INCREASING UTILIZATION OF THE DIABETES PREVENTION PROGRAM

Karen Scherr, MD, PhD

OVERALL AIM

To improve the care of patients with prediabetes at Duke Family Medicine through increased utilization of the Diabetes Prevention Program

PROJECT PHASES

- Phase I: Preparation
  - Gathering background knowledge
  - Stakeholder identification and cultivating relationships
  - Baseline survey of clinic providers
- Phase II: Pilot
  - Identifying eligible patients
  - Creating the electronic referral
  - Retrospective referral of our own patients
- Phase III: Roll out
  - Education campaign for clinic providers
  - Providers prospectively refer their own patients
  - Post-intervention survey of clinic providers
- Phase IV: Next steps
  - Further refinement of referral
  - Roll out to other clinics
  - Development of a "Best Practice Advisory" (BPA)

PHASE I: PREPARATION

Gathering background knowledge

Stakeholder identification and cultivating relationships

Baseline survey of clinic providers

HEALTH CONCERNS IN DURHAM

Table 2.01(a) Top Responses from the Full County Sample

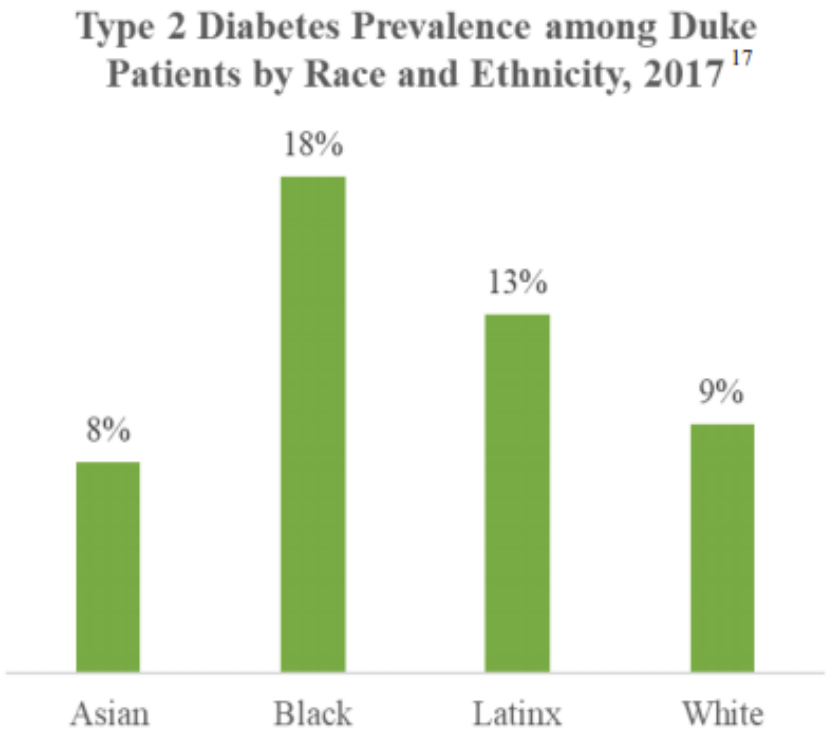
Community Issues	Health Problems	Services Needing Improvement
1. Violent Crime	1. Diabetes	1. Public transportation improvements
2. Affordable housing	2. Mental health	2. Safer community-more police and crime reduction
3. Gentrification	3. Drug use	3. Physical activity infrastructure

Table 2.01(b) Top Responses from the Hispanic or Latino Neighborhood Sample

Community Issues	Health Problems	Services Needing Improvement
1. Theft	1. Diabetes	1. Increased police response to crime
2. Violent Crime	2. Obesity or overweight	2. Access to care
3. Other	3. Cold, flu and cough	3. More health programming and health education

Durham County Community Health Assessment. 2020. https://healthydurham.org/cms/wp-content/uploads/2021/08/2020-CHA-FINAL.pdf

DISPARITIES IN DIABETES IN DURHAM



Maxson, P. (2018, October 30). Duke Center for Community and Population Health Improvement and Community Engagement, Duke University

THE DPP: BARRIERS TO UTILIZATION

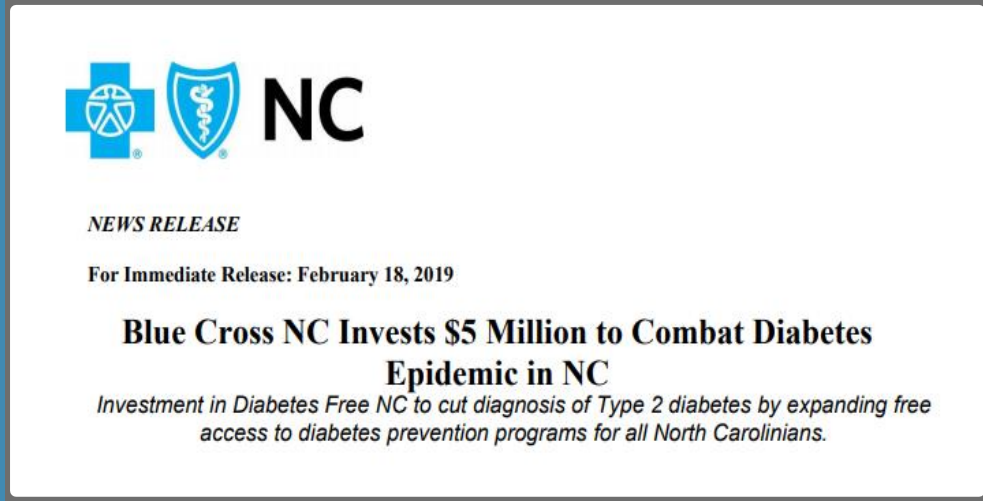
~~Cost~~

Difficulty identifying eligible patients

Cumbersome faxed referral process

Low provider and patient awareness and buy-in

Carroll J, Winters P, Fiscella K, Williams G, Bauch J, Clark L, et al. Process evaluation of practice-based Diabetes Prevention Programs: what are the implementation challenges? Diabetes Educ 2015;41(3):271–9.



NC

NEWS RELEASE

For Immediate Release: February 18, 2019

Blue Cross NC Invests $5 Million to Combat Diabetes Epidemic in NC

Investment in Diabetes Free NC to cut diagnosis of Type 2 diabetes by expanding free access to diabetes prevention programs for all North Carolinians.

https://www.bluecrossnc.com/sites/default/files/document/attachment/providers/public/pdfs/news-and-information/news/News%20Release%20Diabetes%20Free%20NC.pdf

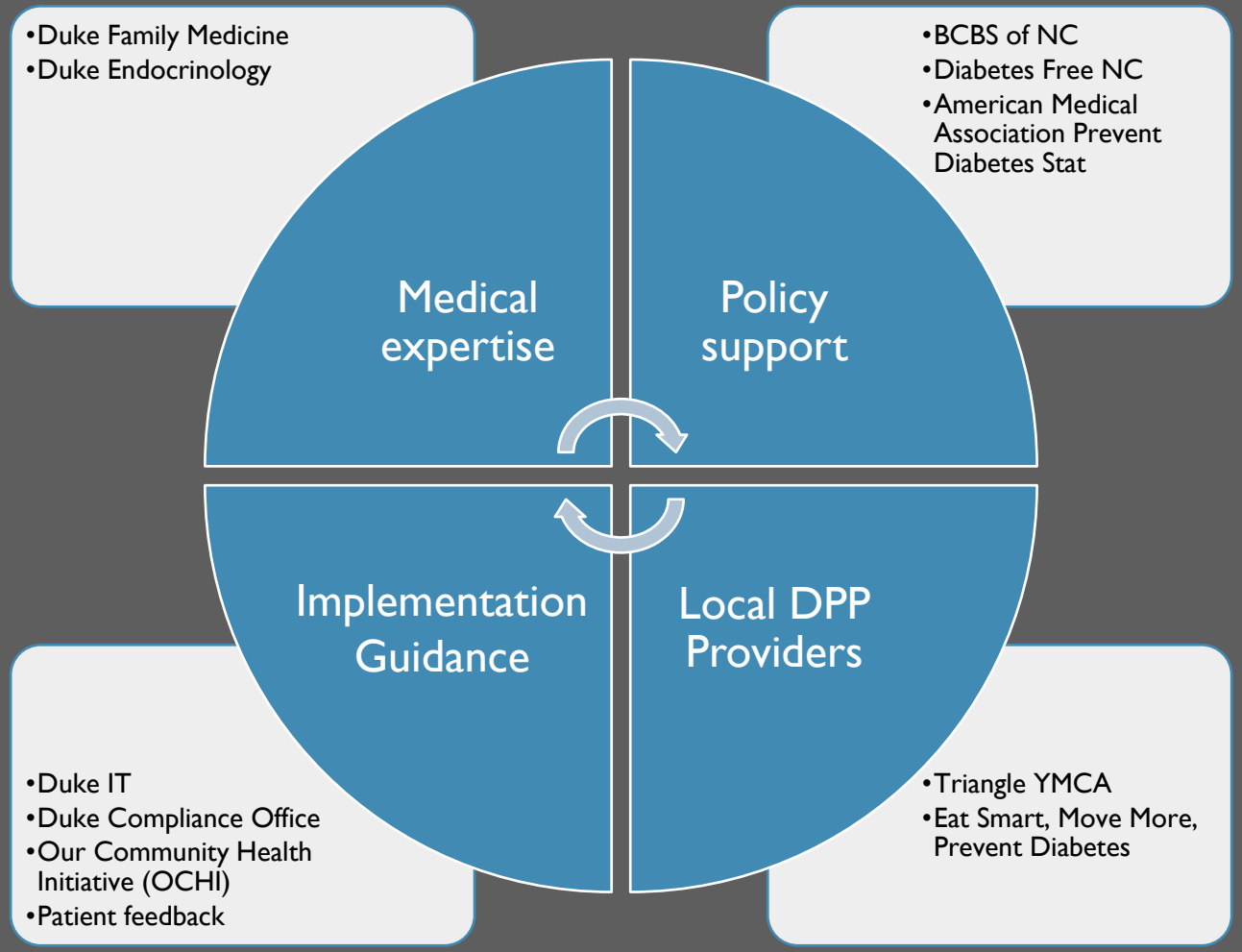
PHASE I: PREPARATION

Gathering background knowledge

Stakeholder identification and cultivating relationships

Baseline survey of clinic providers

STAKEHOLDERS

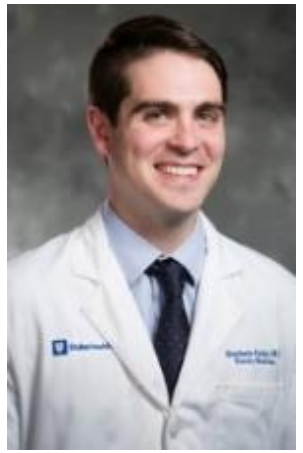


Duke University

Duke Family Medicine & Community Health
Division of Community Health

Duke OIT

Department of Medicine
Duke University School of Medicine
Endocrinology, Metabolism, and Nutrition



Duke Family Medicine & Community Health

FAMILY MEDICINE LEADS
EMERGING LEADER INSTITUTE
American Academy of Family Physicians Foundation

