Increasing utilization of mental health resources by adolescents screening positive for depression and anxiety at the ECU Health Pediatric Diabetes Clinic

Emily Downs, MS4, LINC Scholar

ECU Health Quality Improvement Symposium

February 1, 2023

Collaborative Team Members

- Emily Downs, MS4, LINC Scholar
- Jennifer Sutter, MD, Division Chief ECU Pediatric Endocrinology
- Gina Prettyman, Clinical Social Worker
- Kaitlin Hamilton, PA-C
- Maria Henwood-Finley, DO
- Erin Atwood, MD
- Kacie Nelson, RN, Nurse Specialist
- Courtney Nichols, RN, Nurse Specialist
- Tracey Findling, RN, BSN

Team Leader Key Contact Info:
Dr. Jennifer Sutter (sutterj@ecu.edu)

Background/Introduction

Adolescents with diabetes are at increased risk for depression and anxiety, which left untreated, may negatively affect diabetes management and outcomes (Bernstein et al., 2013).

- In 2020, implementation of a standardized screening protocol in the ECU Pediatric Diabetes Clinic successfully increased annual screening rates for depression and anxiety from 2% to 46%.
- During this same time period (2020), though:
  - Only **40%** of patients with significantly positive screens (score of ≥ 10 on the PHQ 9 or GAD-7 and/or self harm concerns) without an established mental health provider were offered and accepted information regarding mental health resources.
  - Only **21%** of those with significantly positive screens had confirmed utilization of mental health services.
- With a screening process in place, we needed to ensure that we were counseling families appropriately and connecting them with resources that could help our adolescents better manage both their diabetes and mental health.

Aim Statement

Through the implementation of a standard process for responding to moderate to severely positive screens and/or self-harm concerns focusing on education, documentation, and follow-up, in 12 to 18 months we aimed to:

1. Increase the percentage of patients 12 to 21 years seen in our diabetes clinic with moderate to severely positive screens (PHQ-9 and/or GAD-7 ≥ 10 or with concern for self harm) without an established mental health provider who are offered and accept mental health resources from 40% to 90%.

2. Increase confirmed utilization of mental health resources for all patients with moderate to severely positive screens from 21% to 50%.

Measures

Offered and accepted mental health resources

Defined as the proportion of patients <u>without a current mental health provider</u> who accept information on available mental health resources, as documented in EMR by provider or clinic social worker.

Goal documentation: *"Discussed positive screen with patient and provided information for X, Y, and Z in Lenoir County"*

Offered and accepted does <u>NOT</u> include:

- *"Family declined resources"*
- *"Family not concerned" or "family denies problem"*
- *"Patient left before positive screen could be discussed"*
- *Absence of documented discussion in clinic notes*

Utilization of mental health services

Defined as the proportion of all patients meeting study criteria who <u>attend at least one appointment with a mental health provider within 12 months following their positive screen</u> AND had utilization appropriately documented in endocrinology provider note with name/location of provider and estimated date of appointment.

Goal documentation*: "Attends biweekly counseling appointments with X provider at PRIDE in Goldsboro"*

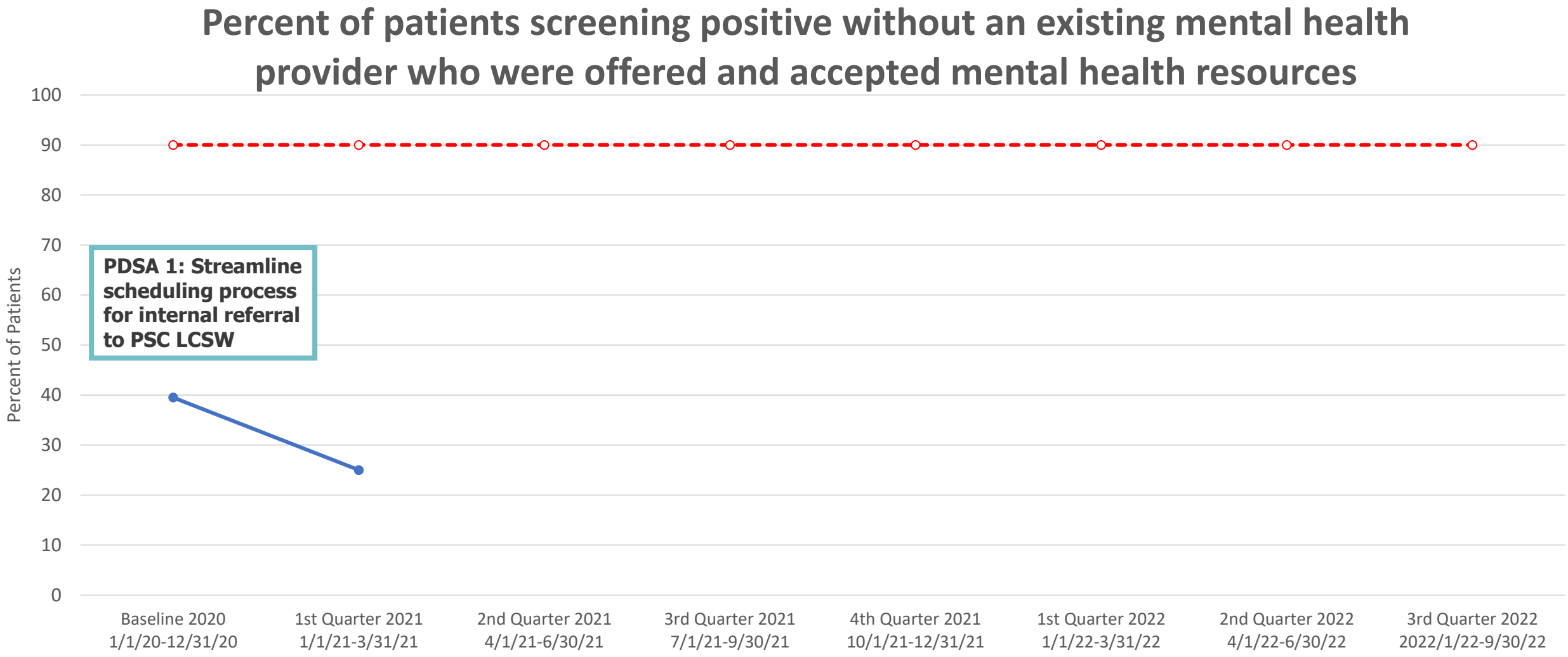
Utilization may include:

