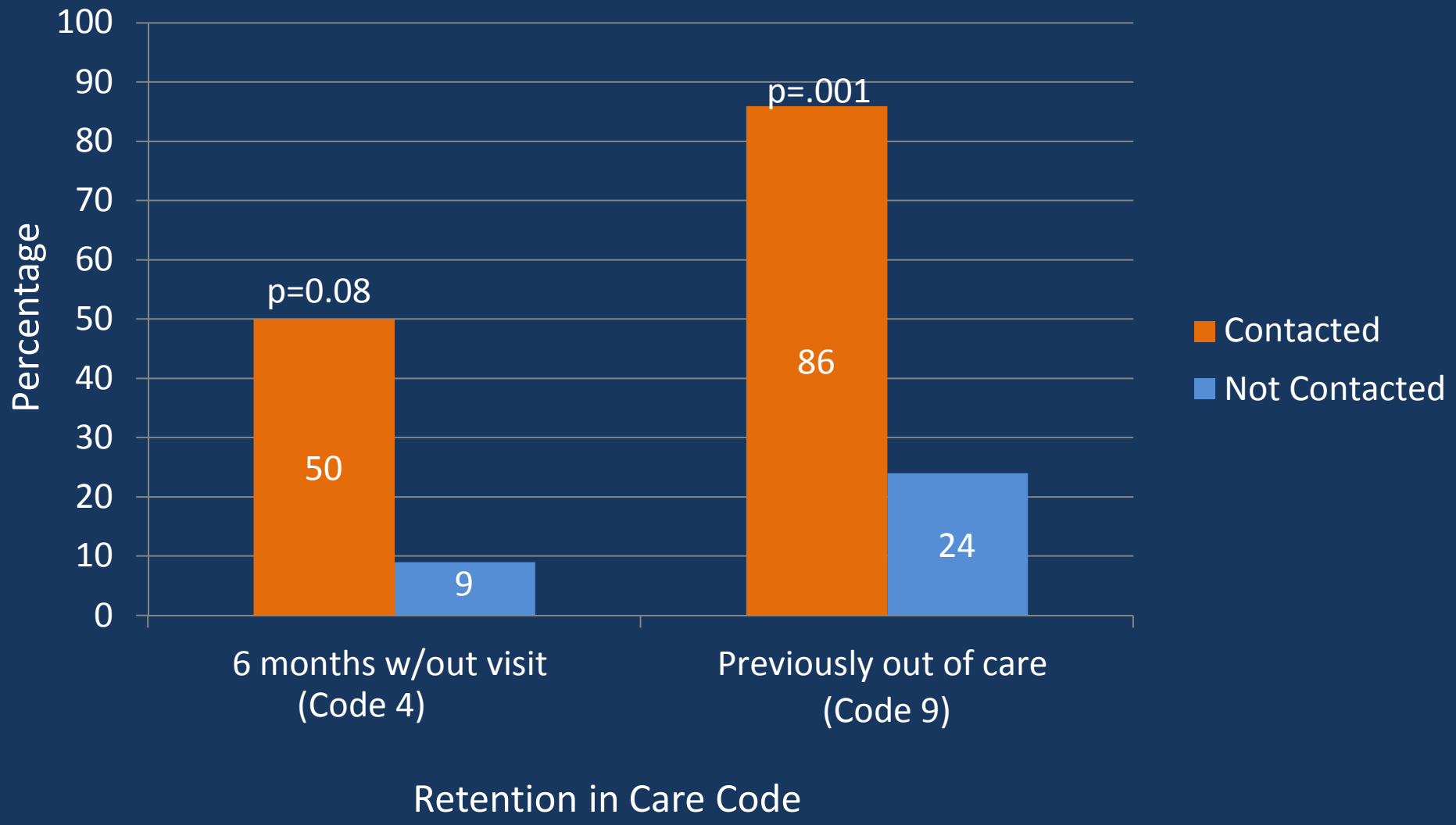
2549 Clinical encounters

584 (23%) with "at risk" clients

Providers contacted 168 (29%) of "at risk" clients



Provider phone calls increase attendance for highest risk groups



Provider Phone Call Olympics

- During the first 10 weeks, providers contacted 40% percent of “at-risk” patients.
- Changes in “at-risk” patient attendance were shared with clinic providers and staff regularly.
- In order to increase provider participation, we developed a “Provider Olympics.” The provider with the greatest percentage of attempted contact was recognized via a group email.
- Unfortunately percentage of patients contacted fell from 40% to 26% in weeks 11-26.

