Data for Care (D4C) Alabama
A Clinic-Wide, Risk Stratification Retention in Care Intervention

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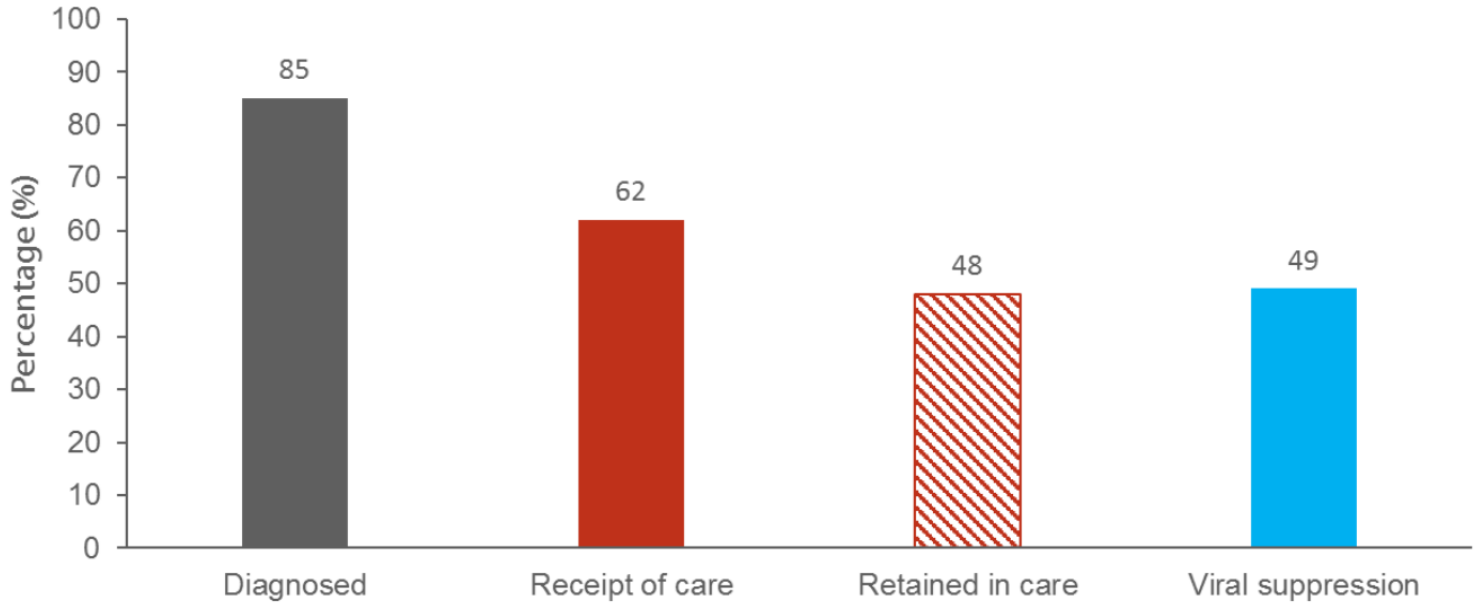
HIV Treatment Cascade (Care Continuum), 2014 – U.S.



Note. Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2014. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2014. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2014.

https://www.cdc.gov/hiv/pdf/library/slidesets/cdc-hiv-prevention-and-care-outcomes.pdf

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Background

- Improving retention in care (RiC) the greatest opportunity along care continuum to advance prevention and treatment benefits for PLWH

- In contrast to linkage to care (e.g., ARTAS) and re-engagement in care (e.g., D2C), no large scale programs implemented for RiC

- Unique infrastructure afforded by RWHAP for systematic, clinic-wide HIV RiC program(s)

Data for Care (D4C): "Big Picture"

- Risk stratification: Clinic-wide risk stratification based upon missed visits prior 12 months

- Resource allocation: Delivery of REPC intervention to intermediate and high risk patients (+ best available RiC resources for HR)

- Continuous quality improvement: Iterative clinic-wide (and individual) monitoring, risk stratification, and targeted RiC service delivery

Why Focus on Missed Visits?