- *Counseling with licensed professional (social worker, psychologist, school counselor)*
- *Medical management (psychiatrist, PCP)*

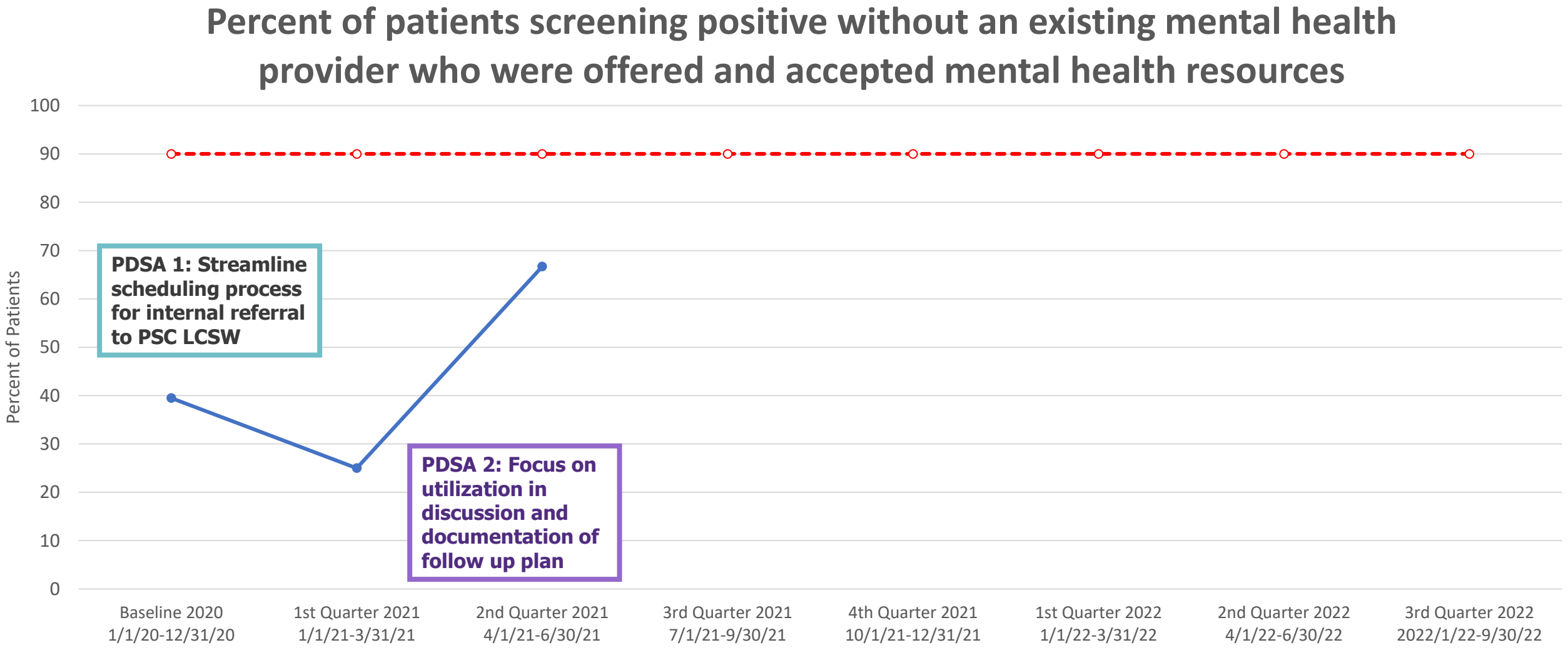
Utilization does <u>NOT</u> include:

- *Informal counseling utilizing church, friends, or family*
- *Nonspecific documentation: "Sees counselor" or "follows with psychiatry"*