AMA
AMERICAN MEDICAL ASSOCIATION

Community Partners

the YMCA
YMCA of the Triangle

OUR COMMUNITY HEALTH INITIATIVE

North Carolina Medical Society FOUNDATION
Opening Doors to Quality Health Care

BlueCross BlueShield of North Carolina

Eat Smart Move More Prevent Diabetes

DIABETESFREE NC

PHASE I: PREPARATION

Gathering background knowledge

Stakeholder identification and cultivating relationships

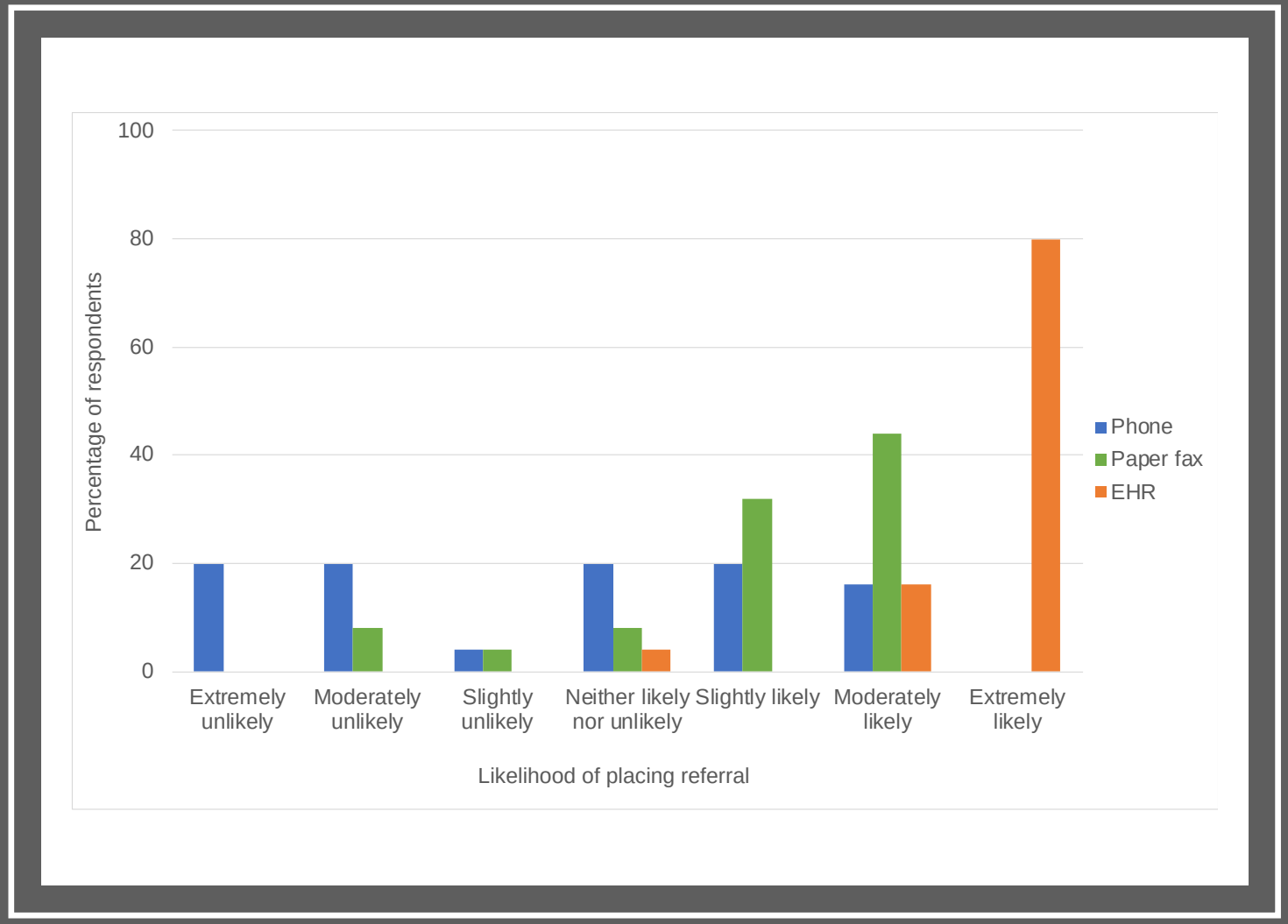
Baseline survey of clinic providers

BASELINE SURVEY OF CLINIC PROVIDERS

- 25 providers responded
  - 14 residents (response rate = 88%)
  - 11 non-resident providers (response rate = 48%)
- Imperfect survey – some providers (especially residents) had already heard informally about this project. We attempted to separate the impact of that on their responses through explicit questions.

REFERRAL LIKELIHOOD

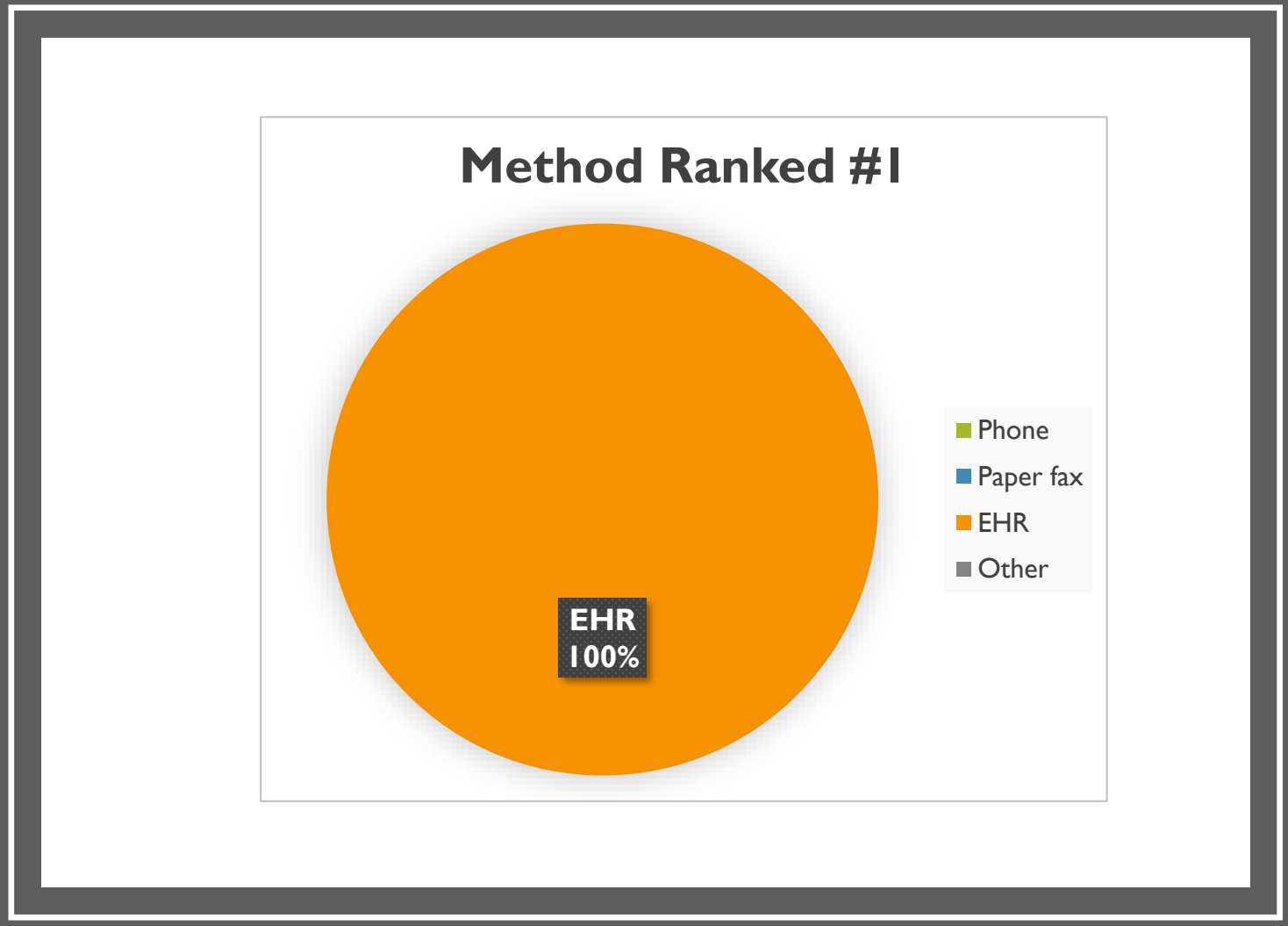
How likely would you be to place a referral to the DPP with each of the following referral methods?



PREFERRED REFERRAL METHOD

Please rank the following referral methods in order of preference:

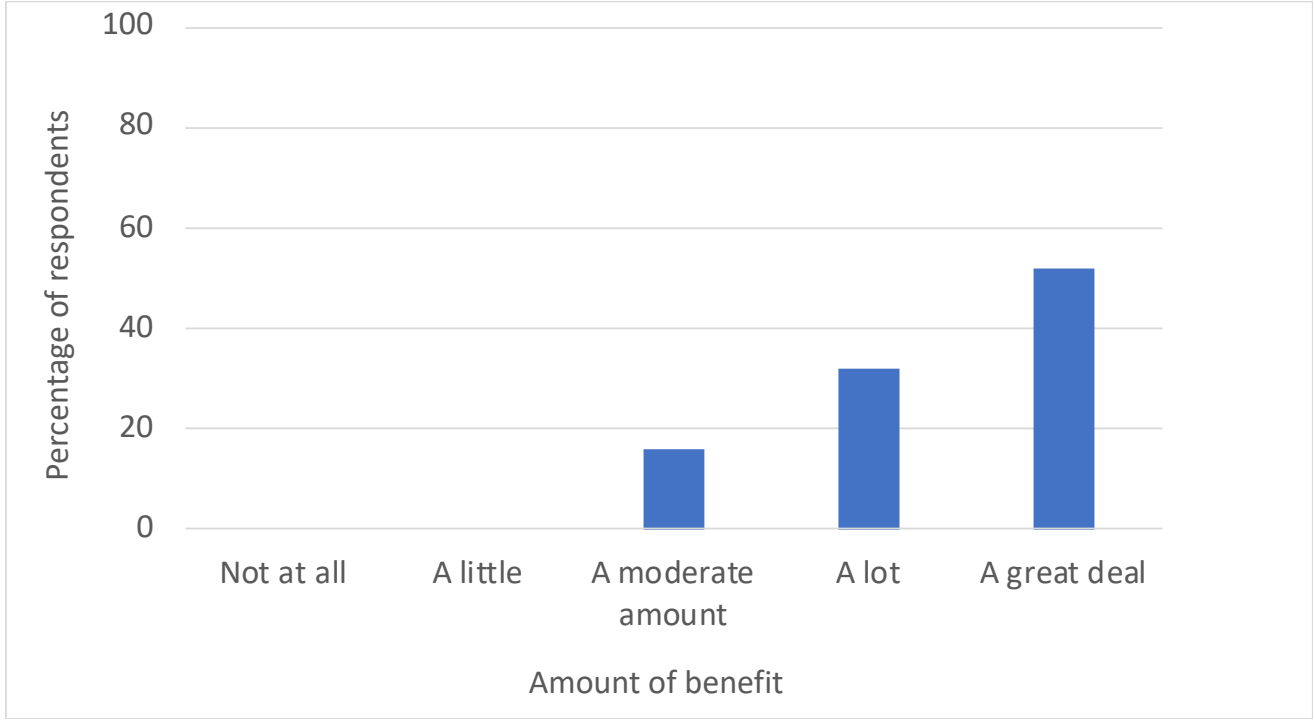
- EHR
- Phone
- Paper fax
- Other



PERCEIVED BENEFIT OF THE DPP

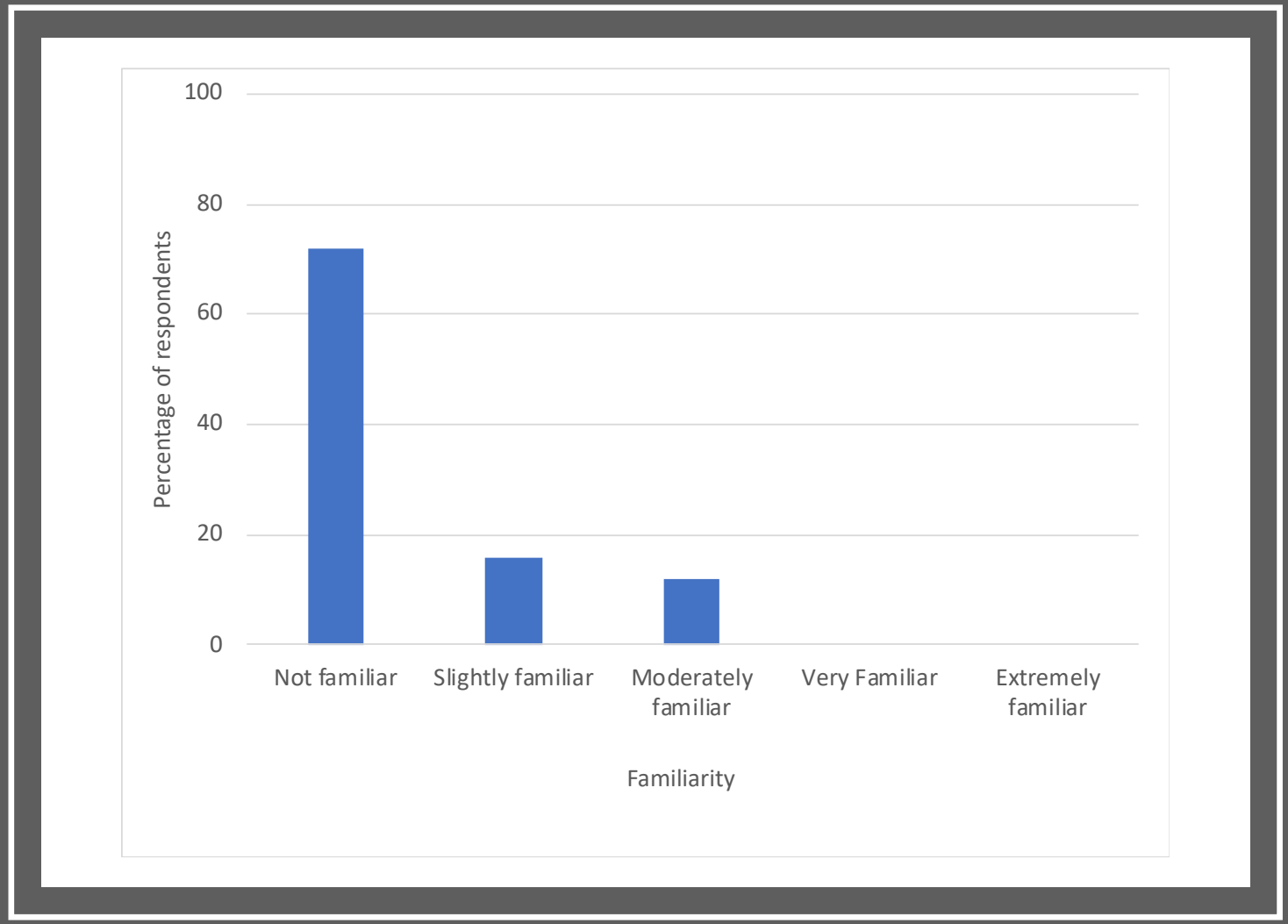
The Diabetes Prevention Program (DPP) is a formal evidence-based treatment for patients with prediabetes or at high risk for diabetes. It is a 12-month intervention that provides patients with education and support to achieve a healthier lifestyle in terms of nutrition, exercise, and stress management.

How much do you think patients at Pickens who have prediabetes or are at high risk for diabetes could benefit from the DPP?



FAMILIARITY WITH THE DPP

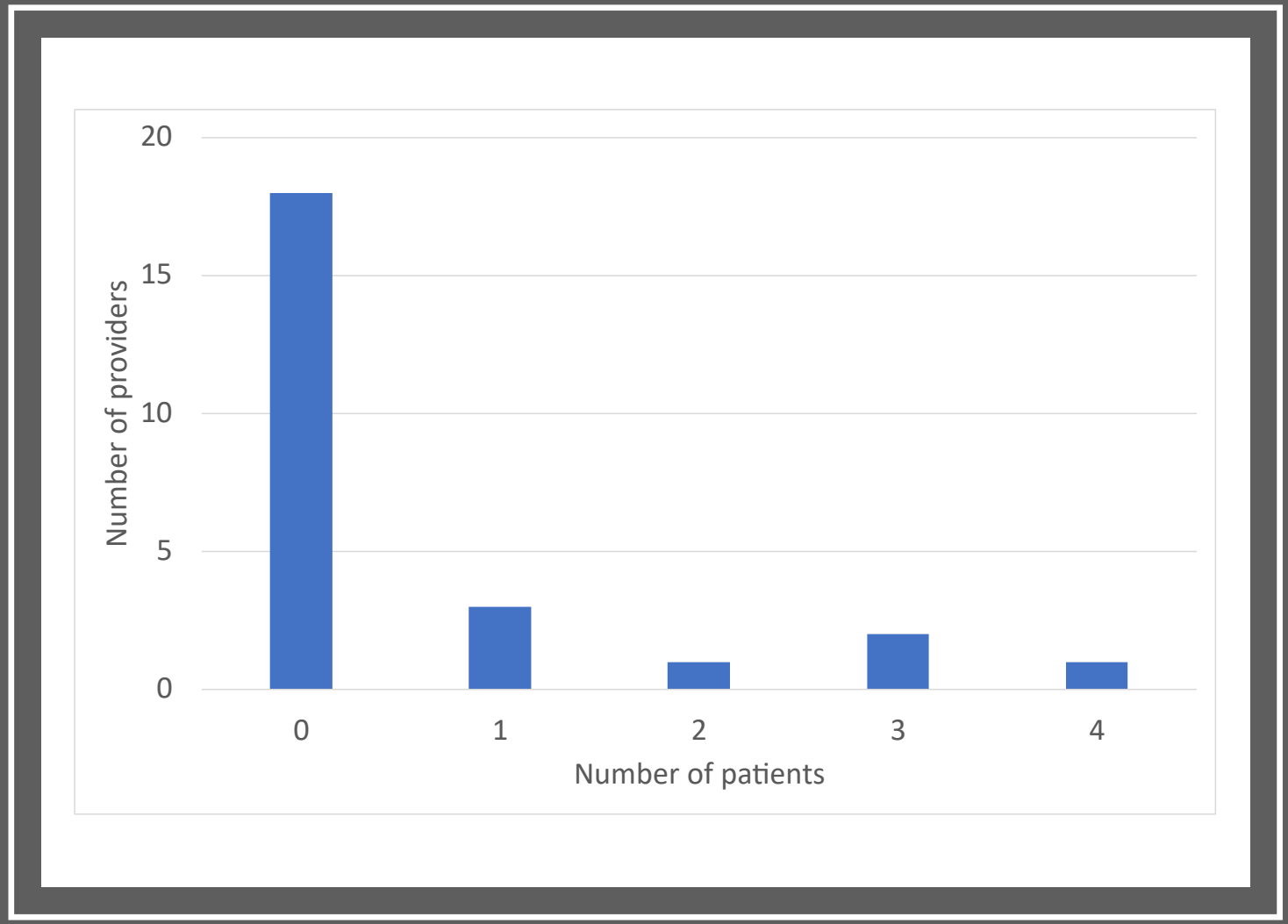
How familiar are you with the Diabetes Prevention Program treatment?



EDUCATING ABOUT DPP

In the last three months, how many patients have you educated/told about the DPP?

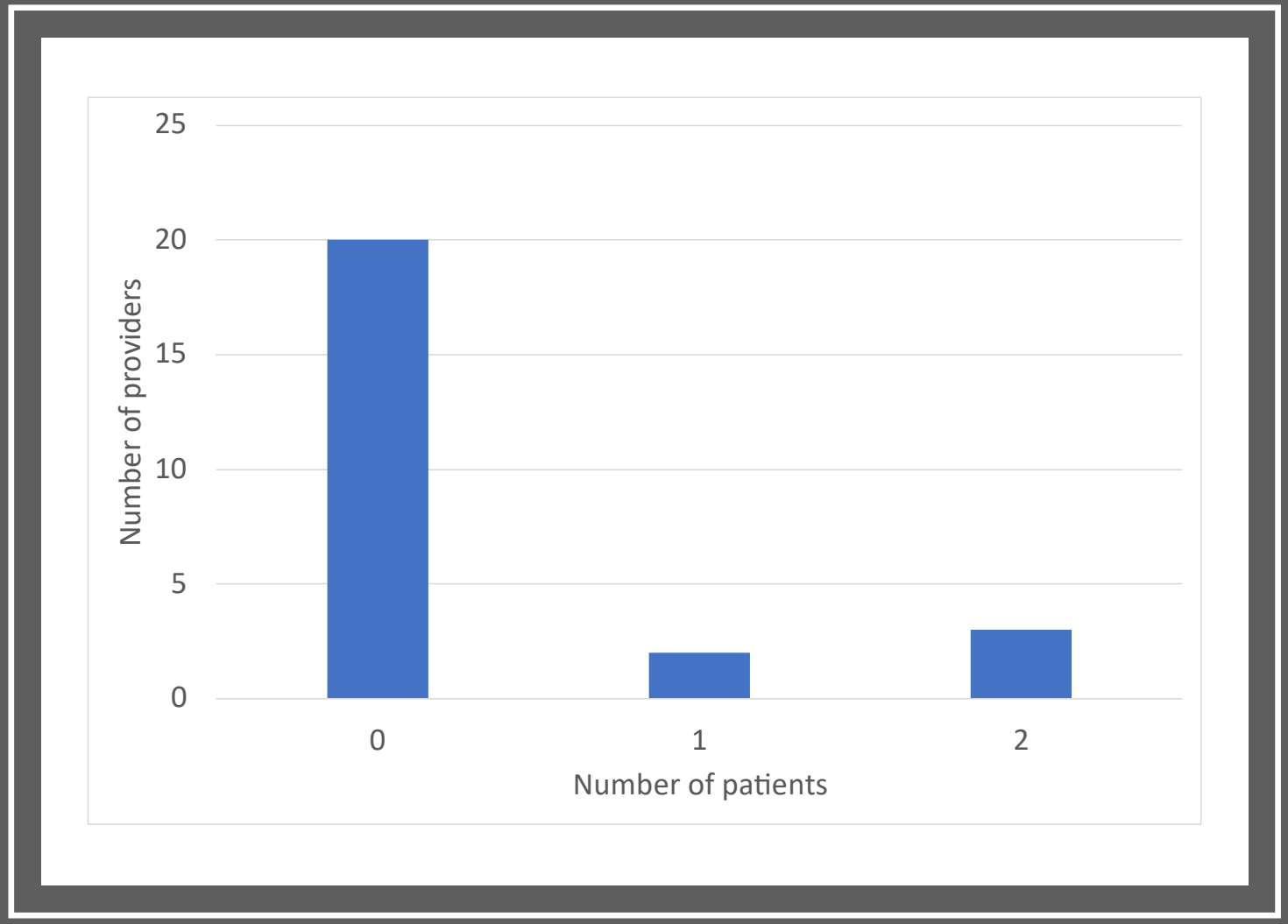
Of the 7 providers who told patients about the DPP, 6 were residents who specifically attributed their behavior to informally hearing about the program from this project.



REFERRALS TO DPP

In the last three months, how many patients have you referred to the DPP?

Of the 5 providers who referred patients to the DPP, all 5 were residents who specifically attributed their behavior to informally hearing about the program from this project.



PHASE 1: SUMMARY

- The landscape is complex and just identifying the people to involve was time intensive.
- Providers thought patients could benefit from the DPP, but they were not very familiar with the program and baseline utilization was low.