- Missed ("no show") HIV visit(s) associations:
  - Delayed ART initiation & longer time to VS
  - Gaps in care & loss to follow-up
  - Greater cumulative viral load
  - Racial / ethnic disparities
  - Mortality

- Missed ("no show") HIV care visits
  - Uniquely captured by HIV medical clinics
  - Immediately measured & actionable

Mugavero et al. *Clin Infect Dis* 2009;48, Zinski et al. *AJPH* 2015;105, Thompson et al. *Annals of Internal Medicine* 2012;156

Retention in Care measure	Need missed visit data?	Ease of calculating	Follow-up time
Missed visits	Yes	Easy	~1 day
Appointment adherence	Yes	Moderate	~1 yr
No-show rate	Yes	Moderate	~1 yr
Constancy: Visit per 3, 4 or 6 mo intervals	No	Moderate	~1 yr
Gap in care	No	Easy	~1 yr
HRSA/HAB	No	Mod-to-difficult	1 yr
DHHS	No	Mod-to-difficult	2 yrs

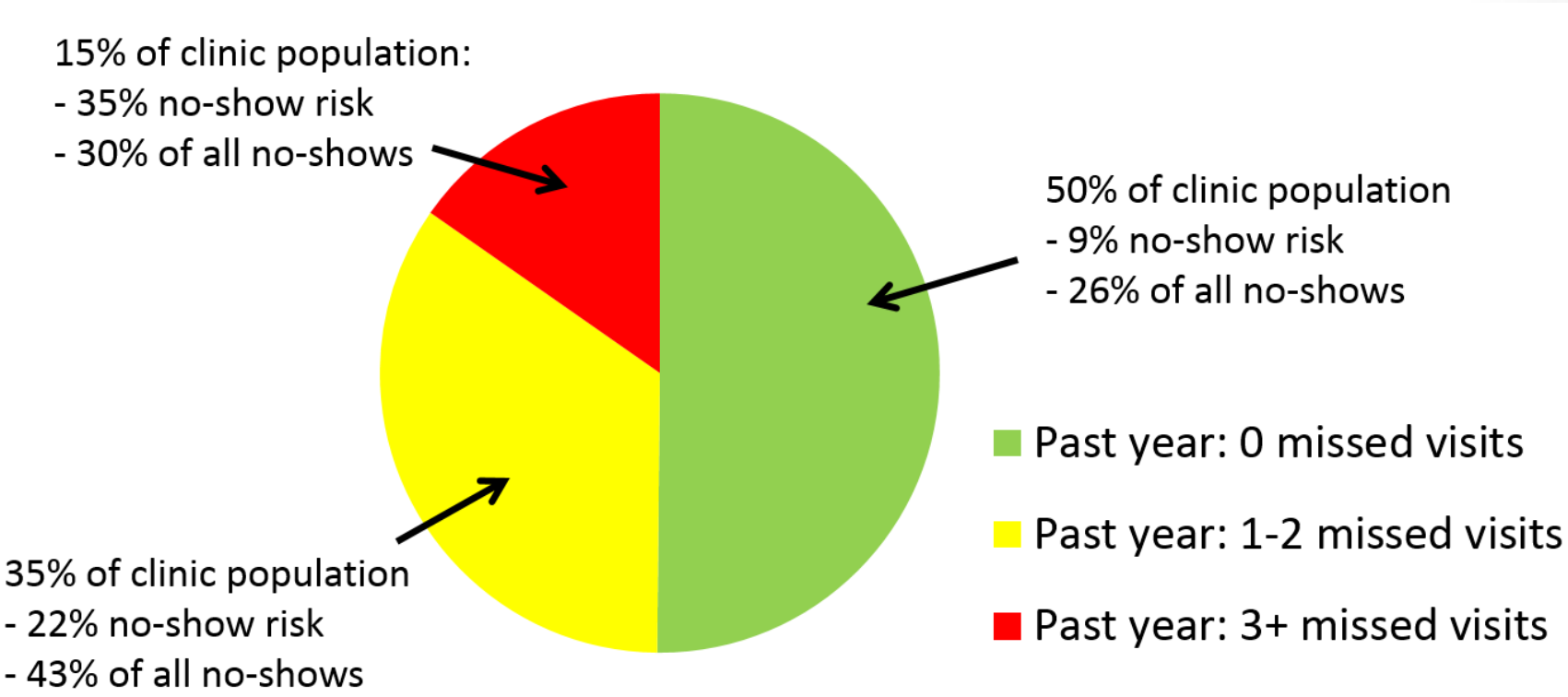
Adapted from: Giordano TP (2012) Measuring retention in HIV care. www.medscape.com.