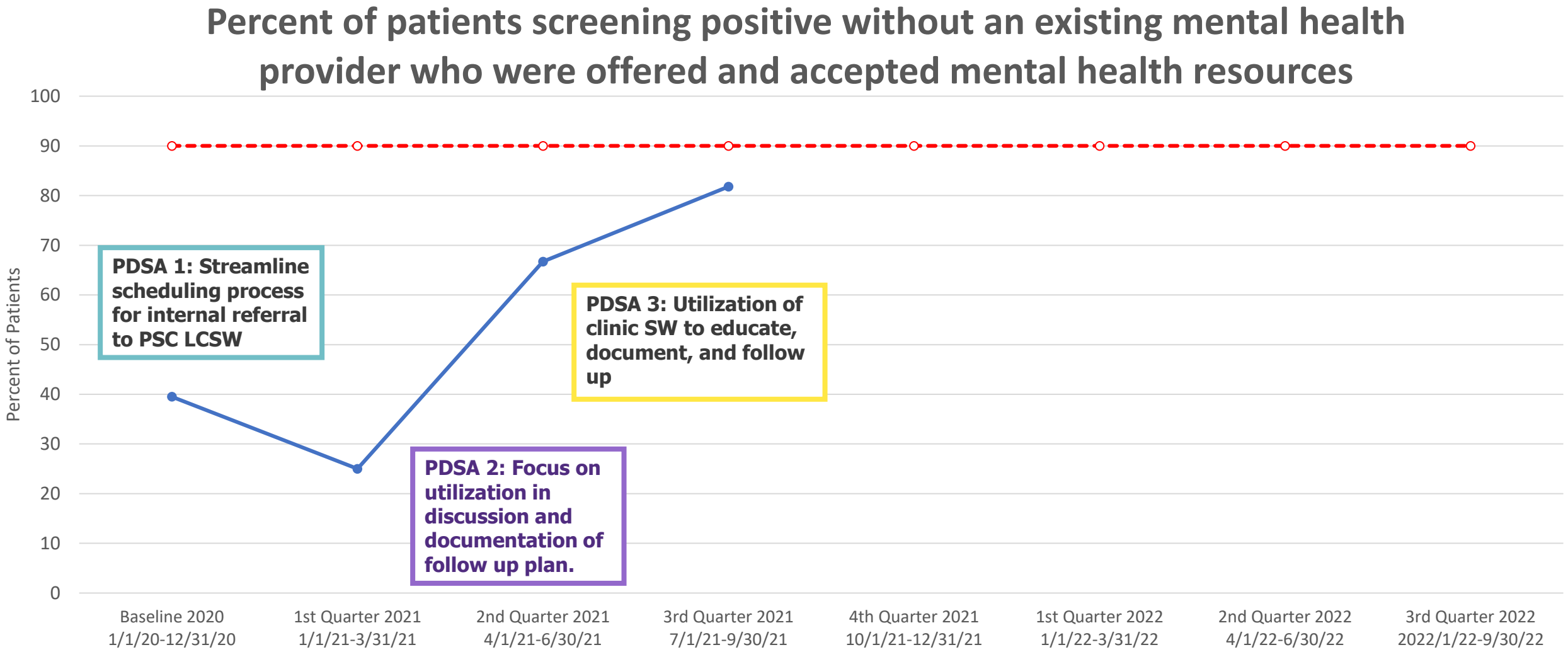
Outcomes: Offered and Accepted Mental Health Resources



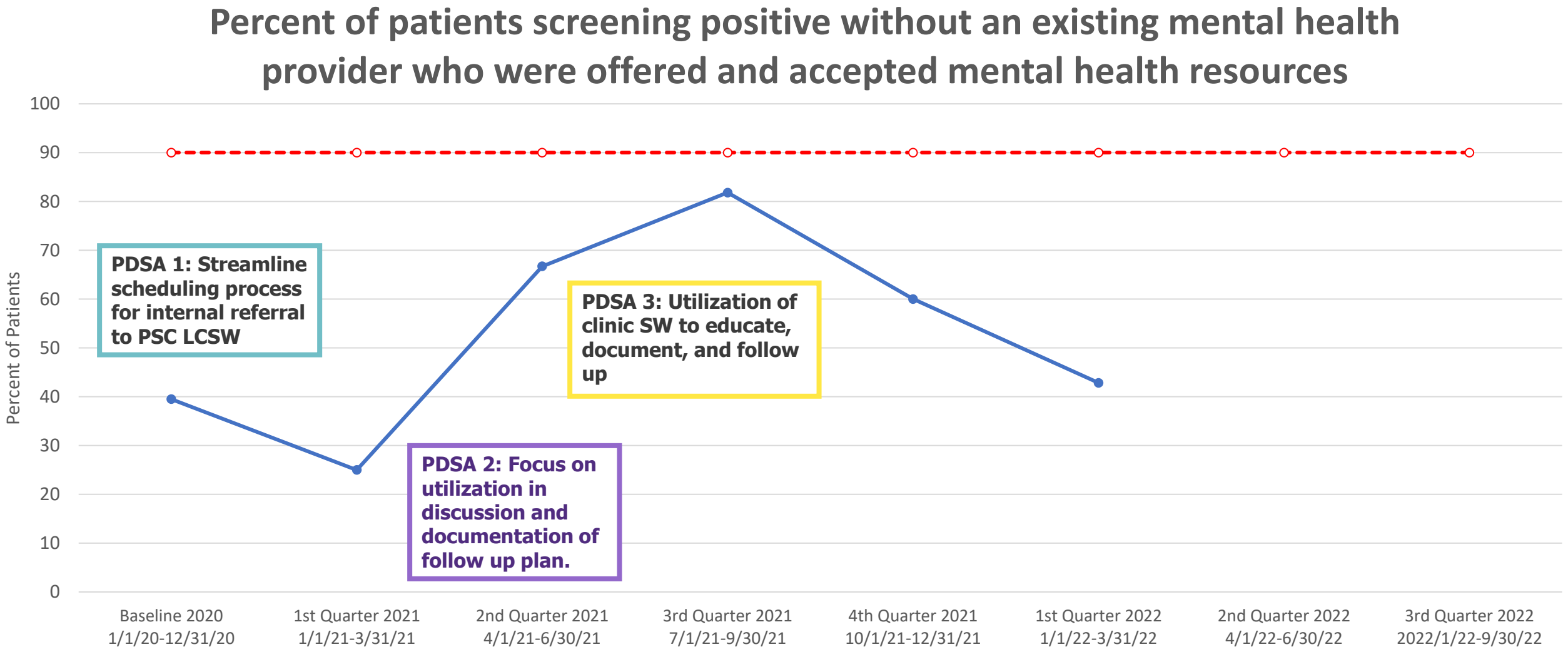
Outcomes: Offered and Accepted Mental Health Resources