PHASE II: PILOT

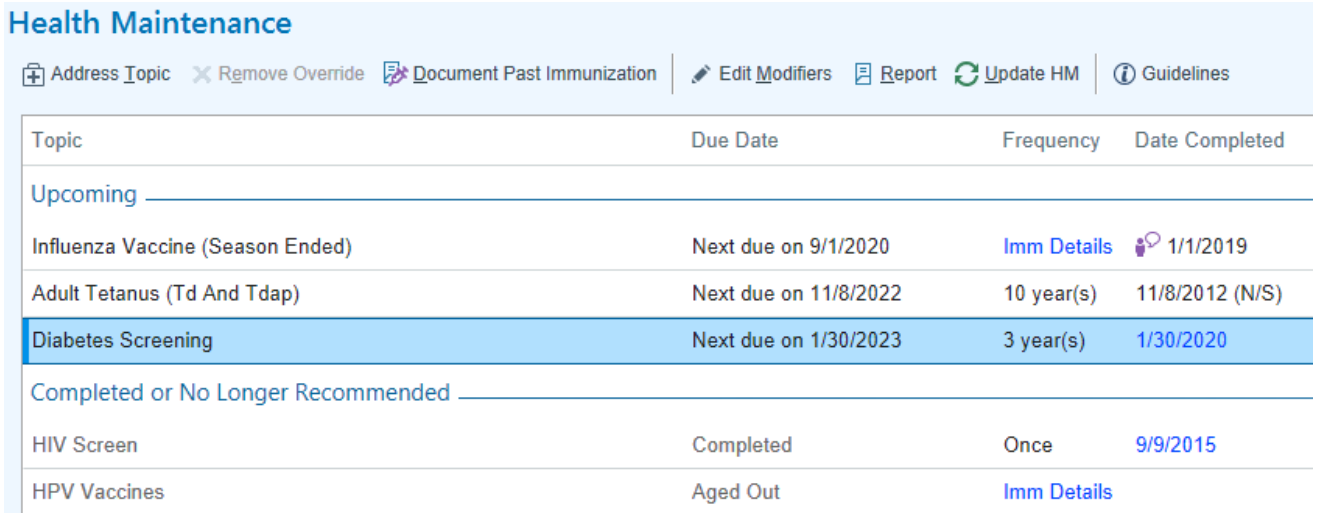
Identifying eligible patients

Creating the electronic referral

Retrospective referral of our own patients

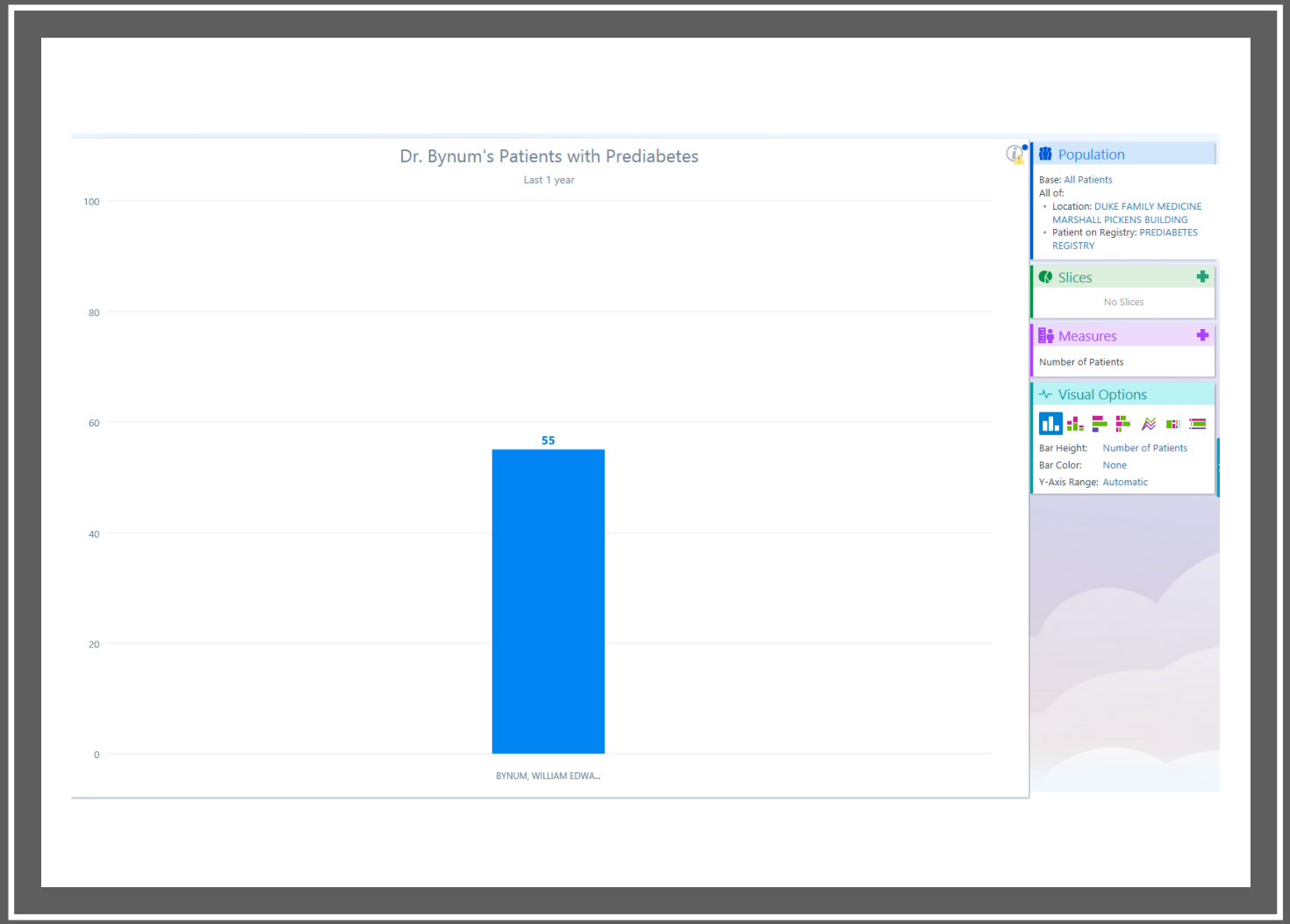
IDENTIFYING ELIGIBLE PATIENTS

Addition of "diabetes screening" to health maintenance recommendations in the EHR



IDENTIFYING ELIGIBLE PATIENTS

Creation of a new searchable “prediabetes registry"



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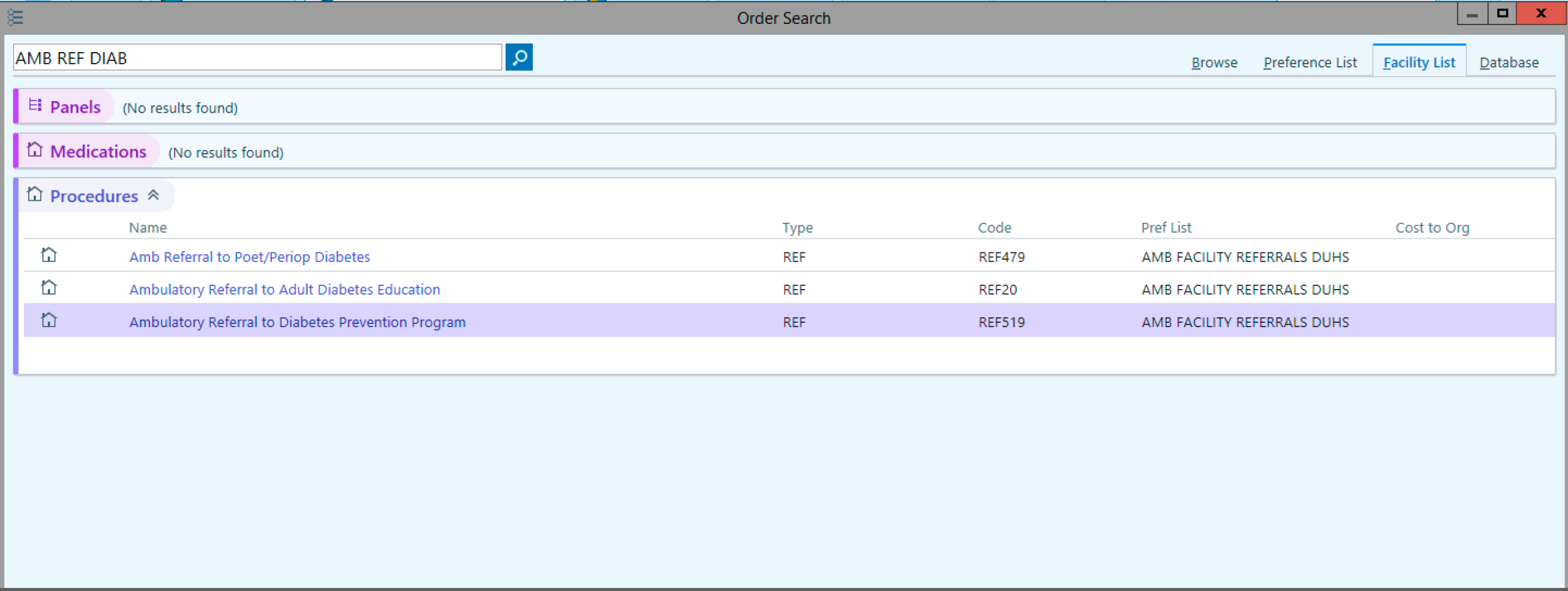
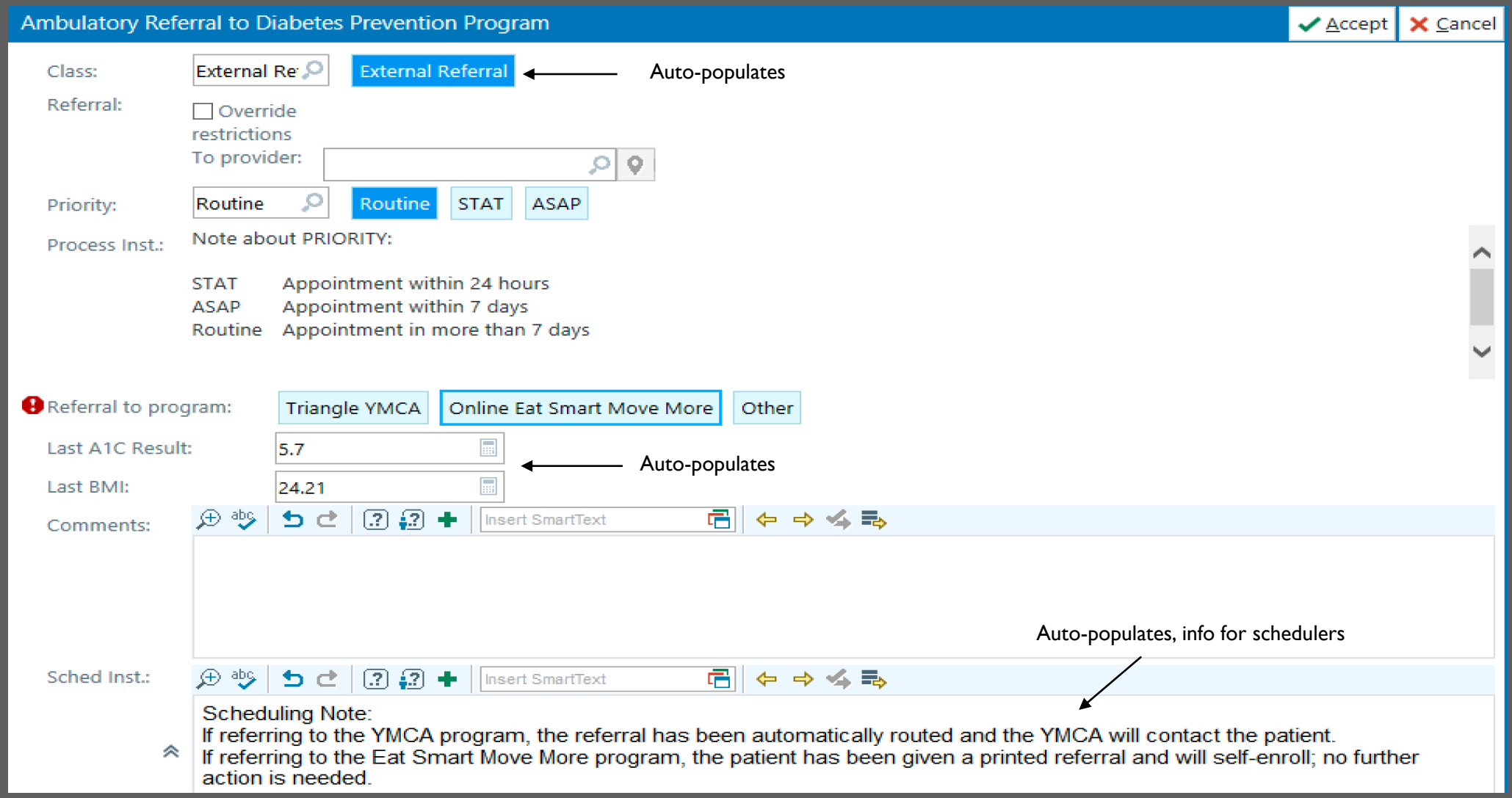