Conclusion

Phone calls made by providers improved clinic attendance in a patient group at high risk of poor engagement in care .

Limitations

- Incomplete provider participation
- Inaccurate patient contact information
- Voicemails counted as contact made
- Rescheduling may have been initiated by the patient or the provider
- Unable to assess whether some improvement was due to other changes in the clinic

Future Strategies

- Phone calls by medical case managers
- Increase incentives for provider participation
- Assess for changes in overall clinic attendance rates and correlations with virologic suppression
- Text messaging

Thank you

- Thanks to all of the providers and patients at the University of Virginia Ryan White Clinic
- This work was supported by:
  - HRSA Grant H76HA04385
  - NIAID K23 AI77339

References

- Althoff A, Schectman J, **Dillingham RA**. "No Show Rate" Predicts Virologic Outcomes in a Largely Rural Population with HIV. Oral Abstract #62031. 5th International Conference on HIV Treatment Adherence. May 23-25, 2010. Miami, Fl)
- Beach MC, Keruly J, Moore RD. Is the quality of the patient-provider relationship associated with better adherence and health outcomes for patients with HIV? *J Gen Intern Med*. 2006;21(6):661-665.
- Dang BN, Westbrook RA, Black WC, Rodriguez-Barradas MC, Giordano TP. Examining the link between patient satisfaction and adherence to HIV care: A structural equation model. *PLoS One*. 2013;8(1):e54729.
- Flickinger TE, Saha S, Moore RD, Beach MC. Higher quality communication and relationships are associated with improved patient engagement in HIV care. *J Acquir Immune Defic Syndr*. 2013.
- Gardner L, Marks G, Craw J, et al. A low-effort clinic-wide intervention improves attendance for HIV primary care. *Clin Infect Dis*. 2012.
- Giordano TP, Gifford AL, White AC,Jr, et al. Retention in care: A challenge to survival with HIV infection. *Clin Infect Dis*. 2007;44(11):1493-1499.
- Henry SR, Goetz MB, Asch SM. The effect of automated telephone appointment reminders on HIV primary care no-shows by veterans. *J Assoc Nurses AIDS Care*. 2012;23(5):409-418.
- Marks G, Gardner LI, Craw J, Crepaz N. Entry and retention in medical care among HIV-diagnosed persons: A meta- analysis. *AIDS*. 2010;24(17):2665-2678.
- Mugavero MJ, Amico KR, Westfall AO, et al. Early retention in HIV care and viral load suppression: Implications for a test and treat approach to HIV prevention. *J Acquir Immune Defic Syndr*. 2012;59(1):86-93.
- Mugavero MJ, Lin HY, Willig JH, et al. Missed visits and mortality among patients establishing initial outpatient HIV treatment. *Clin Infect Dis*. 2009;48(2):248-256.
- Perron NJ, Dao MD, Kossovsky MP, et al. Reduction of missed appointments at an urban primary care clinic: A randomised controlled study. *BMC Fam Pract*. 2010;11:79-2296-11-79.
- Perron, NJ, Dao MD, Righini NC, et al. Text-messaging versus telephone reminders to reduce missed appointments in an academic primary care clinic: a randomized controlled trial. BMC Health Services research, 2013; 12:125.
- Ulett KB, Willig JH, Lin HY, et al. The therapeutic implications of timely linkage and early retention in HIV care. *AIDS Patient Care STDS*. 2009;23(1):41-49.