D4C Risk Stratification

- Data query: missed primary HIV care visits prior 12 months
  - LOW risk: zero missed visits
  - INTERMEDIATE risk: 1-2 missed visits
  - HIGH risk: ≥ 3 missed visits

- Match clinic-wide risk stratification with appointment scheduling system for upcoming 3 months identifying scheduled appointments for INTERMEDIATE and HIGH risk patients

CNICS Risk Stratification (n~12,000)

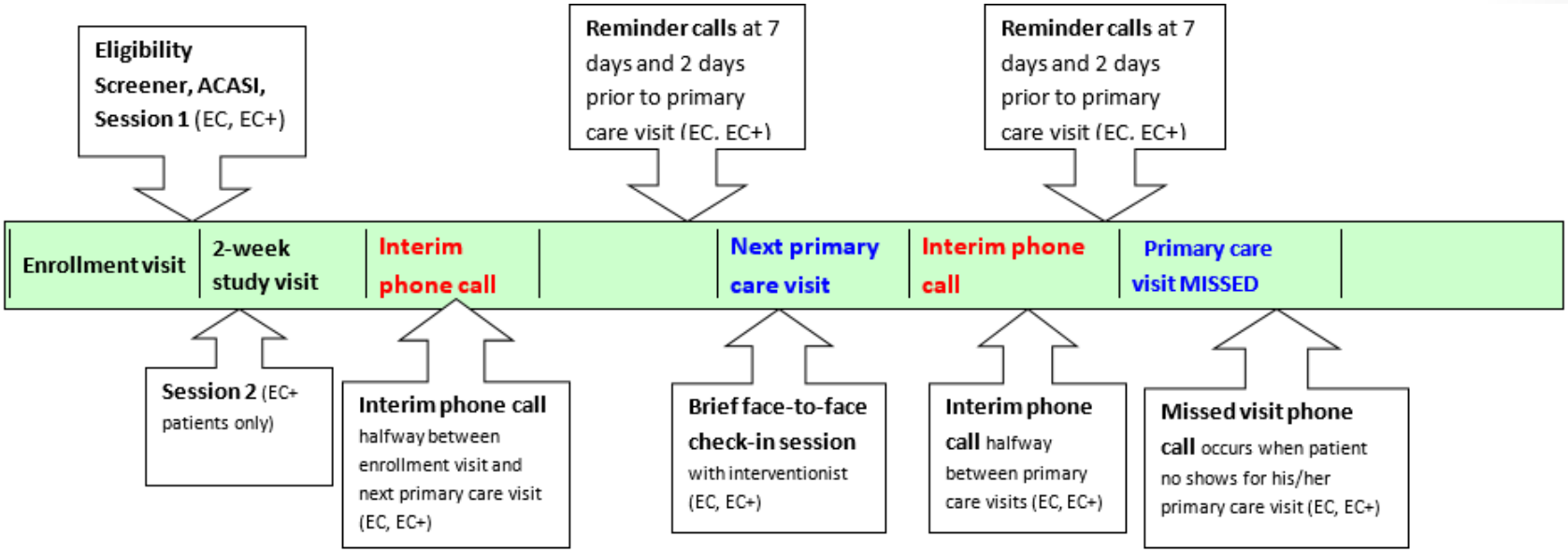


Pence. 11th International Conference on HIV Treatment and Prevention Adherence, Ft Lauderdale, FL; 9-10 May 2016, AIDS & Behavior (under review)

