

CT Children's/UConn Health
CT Department of Public Health
Ryan White Part B

Youth Viral Load Suppression
Quality Improvement Project

Getting to Zero Quality Summit
September 18, 2019



UConn
HEALTH



Quality Improvement Project Background

Connecticut Children's (CCMC), through the Department of Public Health (DPH) Ryan White Part B funding, serves Youth ages 13 to 24 who are living with HIV.

Data collected by DPH in 2017, showed a high disparity in viral load suppression among youth. **It was found that only 68% of youth ages 13- 24 were virally suppressed versus the overall rate of 80%.** As a result of these findings, a **Youth Viral Load Suppression Disparity QI Project was piloted in September 2018.**

A QI committee was established and a PDSA implemented to address the problem with the goal of improving medication adherence to increase viral load suppression.

Youth Viral Load Suppression QI Project

Aligns with the:

- ❖ National HIV/AIDS Strategy
- ❖ Connecticut's Integrated HIV Prevention and Care Plan (2017-2021)
- ❖ Undetectable Equals Un-transmittable (U=U) Campaign
- ❖ Getting to Zero (G2Z) Initiative

PDSA Cycle 1

- (1) Develop a Quality Improvement Committee by November 2017.
- (2) Begin process of investigation/fact findings.

- (3) Conduct a literature search and review.
- (4) Conduct a Medication Adherence App review.

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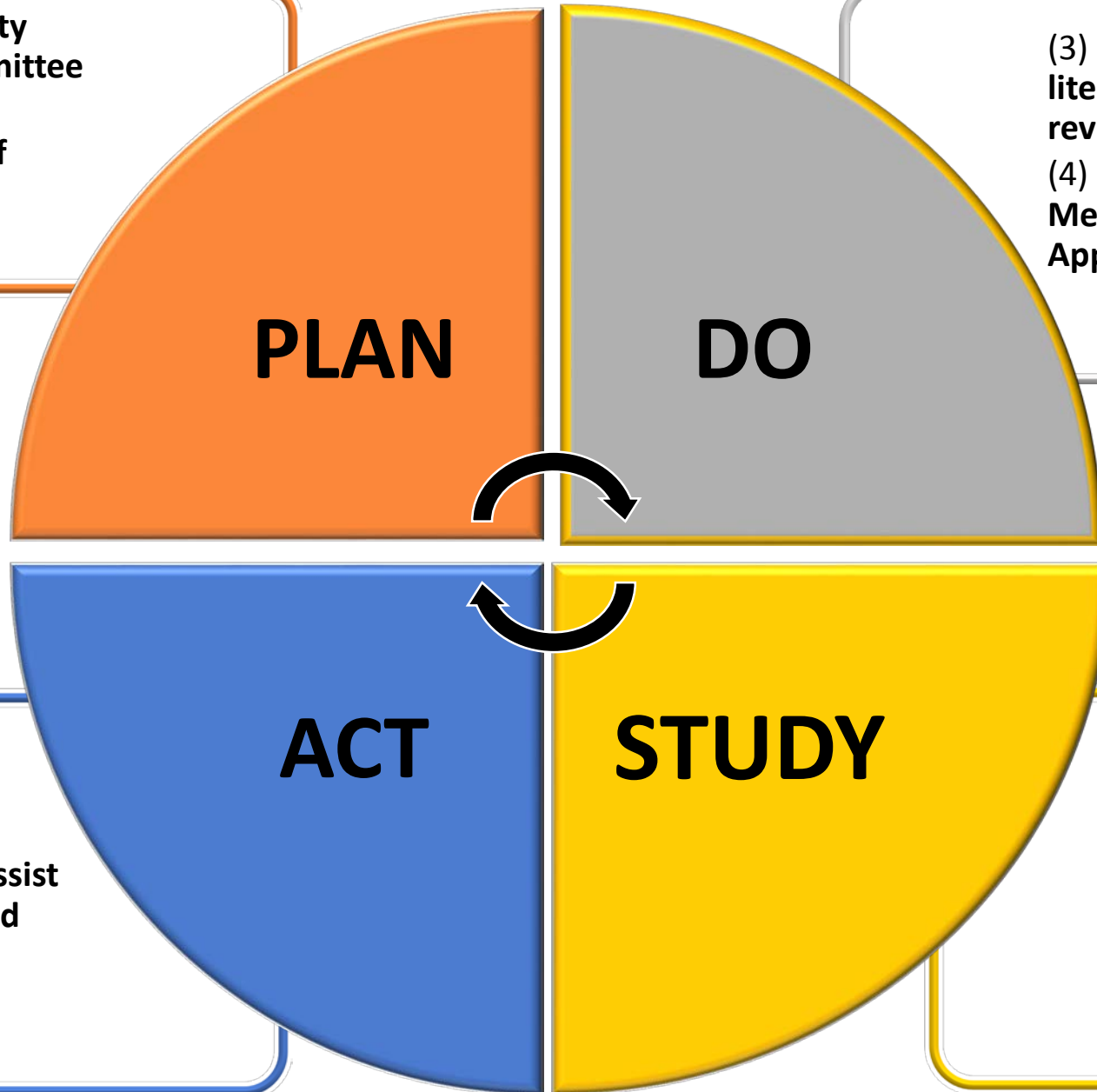
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STUDY