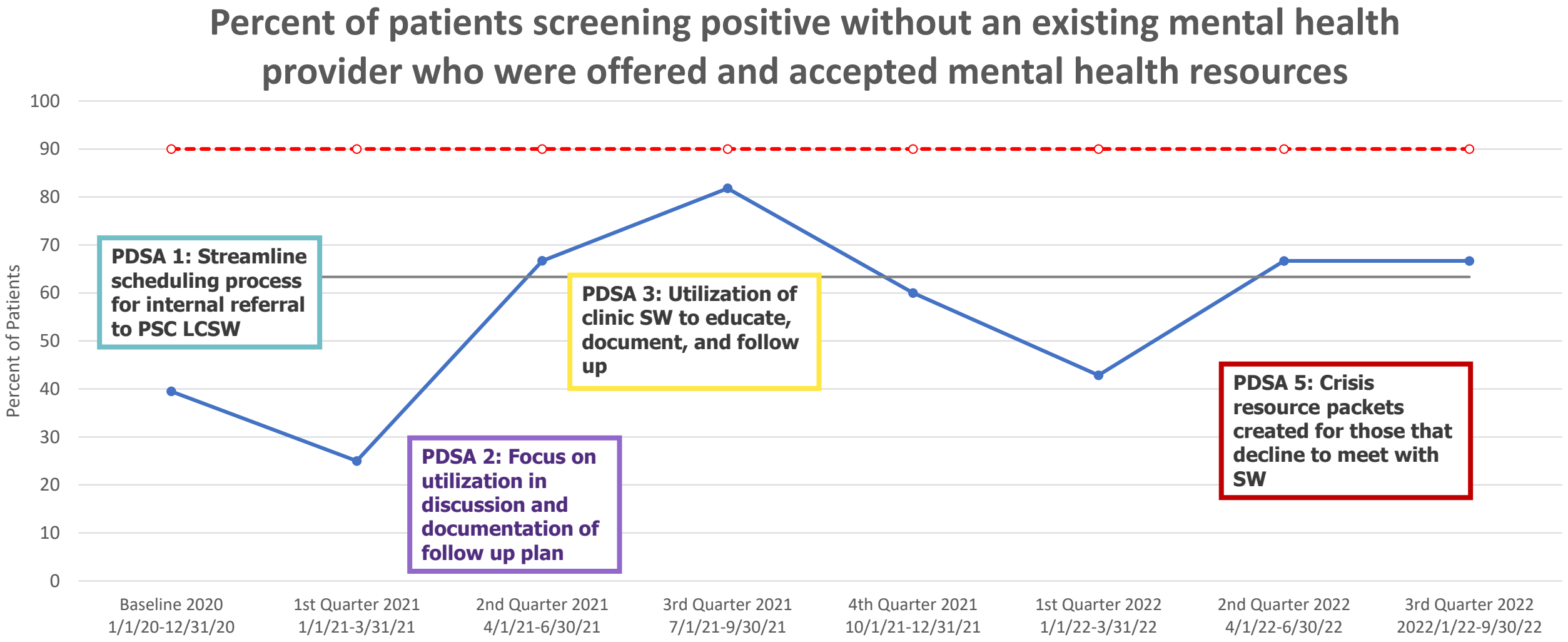
Outcomes: Offered and Accepted Mental Health Resources