D4C Resource Allocation

- INTERMEDIATE and HIGH risk patients receive evidence-based retention through enhanced personal contact (REPC)

D4C Resource Allocation: REPC



Enhanced <u>personal</u> contact (EC)

Interim phone call

Reminder phone calls

Missed visit phone calls

Brief face-face visits

EC plus behavioral skills (EC+)

Strengths-based discussion at 2-week visit

Unmet needs assessment & skills modules:

Organizational skill

Communicating skills

Problem skills

Standard of care (SOC)

Usual practices for established and new patients

Referrals to social worker or case manager, as usually done

Usual visit reminders (automated or individual, telephone or written, etc)

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D4C Resource Allocation: REPC

Study Arm	Visit Constancy, %[a]	Risk Ratio (95% CI)	Visit Adherence, %[b]	Risk Ratio (95% CI)
Enhanced contact only (n = 615)	55.8	1.22 (1.09–1.36)	72.5	1.08 (1.05–1.11)
Enhanced contact plus skills (n = 610)	55.6	1.22 (1.09–1.36)	70.9	1.06 (1.02–1.09)
Standard of care (n = 613)	45.7	Ref	67.2	Ref

REPC Take Home Points:

- 10% increase in RiC by Constancy & HRSA HAB
- 5% increase in visit adherence
- No added benefit of skills modules (EC+)
- Efficacious: women, AA/Black, low SES
- Dose-response b/t # of contacts & RiC
- NOT efficacious: unmet need(s), illicit drug use

Gardner LI et al. *Clin Infect Dis* 2014;59; Shrestha RK et al. *JAIDS* 2015; 68

D4C Resource Allocation

- INTERMEDIATE and HIGH risk patients receive evidence-based retention through enhanced personal contact (REPC)

- HIGH risk patients receive highest intensity resources available at each clinic (e.g., intensive case management, peer mentor, outreach)

- LOW risk patients receive 24-48 hour missed visit call and transition to INTERMEDIATE risk for reminder contacts

D4C Alabama (D4C AL)

- Design: Non-randomized step wedge
- Sites: 7 Ryan White HIV Clinics in Alabama
- Data: Individual-level and clinic-wide socio-demographic, lab, and visit data mirroring RSR
- Evaluation: Process and outcome metrics

Alabama Regional Quality Management Group (ALRQG)

"The Alabama Regional Quality Management Group exists to ensure that those living with HIV/AIDS in the state of Alabama receive quality healthcare through the collaboration of healthcare partners throughout the state. This collaboration aims to continuously improve the quality of HIV care consistent with recognized national standards and current HIV research"

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Courtesy of Ashley Tarrant, MAO, and Jitesh Parmar, Thrive Alabama