- (6) Develop intervention(s) to assist youth to achieve and maintain viral suppression.

- (5) Evaluate results of the literature and Medication Adherence Apps reviews.



Outcomes Summary, Cycle 1

- ❖ Convened first Quality Improvement Committee meeting at Connecticut Children's on November 15, 2017.
- ❖ Goal to address viral load suppression disparity between HIV positive youth and adults in Connecticut.
- ❖ Piloted the use of Medication Adherence/Reminders Apps.
- ❖ After a month of using the apps, youth peers and other QI Team members reported back on the strengths and weaknesses of using the apps (see lessons learned).
- ❖ After analyzing the feedback on the apps, the group decided to evaluate an existing strategy at Connecticut Children's - increasing phone and text contact by MCMs to non-virally suppressed youth.

PDSA Cycle 2

(1) Identify clients eligible for the intervention. For data collection purposes the group will be Ryan White Part B Actively Medically Case Managed youth age 13-24 at UConn/CCMC who were non-suppressed or had outdated Viral Load data.

(2) Develop intervention: Increase frequency of direct communication with non-virally suppressed RWB MCM clients at CCMC to a minimum 4 contacts per month.

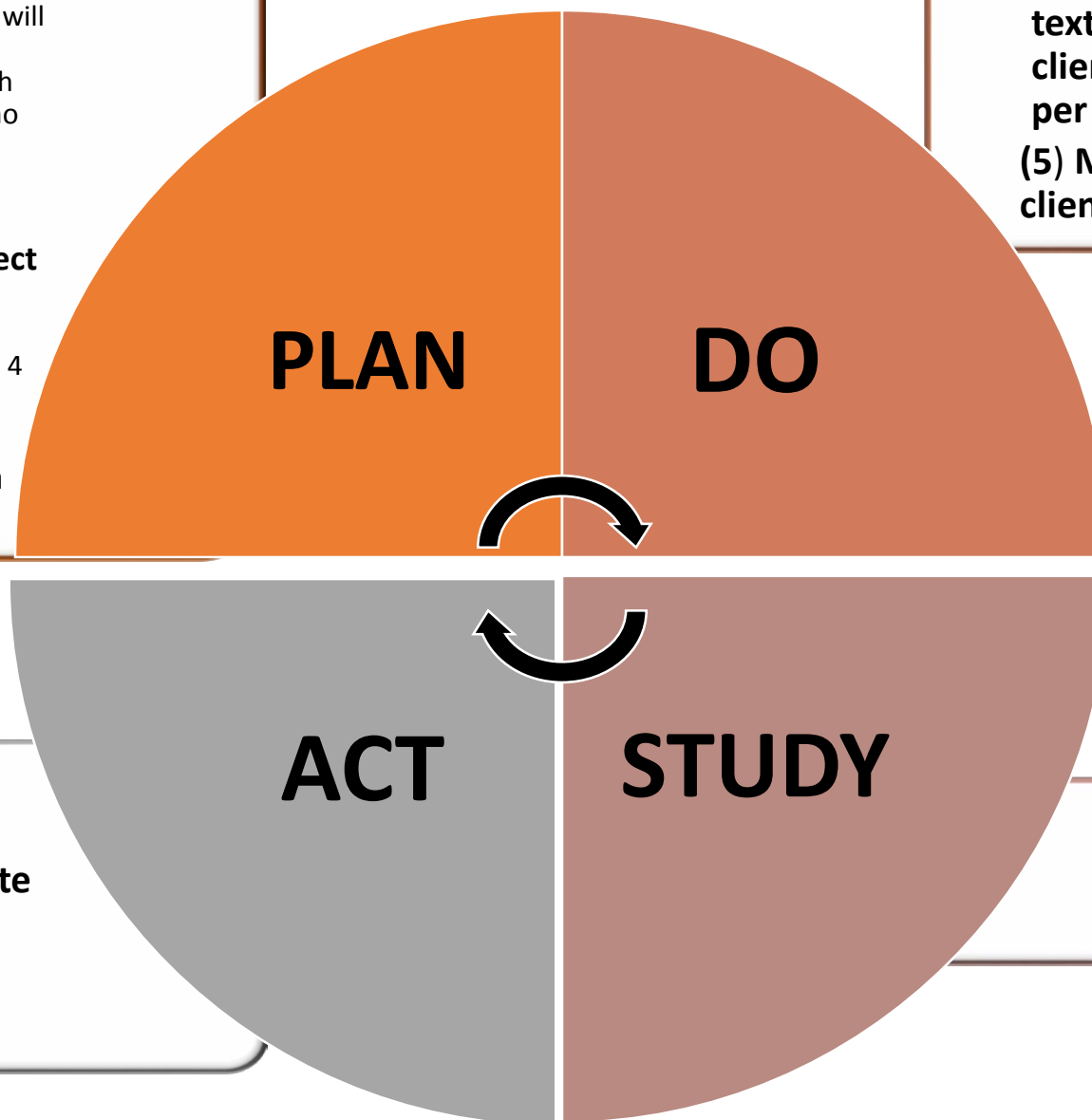
(3) Design data collection strategy (CARE Ware data analysis)