Outcomes: Offered and Accepted Mental Health Resources

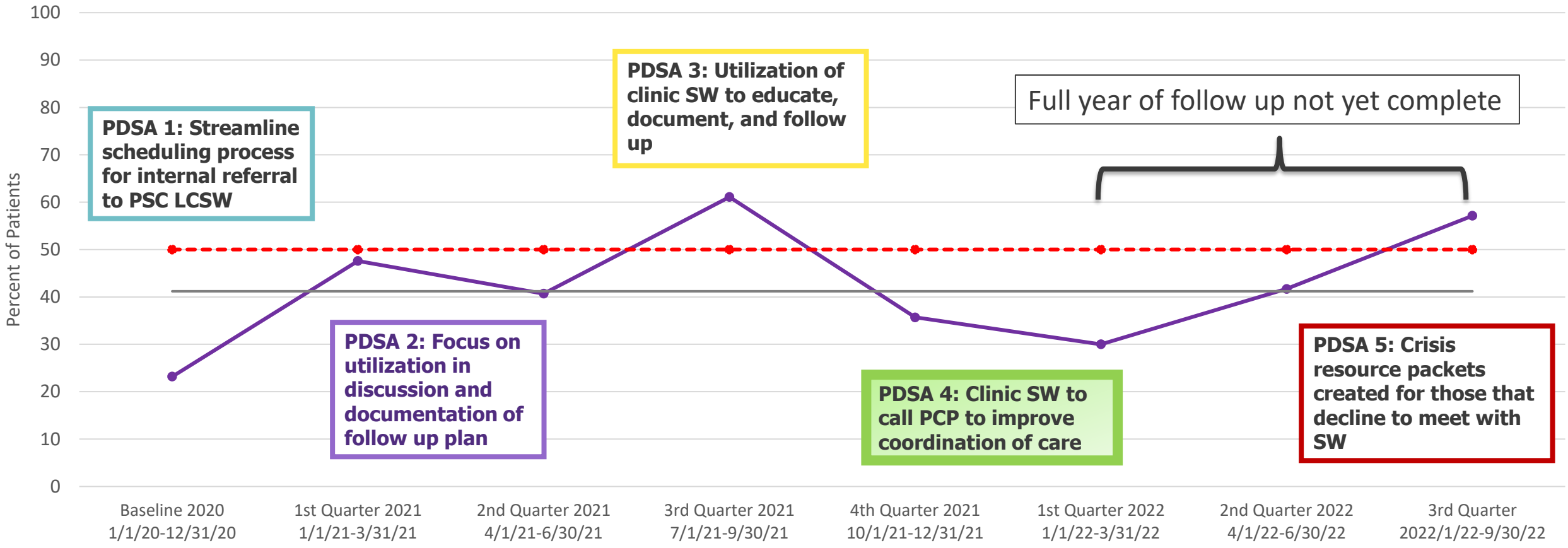


Outcomes: Offered and Accepted Mental Health Resources

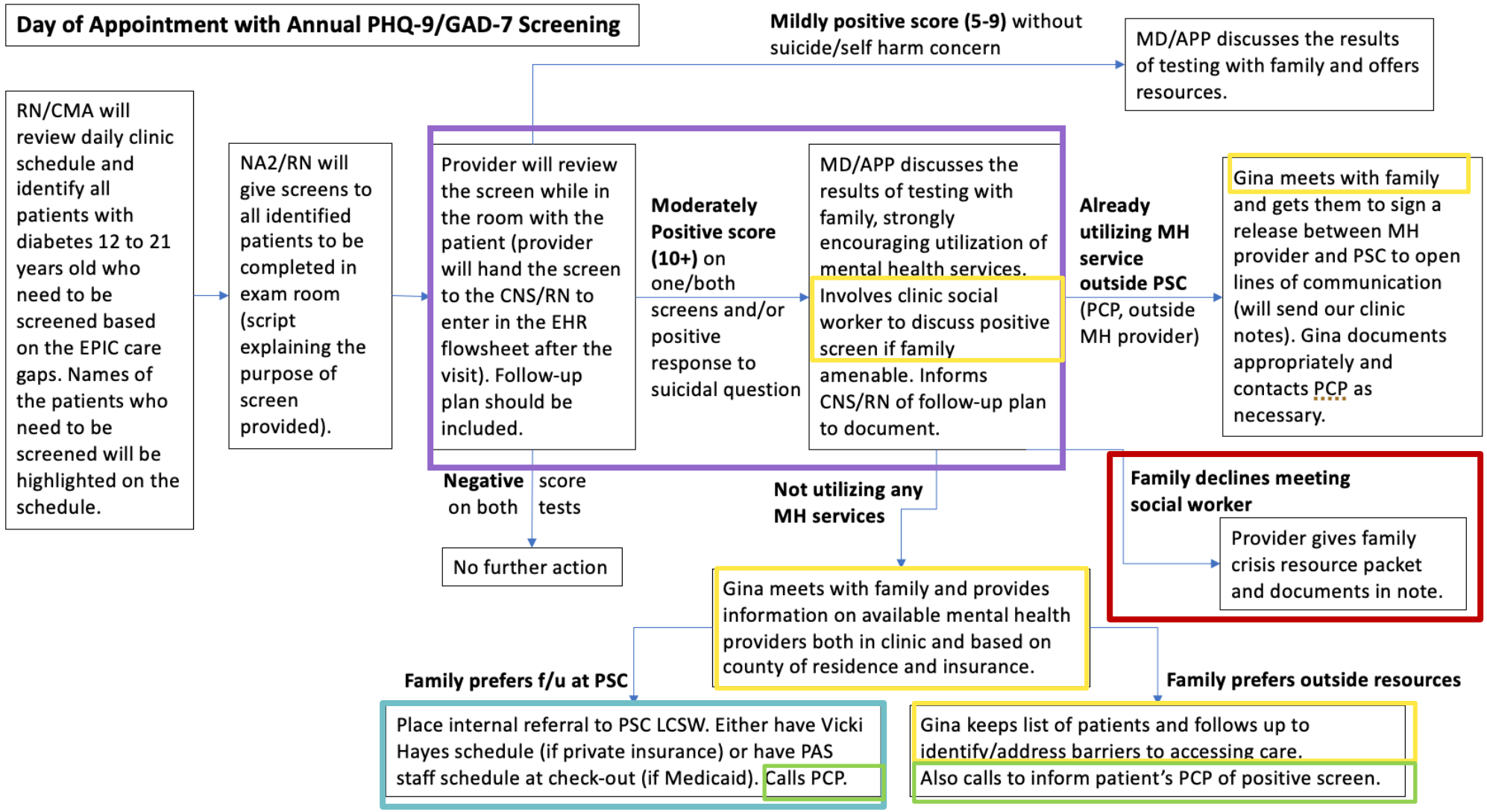


Outcomes: Confirmed Utilization of Mental Health Resources

Percentage of patients with positive screens who have confirmed utilization of mental health resources within one year after positive screen



Process Map with PDSA Cycles



PDSA 1: Streamline scheduling process for internal referral to PSC LCSW

PDSA 2: Focus on utilization in discussion and documentation of follow up plan.

PDSA 3: Utilization of clinic SW to educate, document, and follow up

PDSA 4: Clinic SW to call PCP to improve coordination of care.

PDSA 5: Crisis resource packets created for those that decline to meet with SW

Challenges Encountered in QI Process

Early in project:

- Narrow focus when designing intervention (PDSA 1)
- Different levels of provider comfort and time with discussing mental health issues, especially if patient indicated concern for self-harm
- Forgetting to check-in at subsequent visits

Later challenges:

- Lack of consistent documentation, especially with regard to identifying the mental health provider
- Provider drift from protocol, especially during hands-off period
- Patient fatigue with repeat positive screens, especially if having met with social worker before
- Lack of discussion when social worker out of office or busy

Early adjustments:

→ Reframed goal for each intervention to touch as many relevant patients as possible (broadened focus)

→ Utilize social worker both to discuss positive screens, provide resources, and maintain a list of patients to assess barriers and ensure follow-up (PDSA 3)

Later adjustments:

→ Periodic reminders, use of depression screening tool flowsheet, changes in provider smart phrases (at their discretion)

→ Reminders and presentation of data at department meetings

→ Created crisis resource packets (PDSA 5)

→ Educate and use other social workers in clinic as back-ups when primary social worker on project is out