THE NEW ELECTRONIC REFERRAL



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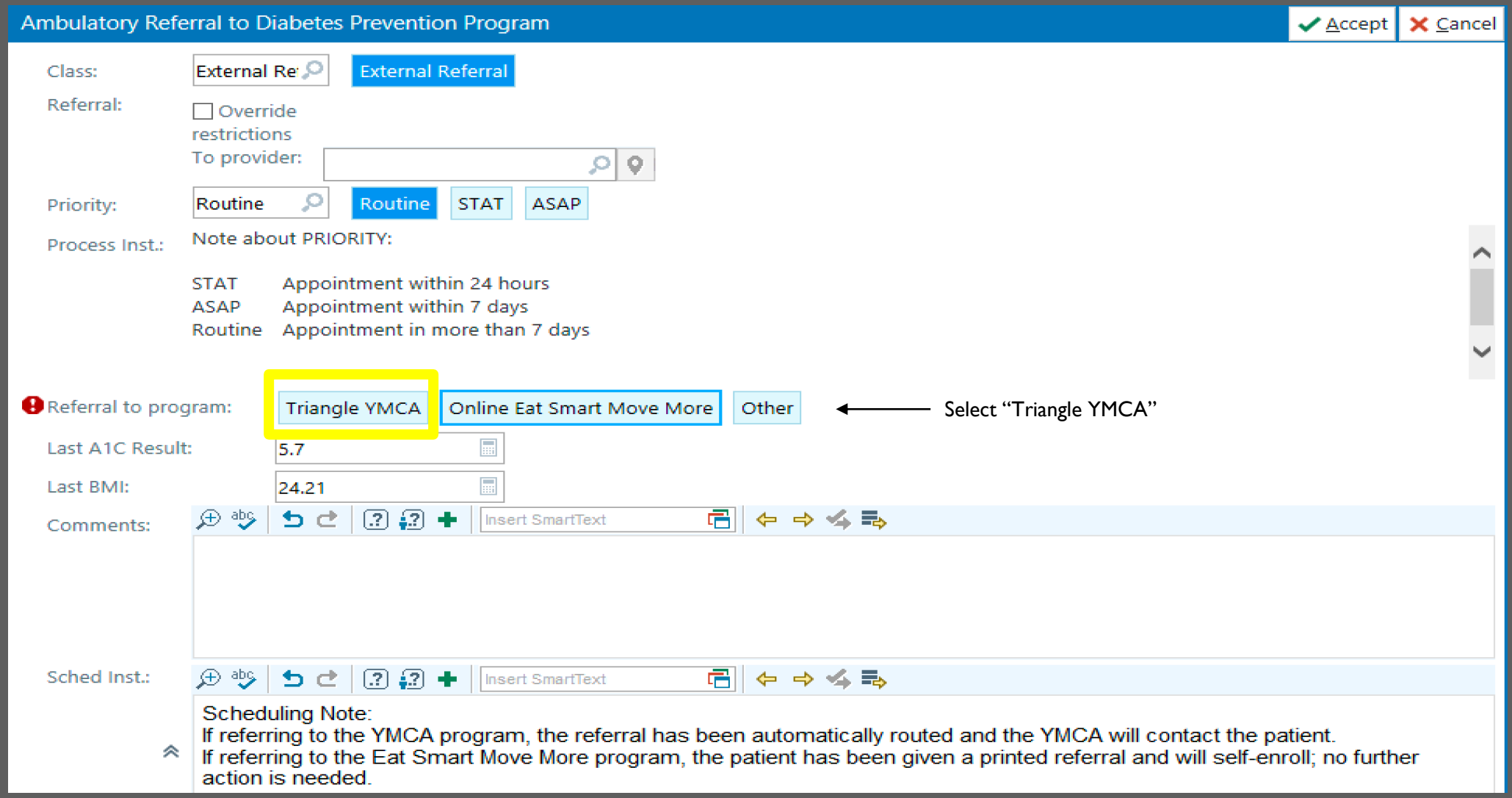
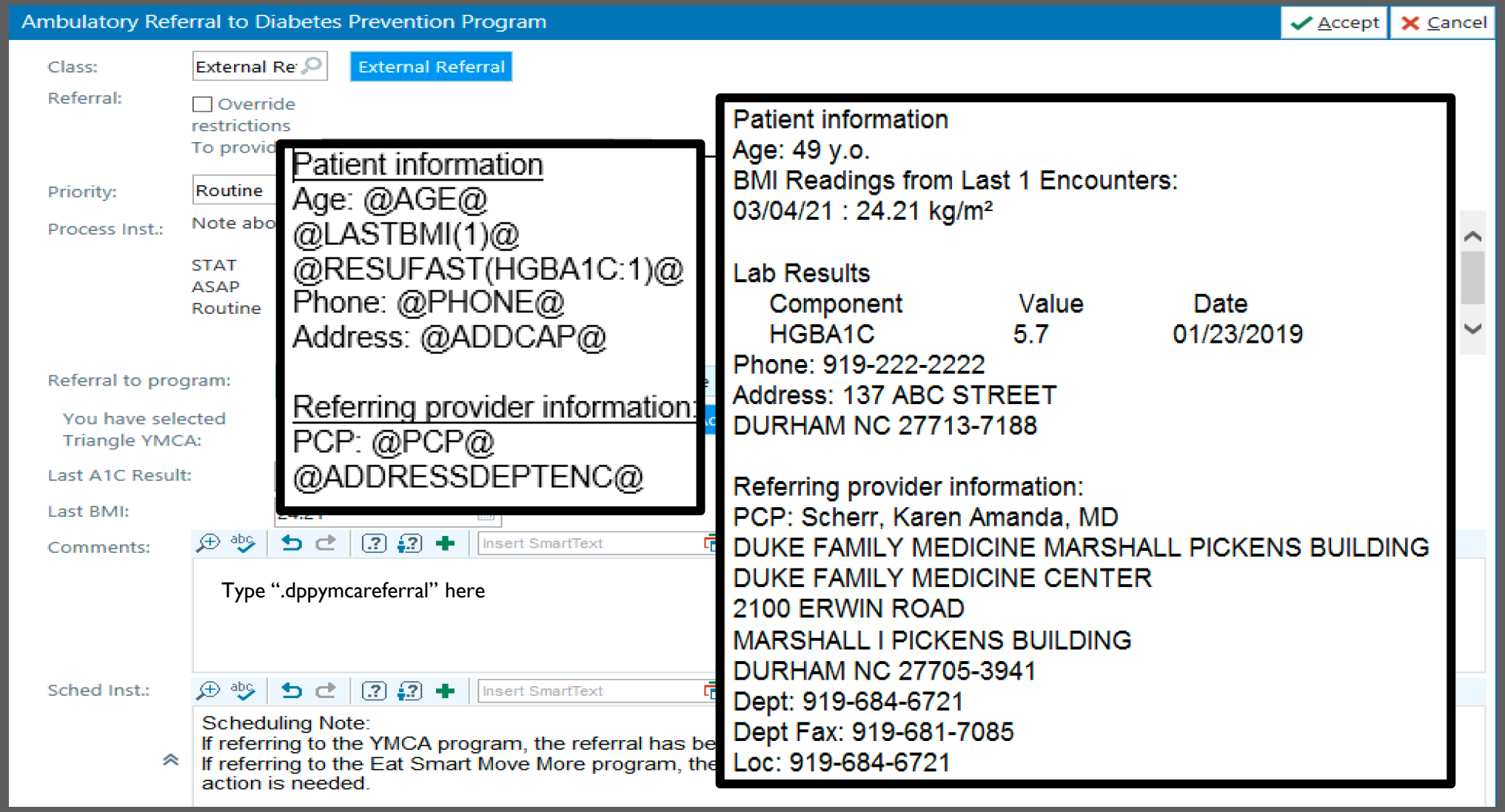
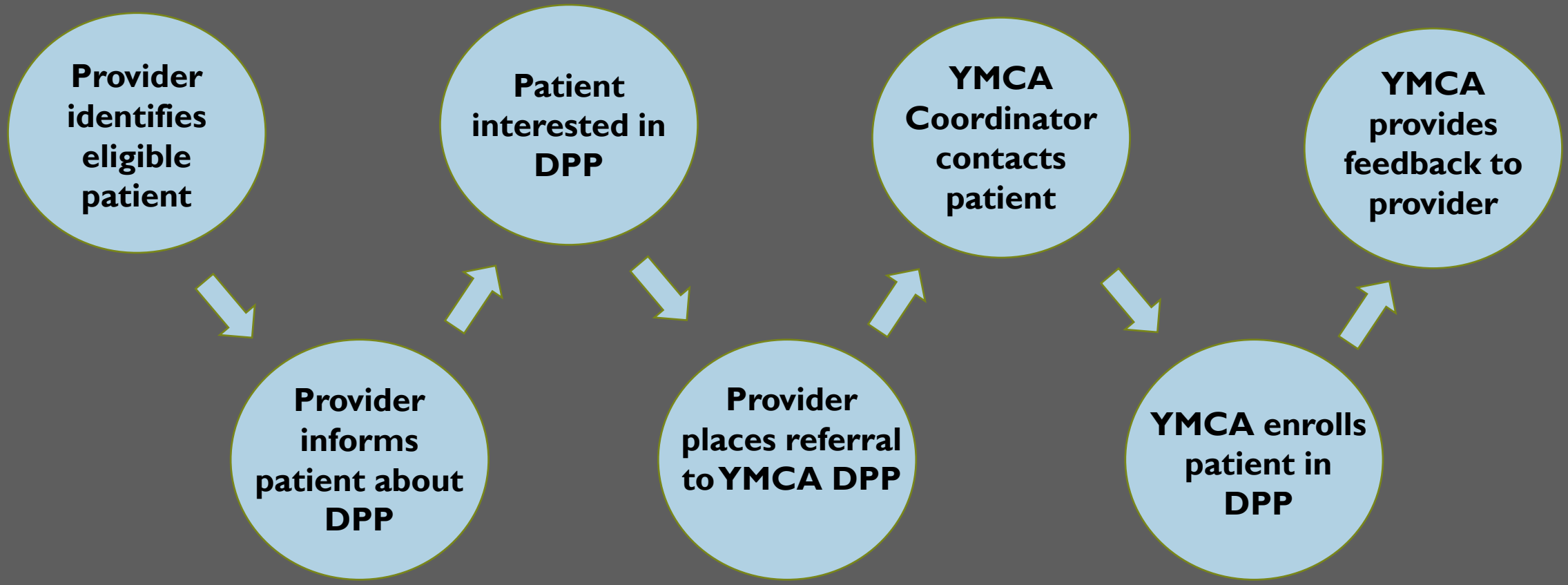