(7) Continue intervention to evaluate the it's long term effectiveness.

(4) Medical Case Manager(s) text and/or call eligible clients a minimum of 4 times per month.

(5) Monitor the effect on the clients' viral suppression rate.

(6) Evaluate results of the intervention.



Outcomes Summary, Cycle 2

- ❖ Very small sample size.
- ❖ Twenty five per cent (25%) of RW B clients in the PDSA achieved viral suppression within the cycle period.
- ❖ During Cycle 2, the target contact levels on average did not meet the design. Average contact was approx. 3 times per month per client.
- ❖ **It is noteworthy that where viral suppression was achieved, monthly contact levels had met or exceeded design specs.**
- ❖ Intervention will be continued for another 6 month cycle to further assess long-term effectiveness.

PDSA Cycle 3

(1) Having observed improved viral suppression within the first cycle period, **the intervention will be continued with the original client group to assess long term effectiveness** (virally suppressed/maintained viral suppression).

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(2) Continue to implement **the intervention of enhanced communication** for an additional six months
(3) Continue to monitor and analyze CAREWare client data.

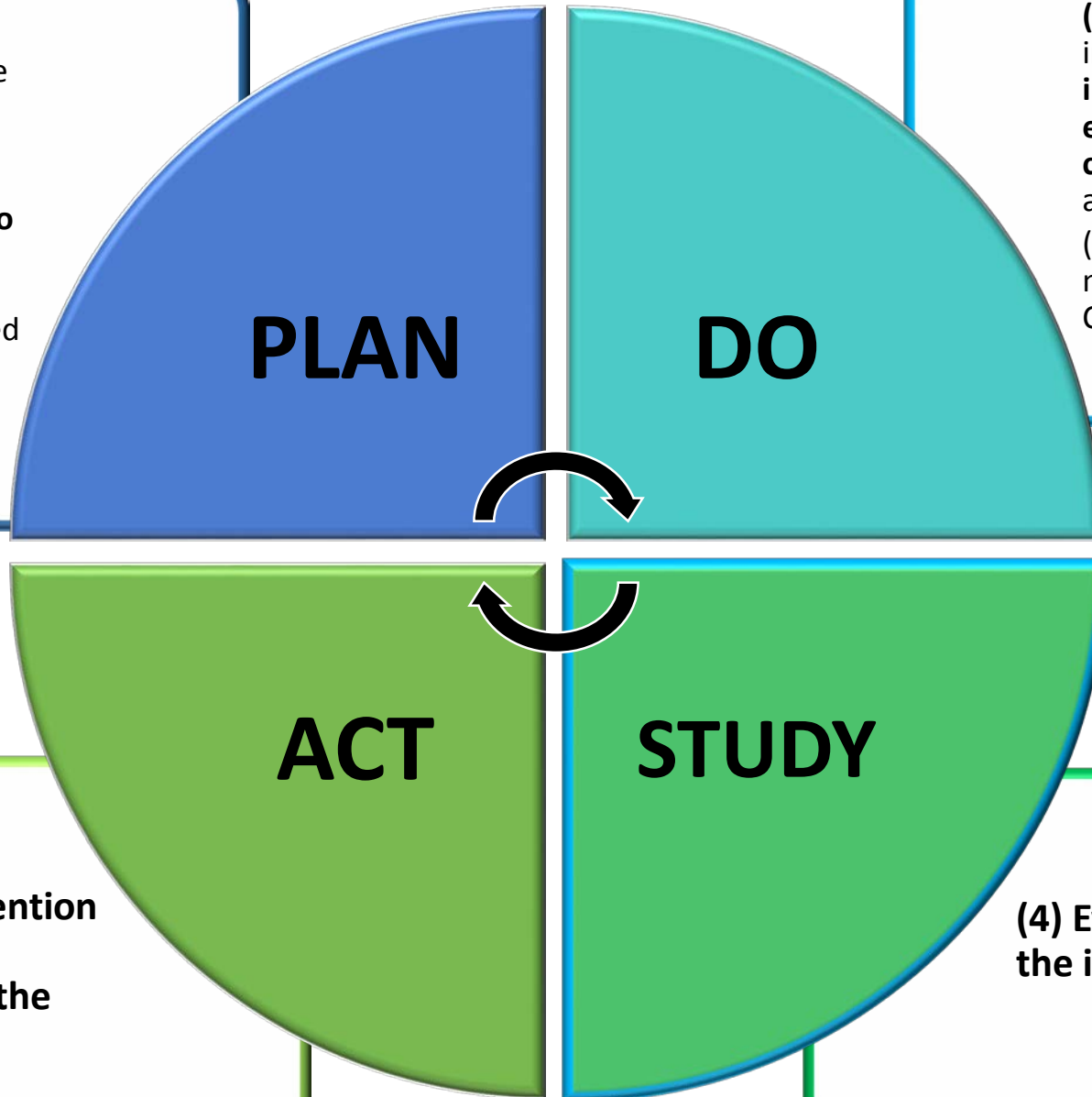
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(4) Evaluate results of the intervention

STUDY

(5) Share intervention and results with stakeholders at the Quality Summit.

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Outcomes Cycle 3

- (1) Intervention with original group continued for a second 6 month cycle to assess long term effectiveness.
- (2) RWB Medical Case Managers continued enhanced levels of direct communication with non-virally suppressed youth and youth with outdated Viral Load data.
- (3) Contact rates and Viral Load data were monitored on a monthly basis in CAREWare.
- (4) Through July 2019:**
 - **contact frequency between MCM and client met the design study.**