ALRQG; Missed visit indicator

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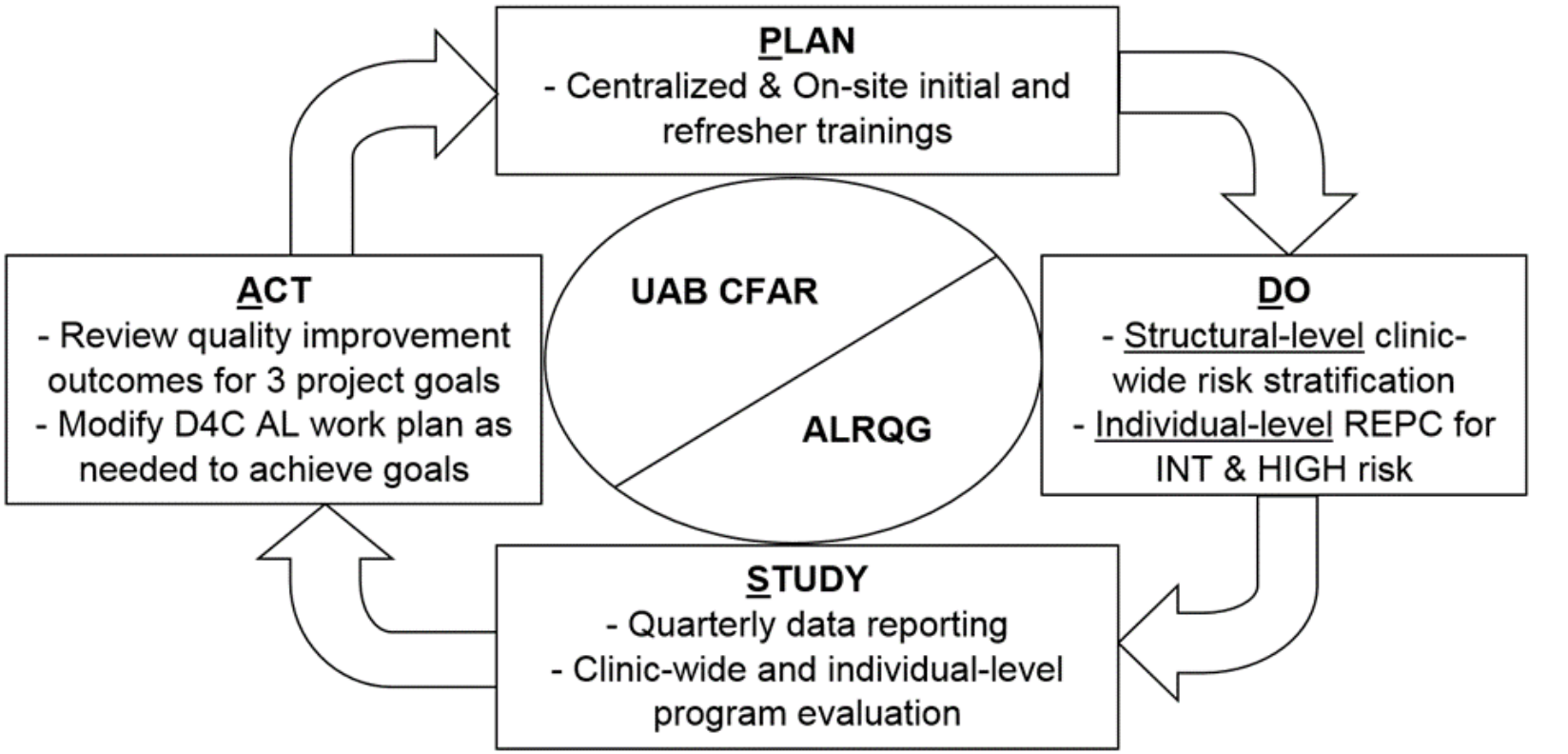
Courtesy of Ashley Tarrant, MAO, and Jitesh Parmar, Thrive Alabama