Lessons Learned

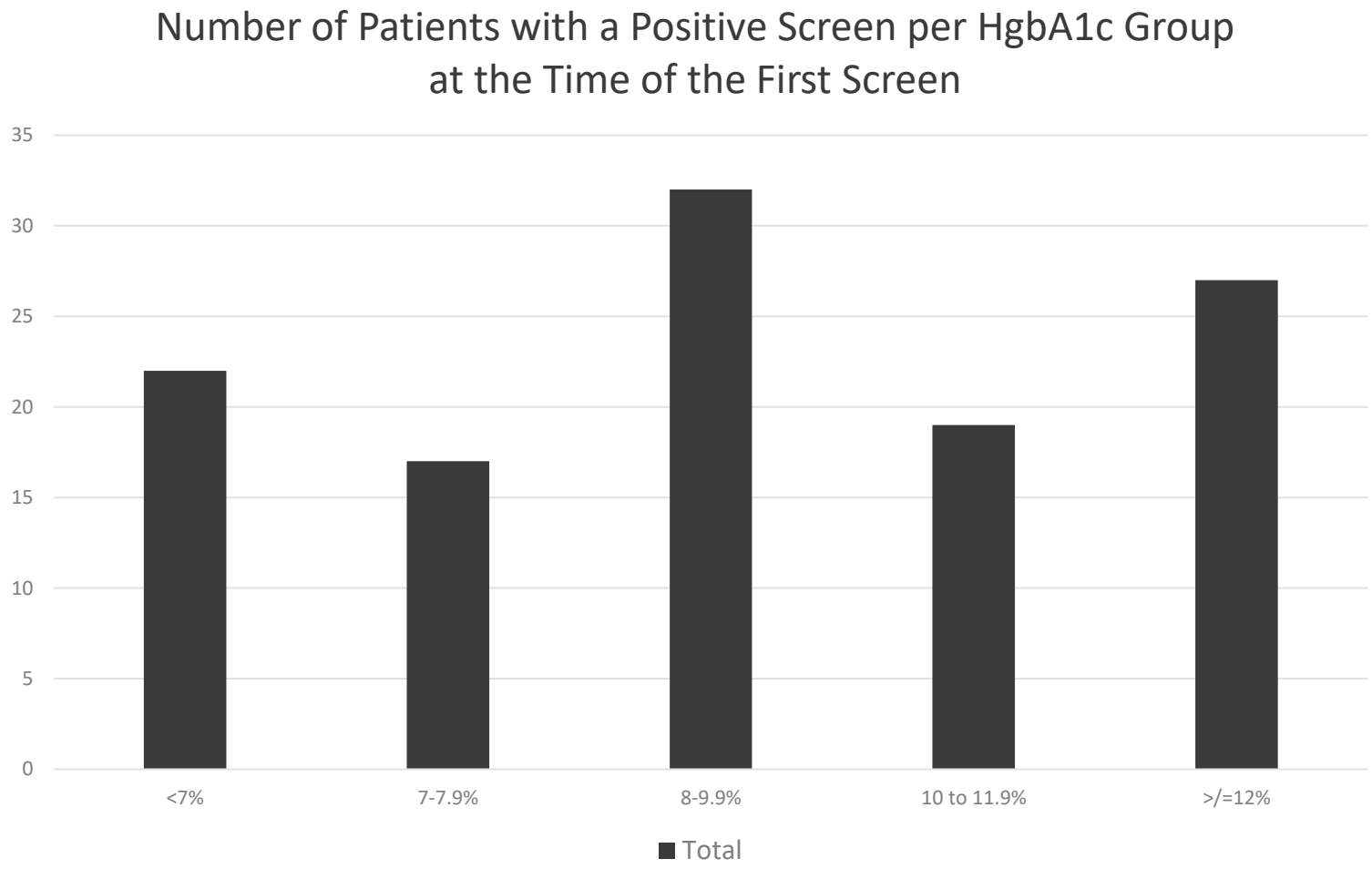
- Having a champion trained, comfortable, and with enough time to discuss positive screens was key in achieving buy-in from patients and families.
- Follow-up after positive screens is key to bridging the gap between accepting resources and utilizing services. Our clinic social worker has provided encouragement, coordinated referrals, and identified barriers by calling between appointments.
- Making PCP aware of positive screens can improve coordination of care (especially when referrals are needed) and increases support for patients in crisis.
- Some families may be resistant, and that is expected. Lower stakes ways of providing resources can be helpful.
- Managing mental health can be a roller coaster. Patients may access resources, be lost to follow up, resume, find other providers, etc. As providers, we must be consistent with checking in and providing support compatible with the patient's current willingness to seek help.

Next Steps – Assessment of Disease Control

Long-term goal: assess whether our patients who utilize mental health services have improvement in either disease control (A1c, time in target) or management behaviors (how often patients wear their CGMs or check their blood sugar).

We have started to look at our data with regards to HgbA1c:

- No pattern identified with regards to HgbA1c at the time of positive screen.