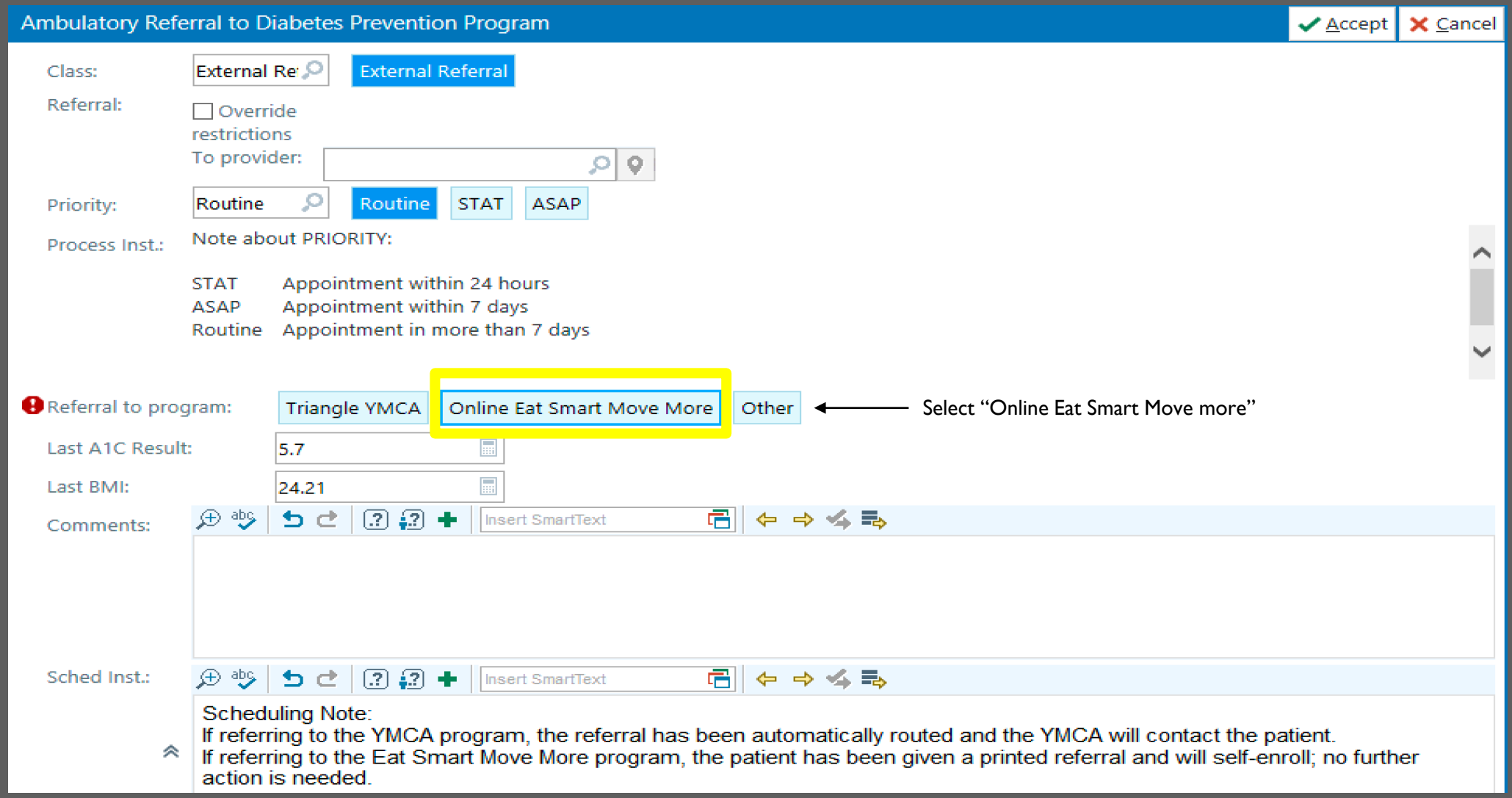
THE NEW ELECTRONIC REFERRAL: YMCA



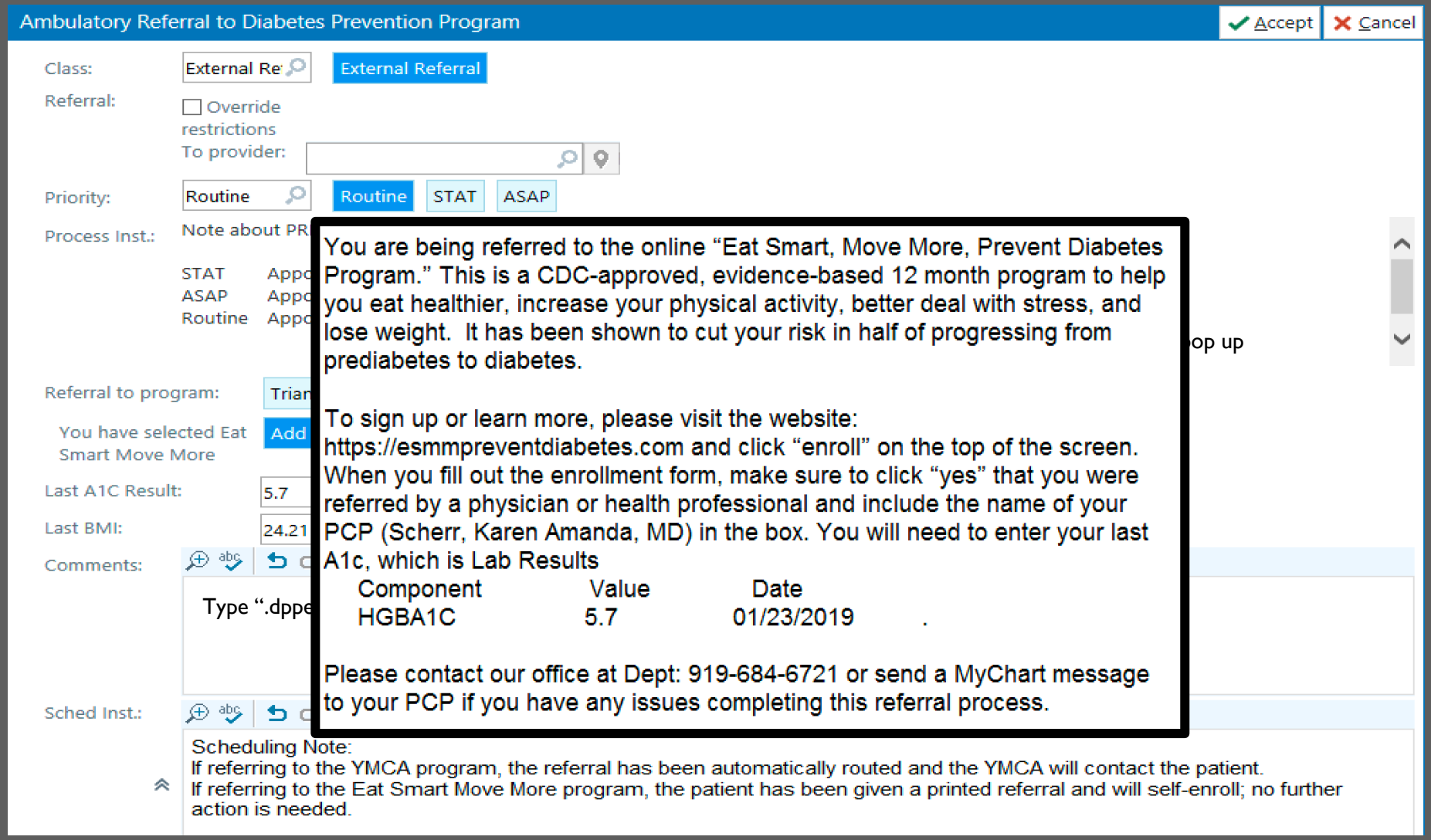
THE NEW ELECTRONIC REFERRAL: YMCA

REFERRAL FLOW FOR THE YMCA



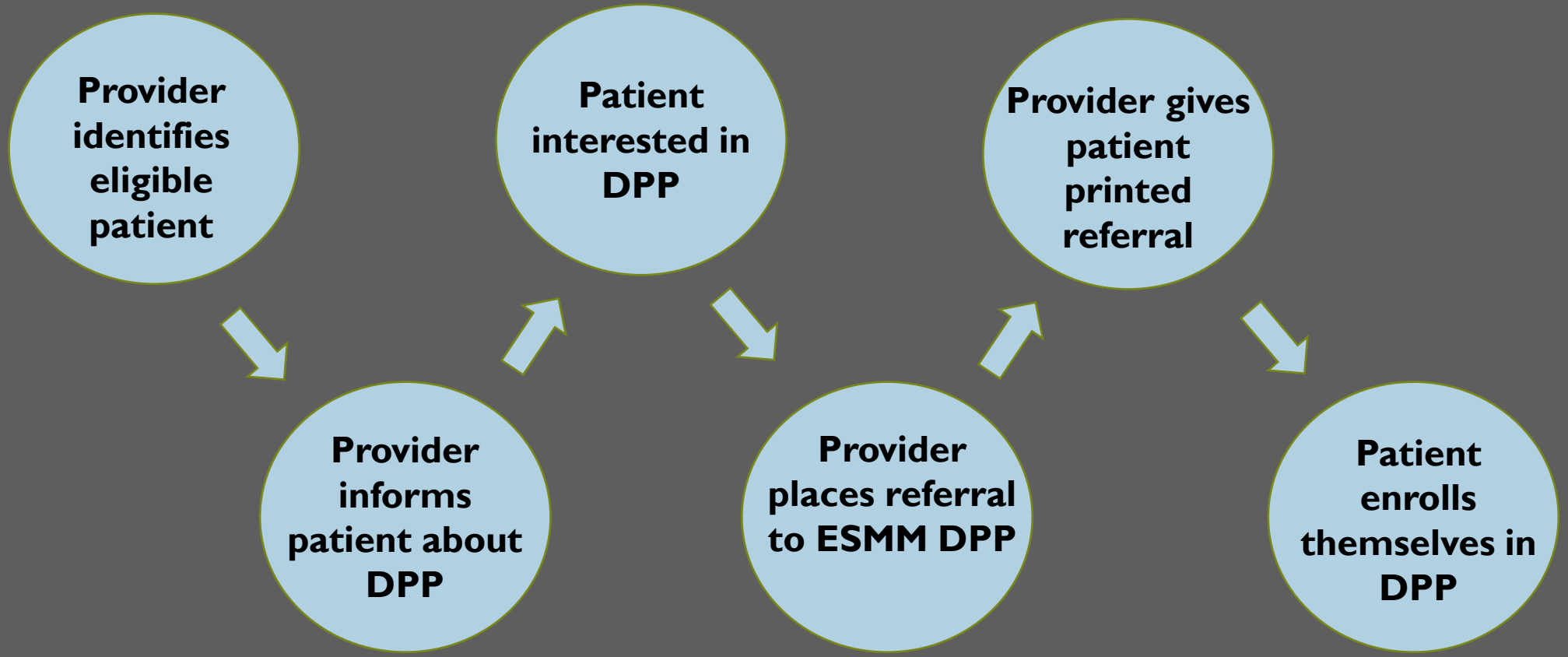


THE NEW ELECTRONIC REFERRAL: EAT SMART MOVE MORE PREVENT DIABETES



THE NEW ELECTRONIC REFERRAL: EAT SMART MOVE MORE PREVENT DIABETES

REFERRAL FLOW FOR EAT SMART, MOVE MORE, PREVENT DIABETES



PHASE II: PILOT

Identifying eligible patients

Creating the electronic referral

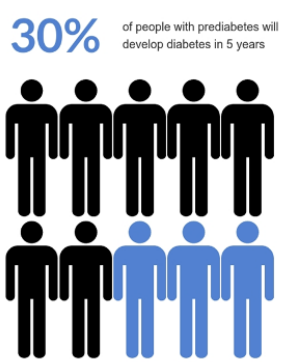
Retrospective referral of our own patients

PROCESS FOR RETROSPECTIVE REFERRALS

Dear @M@ @FNAME@ @LNAME@,

Thank you for being a patient of Duke Family Medicine! We are writing to let you know about a free program to help improve your health.