D4C AL: CQI using PDSA Framework



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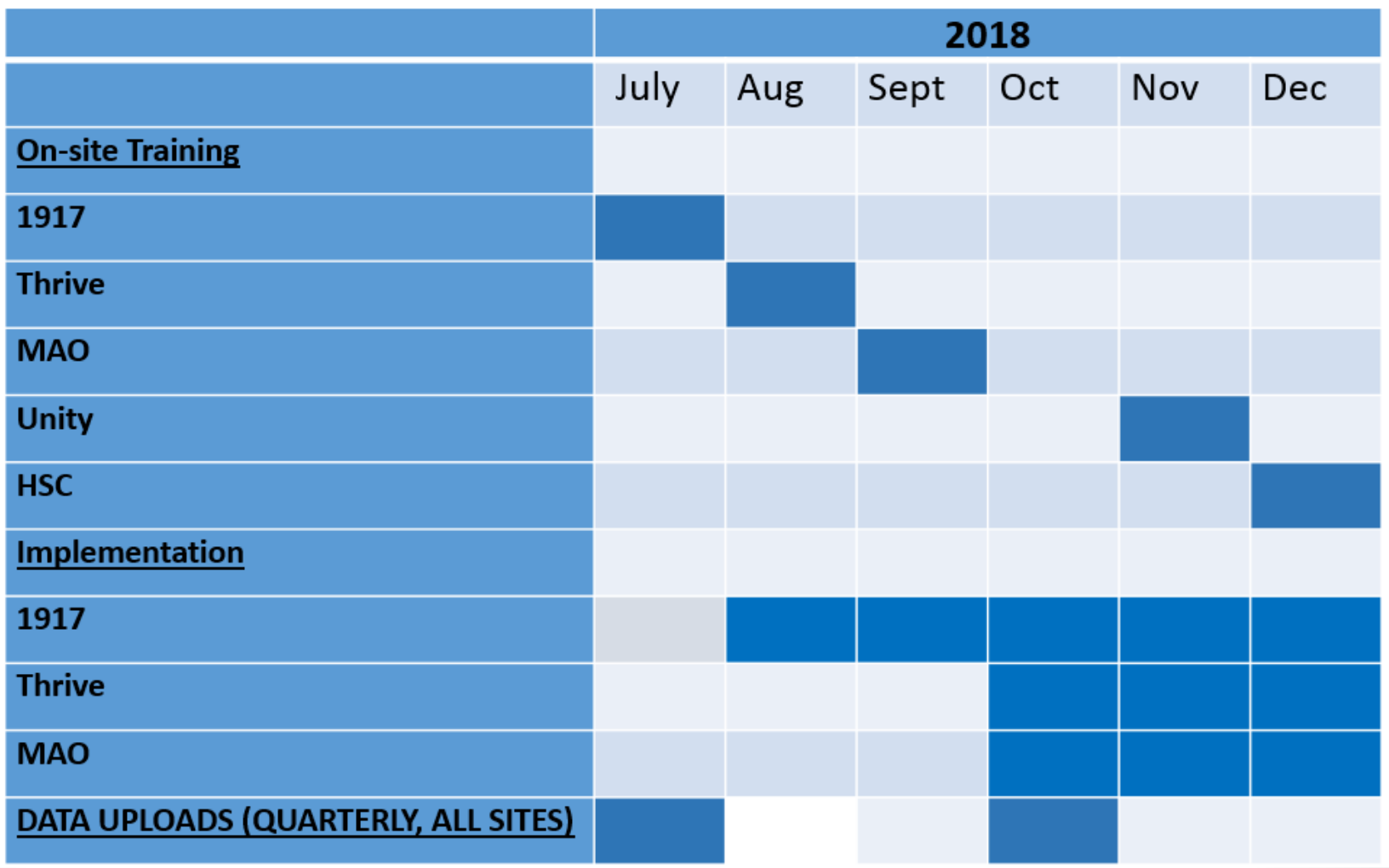
D4C Alabama (D4C AL): Timeline