Next Steps – Assessment of Disease Control

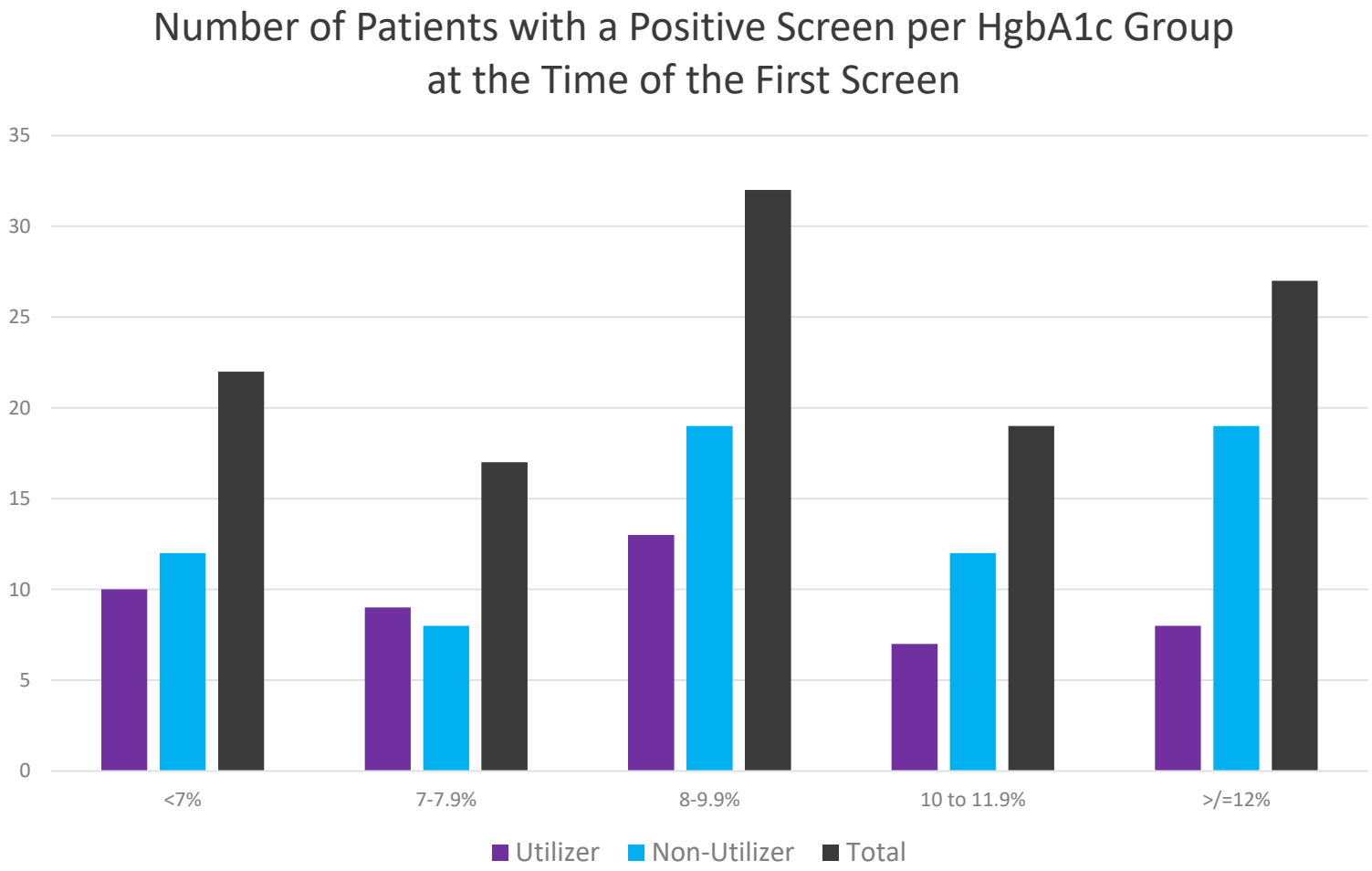
Long-term goal: assess whether our patients who utilize mental health services have improvement in either disease control (A1c, time in target) or management behaviors (how often patients wear their CGMs or check their blood sugar).

We have started to look at our data with regards to HgbA1c:

- No pattern identified with regards to HgbA1c at the time of positive screen.

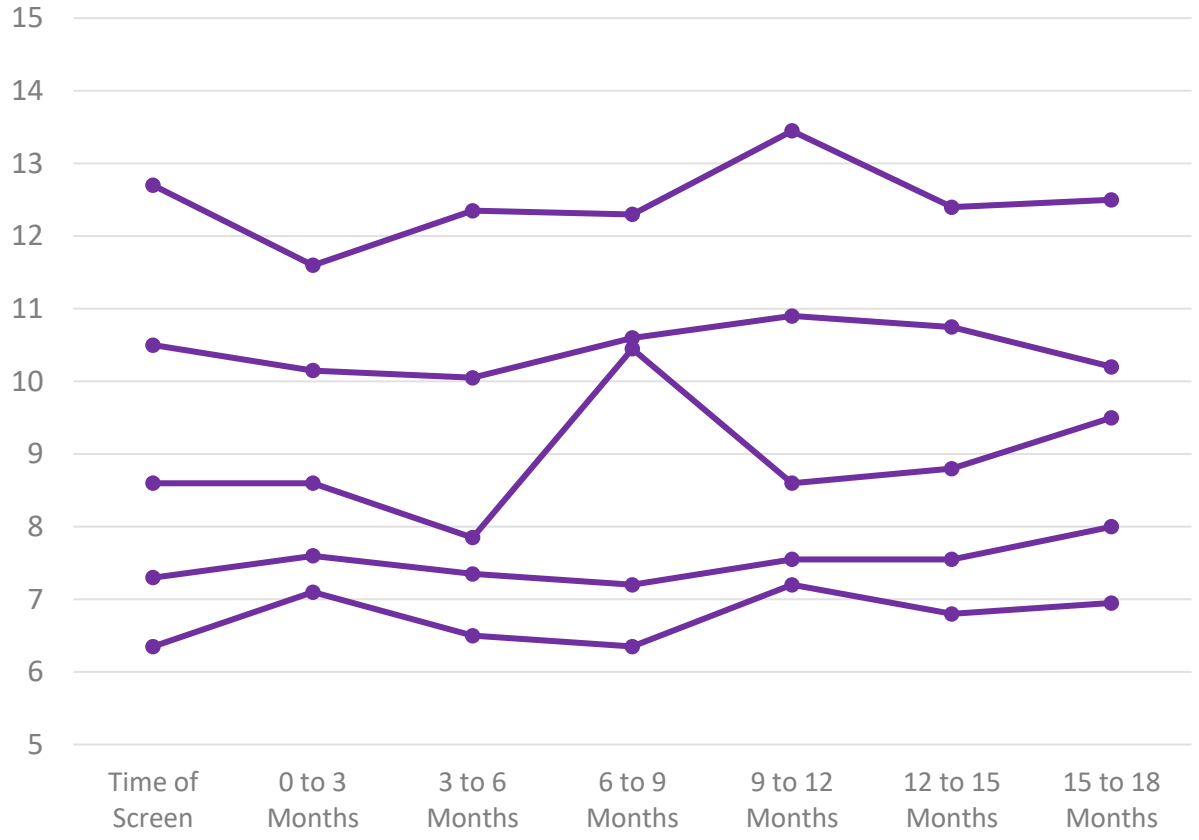
But comparing utilizers to non-utilizers:

- Patients with lower HgbA1c's at the time of the positive screen are **EQUAL** in terms of utilization of mental health resources.
- Patient with higher HgbA1c's at the time of the positive are **LESS** likely to utilize mental health resources.