 - **Viral Load Suppression rate maintained.**
 - **Improvement in updates to Viral Load data (lab results).**

QI Pearls of Wisdom

Medication Adherence Mobile Apps were found to have **privacy and usability issues**. These issues included vague policies on personal information and use of third party data sharing (for example, use of Google Calendar for appointment details).



The group piloting the Medication Adherence Apps reported that **passwords are sometimes shared** with partners/friends.

MCM with capabilities to text youth **can facilitate client linkage to other care and supports** (i.e. housing support workers, medical staff etc.).



QI team reduced contact to 1x week. Youth described text/calling two times a week as excessive.

A new subservice was added to CAREWare to simplify tracking of communication levels. This was found to reduce data entry time & burden significantly.



Rate of increased contact could now **be easily tracked and measured** alongside client viral suppression and current lab information.

Structural Impact

- ❖ The QI Team incorporated a Medical Case Management Texting subservice in CAREWare in order to more easily track and gauge that specific form of communication with all clients.
- ❖ According to the latest Connecticut Department of Public Health Epidemiological data (2017), the **statewide viral suppression rate for youth living with HIV in Connecticut ages 13 to 24 was 57%**.
- ❖ Among Ryan White B Medically Case Managed youth at Connecticut Children's, this rate was 80% at the end of Cycle One and 69% at the end of Cycle Two.
- ❖ The QI Team will implement this intervention as a Cycle 4 PDSA to children and youth 13-24 across all Ryan White Parts at Connecticut Children's/UConn Health with the goal of expanding to other RW clients across the state of Connecticut as a "Text to Treat" (T2T) intervention in 2020.

Quality Improvement Committee

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