Our records show that you have a condition that we call "prediabetes." This means your blood glucose (sugar) level is not in the diabetes range, but it is higher than normal, which increases your risk of developing serious health problems including type 2 diabetes, heart disease, and stroke.



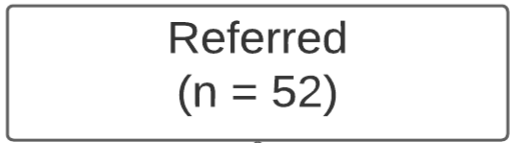
We have some good news — the Diabetes Prevention Program (DPP) can cut your risk of getting Type 2 diabetes in half, and we think you would benefit from the program. The DPP is a 12-month program led by a trained lifestyle coach that helps you learn to eat healthier, get more physical activity, better deal with stress, and lose weight.

DPPs usually cost about $430, but right now it's free to all North Carolina residents regardless of your insurance! The YMCA of the Triangle currently offers an excellent virtual online program. When COVID-19 restrictions are lifted, they will restart their in-person DPPs at several locations, and offer transportation, child-care, and a discounted medical membership to people who qualify.

The YCMA will be calling you in the next few weeks to tell you more about this program and can help you sign up if you are interested. We are here to support you in your journey to health. If you would like to talk more about your prediabetes, please call our office at 919-684-6721 to schedule an appointment.

Sincerely,
Duke Family Medicine, on behalf of your PCP @PCP@

OUTCOMES OF RETROSPECTIVE REFERRALS



- Only 37% of patients were successfully contacted. The most common outcome was voicemail (44% of referrals).
- However, of the patients who were successfully contacted, 50% were enrolled and 16% were interested.

PHASE II: SUMMARY

- The creation of a new prediabetes registry allowed us to easily identify patients who could potentially benefit from the DPP (n = 5,723 at our clinic).
- Referral of our own patients allowed us to identify and fix issues with the new electronic referral process.

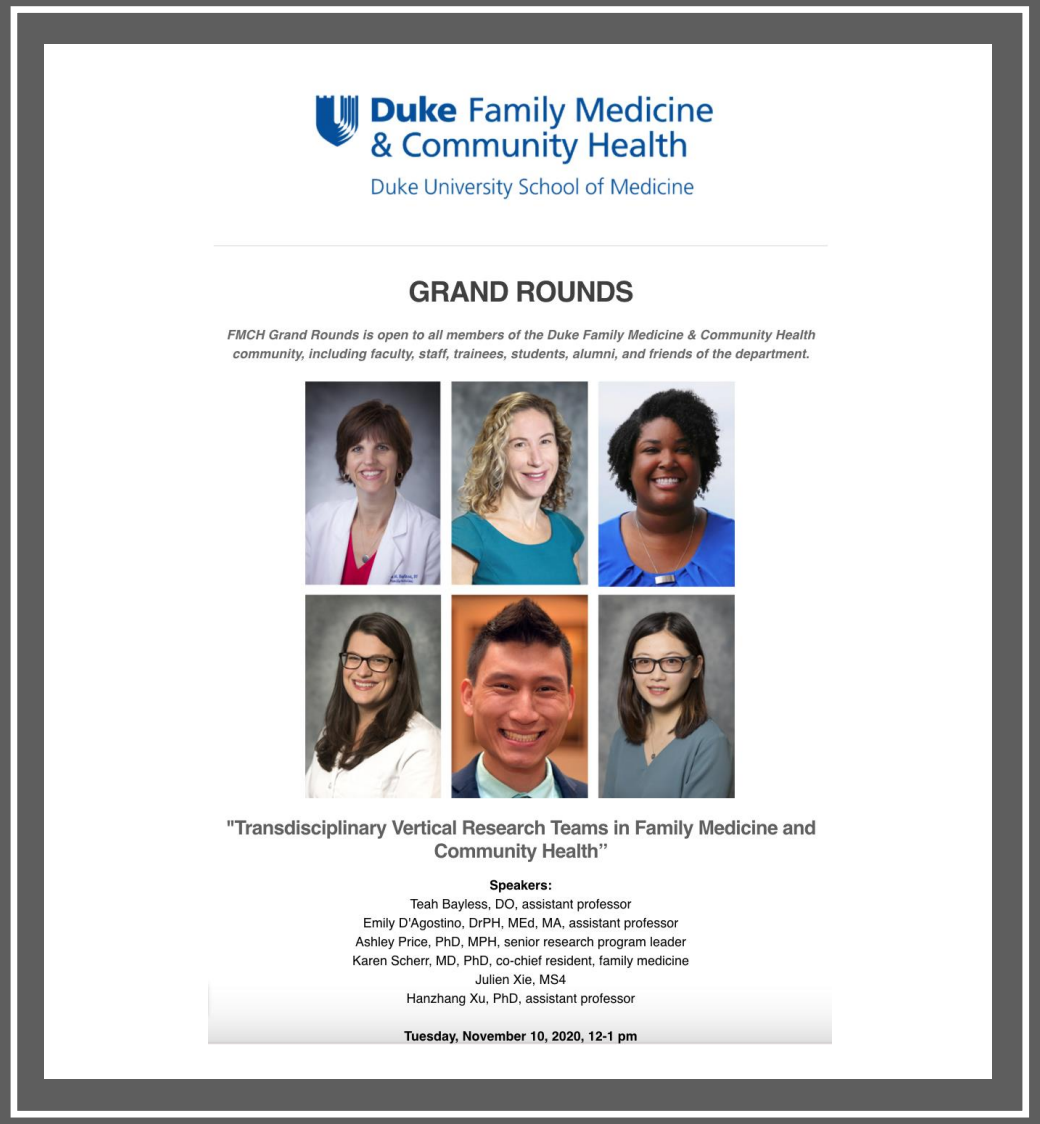
PHASE III: ROLL OUT

Education campaign for clinic providers

Providers prospectively refer their own patients

Post-intervention survey

PRESENTATION AT DEPARTMENT GRAND ROUNDS



Duke Family Medicine & Community Health

Duke University School of Medicine

GRAND ROUNDS

FMCH Grand Rounds is open to all members of the Duke Family Medicine & Community Health community, including faculty, staff, trainees, students, alumni, and friends of the department.

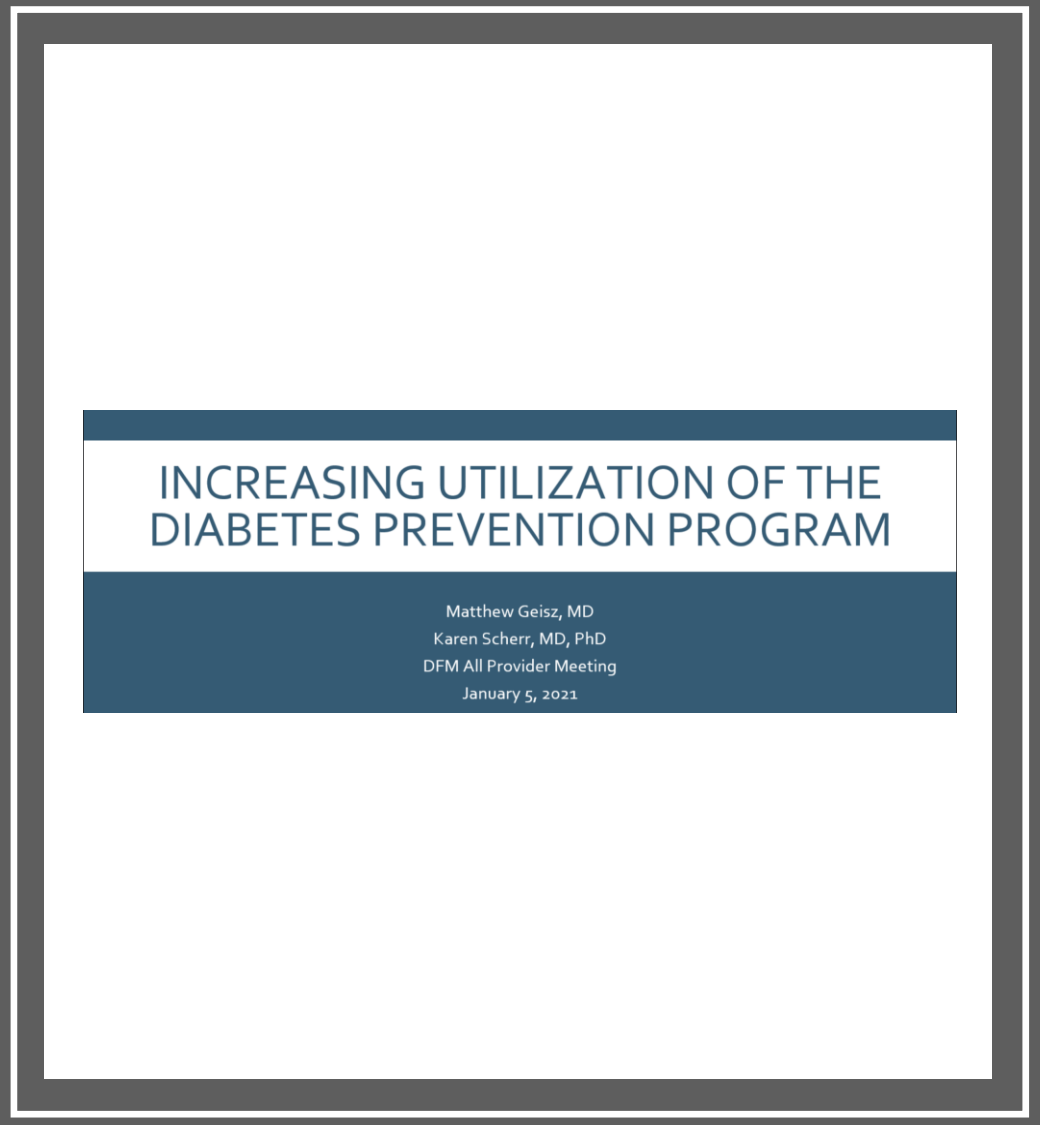
"Transdisciplinary Vertical Research Teams in Family Medicine and Community Health"

Speakers:

Teah Bayless, DO, assistant professor
Emily D'Agostino, DrPH, MEd, MA, assistant professor
Ashley Price, PhD, MPH, senior research program leader
Karen Scherr, MD, PhD, co-chief resident, family medicine
Julien Xie, MS4
Hanzhang Xu, PhD, assistant professor