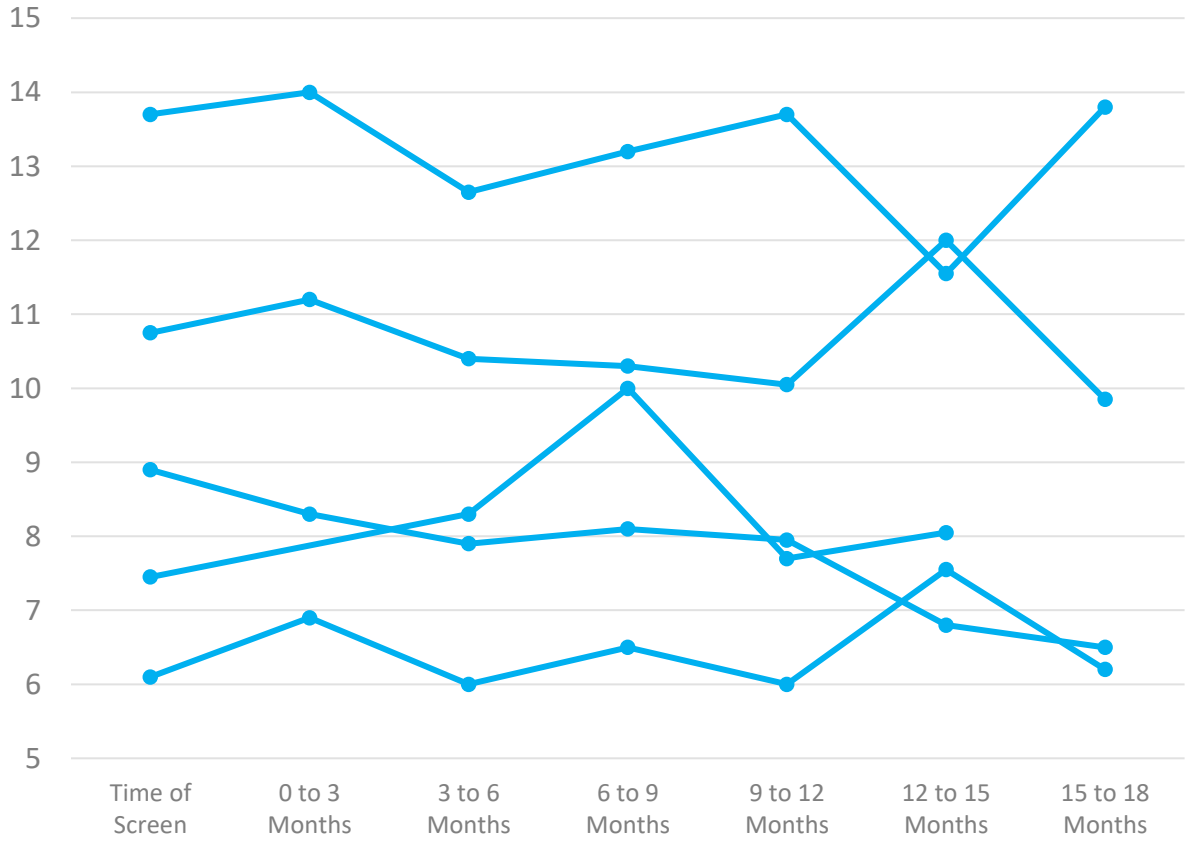


Next Steps – Assessment of Disease Control (HgbA1c)

Utilizers: Median HgbA1c Trend over Time by HgbA1c Group at time of Positive Screen



Non-Utilizers: Median HgbA1c Trend over Time by HgbA1c Group at time of Positive Screen



While we have not noted an overall improvement in HgbA1c, we can certainly identify individual patients in our practice that have benefited from the utilization of mental health care.

ECU HEALTH

Scale Up and Spread – Exciting News!

Protocol utilizing clinic social workers to discuss moderately to severely positive PHQ-9 screens has now been written as an SOP (October 2022) and **expanded to our entire Pediatric Specialty Clinic!**

Protocol includes:

1. Required referral to social worker for PHQ ≥ 10 or concern for suicidal ideation
2. Provision of appropriate mental health resource information based on patient address
3. Social worker to contact PCP to increase coordination of care

ECU Physicians

Pediatric Specialty Clinic

Title of SOP: ECU Pediatric Specialty Clinic Annual Depression Screening

c. Provider
   i. Provider will collect, score, and review PHQ-9 questionnaire with patients who have a positive screen (score greater than 4)
      1. Provider will give scored PHQ-9 with plan to team RN for entry into patient's electronic health record. (Completion including plan is required to meet quality metric)
      2. Provider will inform clinic Social Worker of positive PHQ-9 score under the following conditions:
         a. Significant concern with score greater than or equal to 10 (ten) **OR** concern for suicidal ideation **requires** referral to social worker
         b. Moderate concern with score between 5 (five) and 9 (nine) **without** concern for suicidal ideation, referral to social worker at the provider's discretion

d. Social Worker
   i. Social worker will provide appropriate mental health resource information based on patient address
   ii. Social worker will contact patient's primary care provider to inform of positive depression screen
      1. Social worker will document steps taken in patient EHR

Questions?

Emily Downs, MS4, LINC Scholar
Brody School of Medicine
downse15@students.ecu.edu