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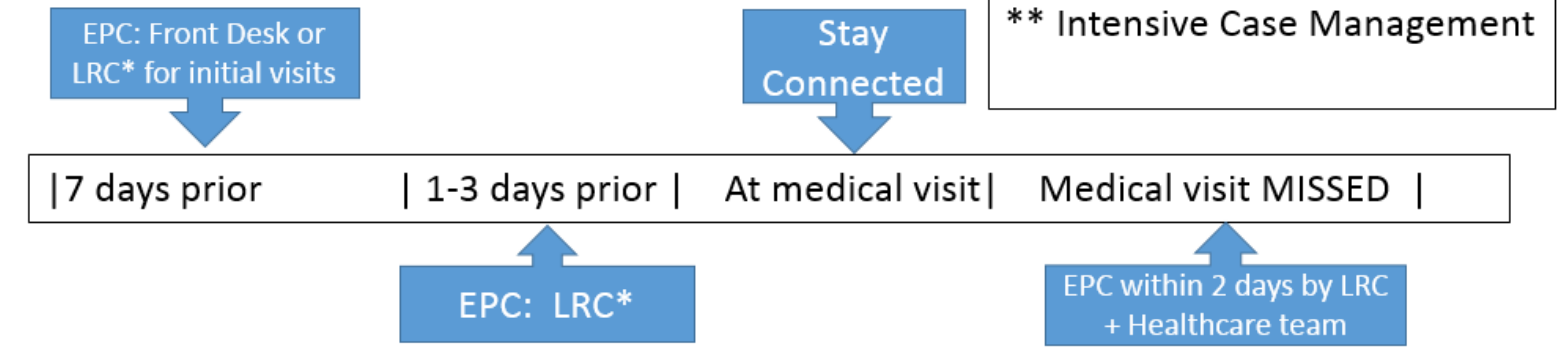
D4C (Data for Care) 1917 Pilot

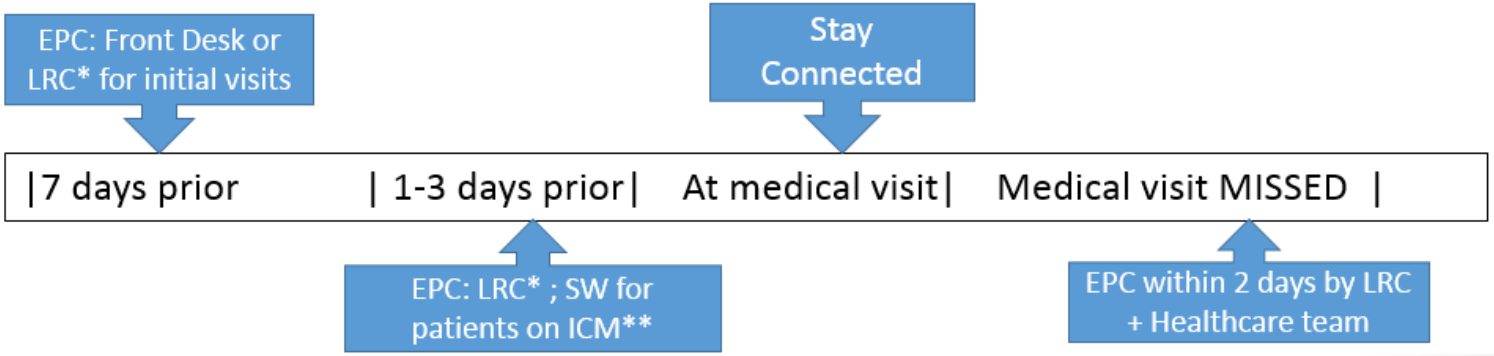
*LRC = Linkage & Retention Coordinator

** Intensive Case Management

1-2 Missed Visits (Medium Risk)



≥3 Missed Visits (High Risk)



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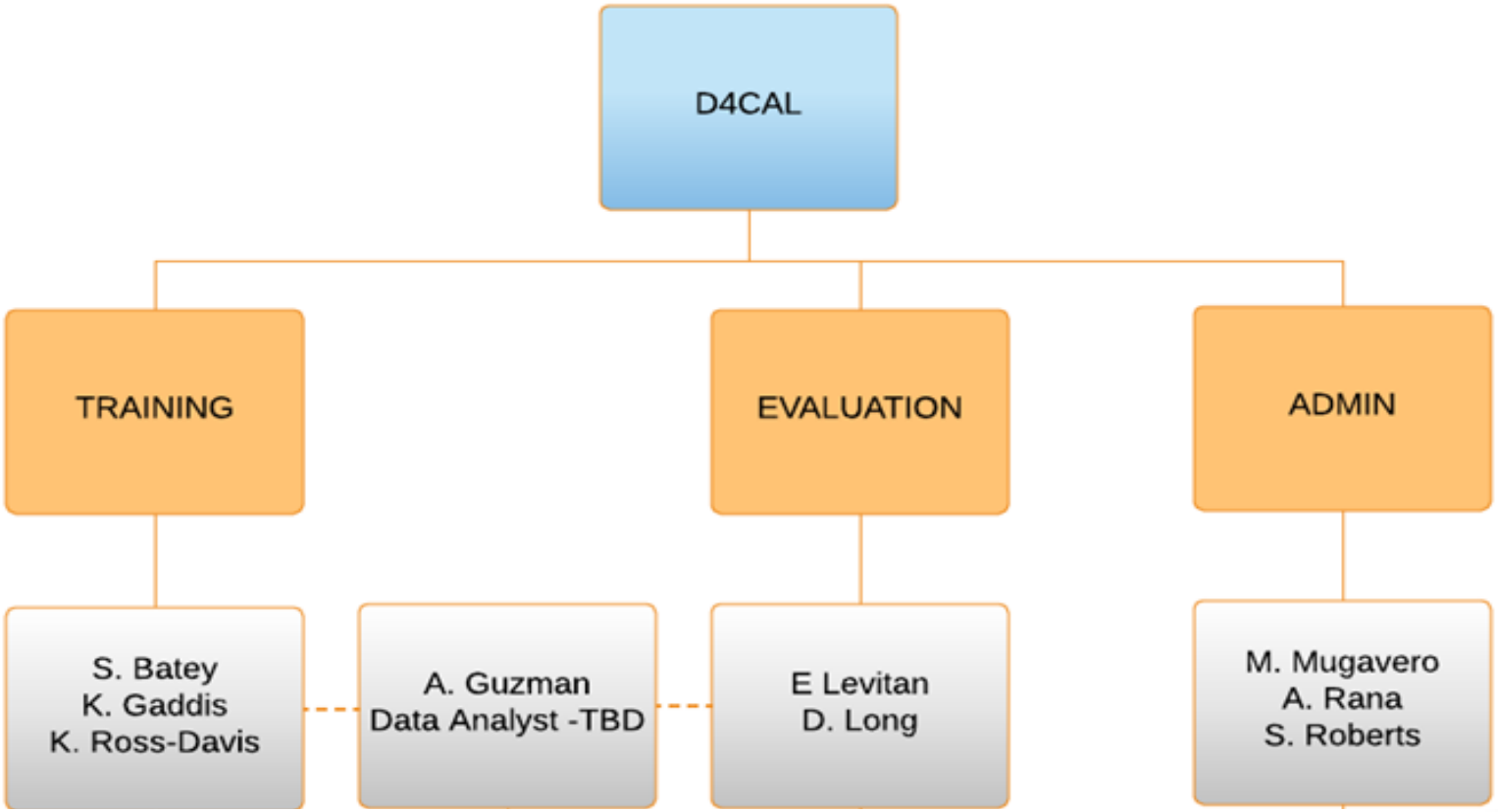
D4C Alabama (D4C AL) Metrics

- Process:
  - Fidelity of clinic-wide risk stratification
  - Fidelity of REPC reminder & missed visit calls
  - Measuring "best" RiC programs for HR @ sites
  - Fidelity of HR patients receiving "best" RIC
- Outcomes: Individual-level and clinic wide
  - Missed visits, visit adherence & HRSA HAB
  - Viral Suppression
- Implementation Science Metrics?

Acknowledgements



- Jitesh Parmar (THRIVE), Ashley Tarrant (MAO) & ALRQG Site Leads and Clinic Directors

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