Tuesday, November 10, 2020, 12-1 pm

PRESENTATION AT CLINIC PROVIDER MEETING



INFORMATION IN CLINIC NEWSLETTER

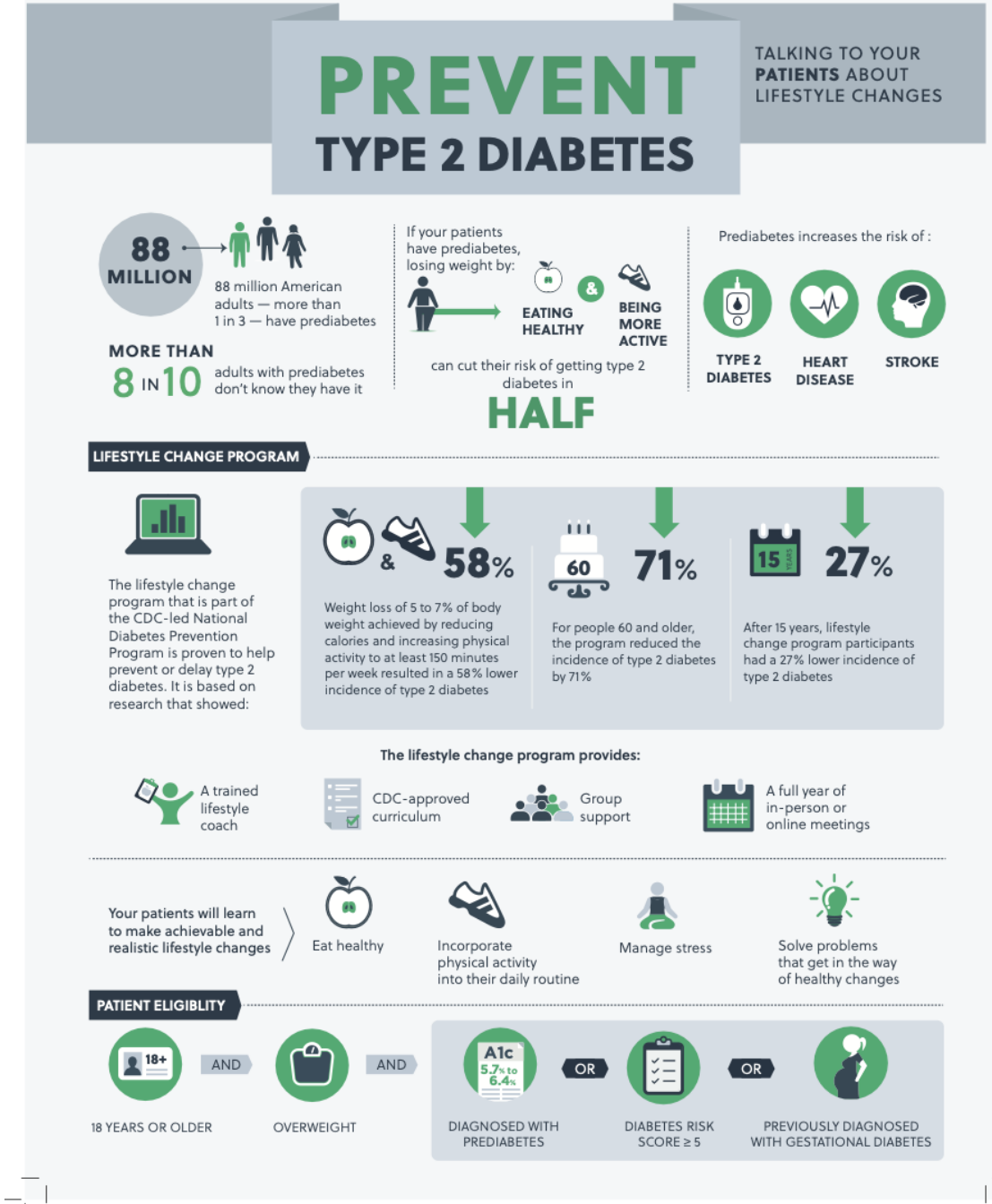
The Diabetes Prevention Program (DPP) see attachment is a CDC recognized, evidenced-based program focused on achieving weight loss. The DPP has been shown to decrease the risk of developing diabetes by 50% for patients with prediabetes. This program is free of cost to the patient! There is now a referral within Epic, "Ambulatory Referral to Diabetes Prevention Program", to two local DPP providers:

1) YMCA of the Triangle: Online and In-person classes available. Multiple locations throughout the Triangle. Patients may also be eligible for discounted membership to YMCA, although a membership is NOT required to participate in the DPP. Karen and Matt would encourage use of the YMCA DPP as we are partnering for the YMCA to provide feedback to providers on patient outcomes.

2) Eat Smart Move More: Online only. $30 enrollment fee that is reimbursed following completion of the course.

Please consider referring your patients at risk of diabetes. Further information on eligibility and step-by-step referral instructions are attached. Contact Matt Geisz or Karen Scherr with questions.

FLYERS POSTED IN CLINIC: SIDE 1



FLYERS POSTED IN CLINIC: SIDE 2

HOW TO REFER PATIENTS TO THE
DIABETES PREVENTION PROGRAM

PLACE THE REFERRAL ORDER IN EPIC

TRIANGLE YMCA

1. Search for the order by typing in **"amb ref diab"**
   - The full name of the order is the "Ambulatory referral to diabetes prevention program" (REF 519)
2. Select **"Triangle YMCA"** for the "referral to program"
3. **Follow the instructions** that pop up, which state the following:
   1. In the "To Provider" box, select **"Triangle YMCA"**
   2. In the "Comments" box, type **".dppymcareferral"**
4. Sign the order
5. The referral is routed
   - The referral will be automatically routed electronically to the YMCA's EHR
6. The YCMA contacts your patient
   - Staff will confirm eligibility, explain more about the program, explore barriers to enrollment/attendance, and help patients enroll in the program

EAT SMART MOVE MORE

1. Search for the order by typing in **"amb ref diab"**
   - The full name of the order is the "Ambulatory referral to diabetes prevention program" (REF 519)
2. Select **"Online Eat Smart Move More"** for the "referral to program"
3. **Follow the instructions** that pop up, which state the following:
   1. In the "Comments" box, type **".dppeatsmartmovemorereferral"**
4. Hand the printed referral to patient and encourage patient to self-enroll
   - Once signed, the referral will automatically print
   - The dotphrase" dppeatsmartmovemorereferral" that was placed in the comments will be included in the printed referral and instructs patients on how to enroll

PHASE III: ROLL OUT

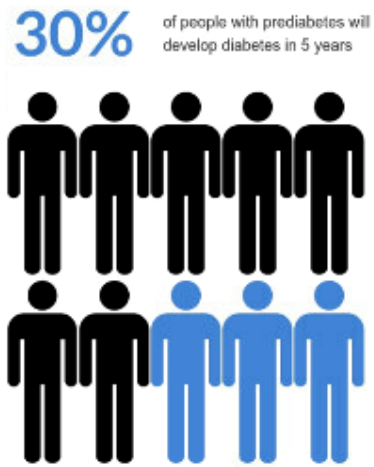
Education campaign for clinic providers

Providers prospectively refer their own patients

Post-intervention survey

PROSPECTIVE REFERRALS

As we've discussed before, you have prediabetes. This means your blood glucose (sugar) level is higher than normal, which increases your risk of developing serious health problems including type 2 diabetes, heart disease, and stroke.



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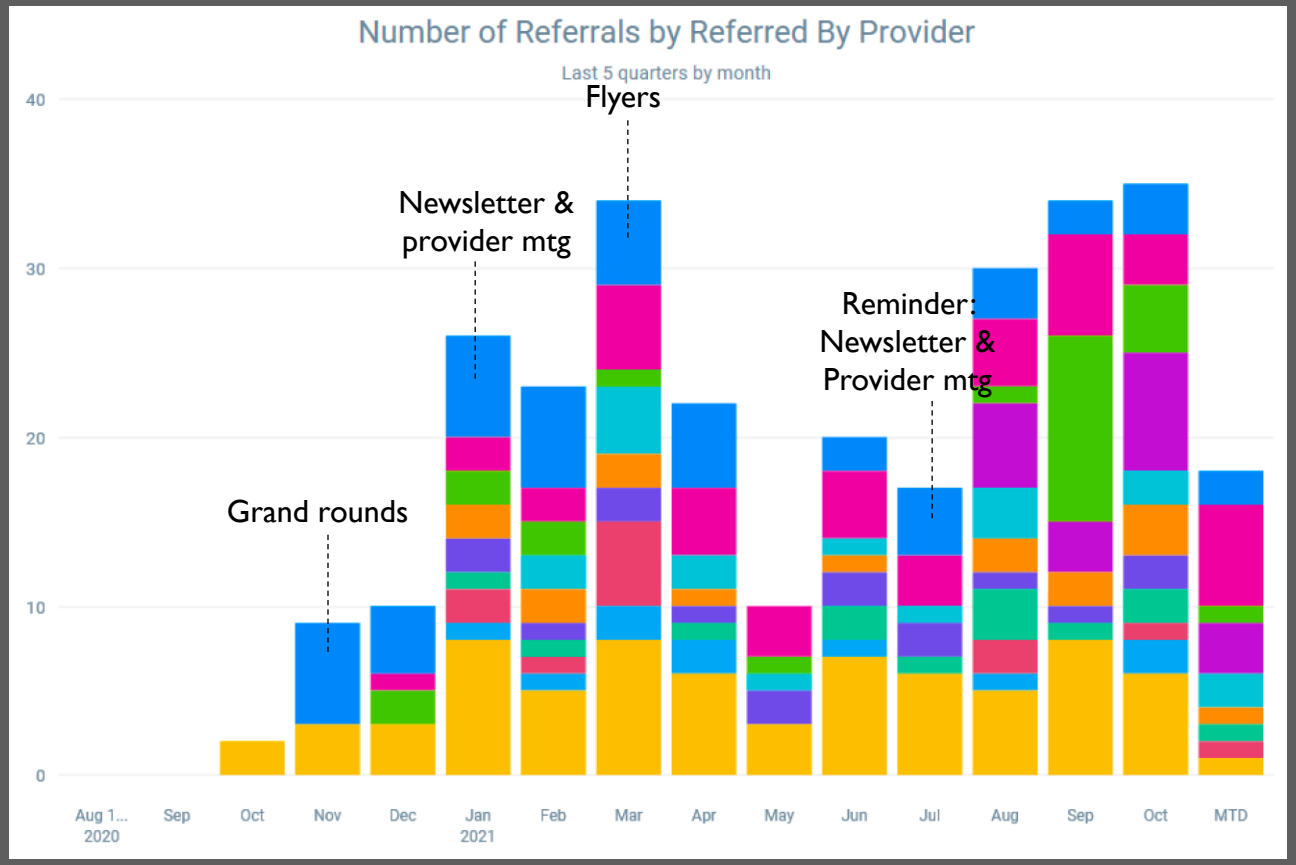
DPPs usually cost about $430, but right now it's free to all North Carolina residents regardless of your insurance! The YMCA of the Triangle currently offers an excellent virtual online program. When COVID-19 restrictions are lifted, they will restart their in-person DPPs at several locations, and offer transportation, child-care, and a discounted medical membership to people who qualify. There is also an online DPP through "Eat Smart, Move More, Prevent Diabetes" (you do have to pay $30 at the beginning of this program, but it is given back to you later as long as you complete the program).

Please let me know if you are interested in a referral to a DPP by sending a MyChart message or calling 919-684-6721 and leaving a message stating you would like a referral. If you want to discuss your case more or have specific questions, please call 919-684-6721 to schedule an appointment with any Duke Family Medicine provider.

REFERRALS


Number of Referrals by Referred By Provider
Last 5 quarters by month
Flyers
Newsletter & provider mtg
Reminder: Newsletter & Provider mtg
Grand rounds
40
30
20
10
0
Aug 1... 2020
Sep
Oct
Nov
Dec
Jan 2021
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
MTD

PHASE III: ROLL OUT

Education campaign for clinic providers

Providers prospectively refer their own patients

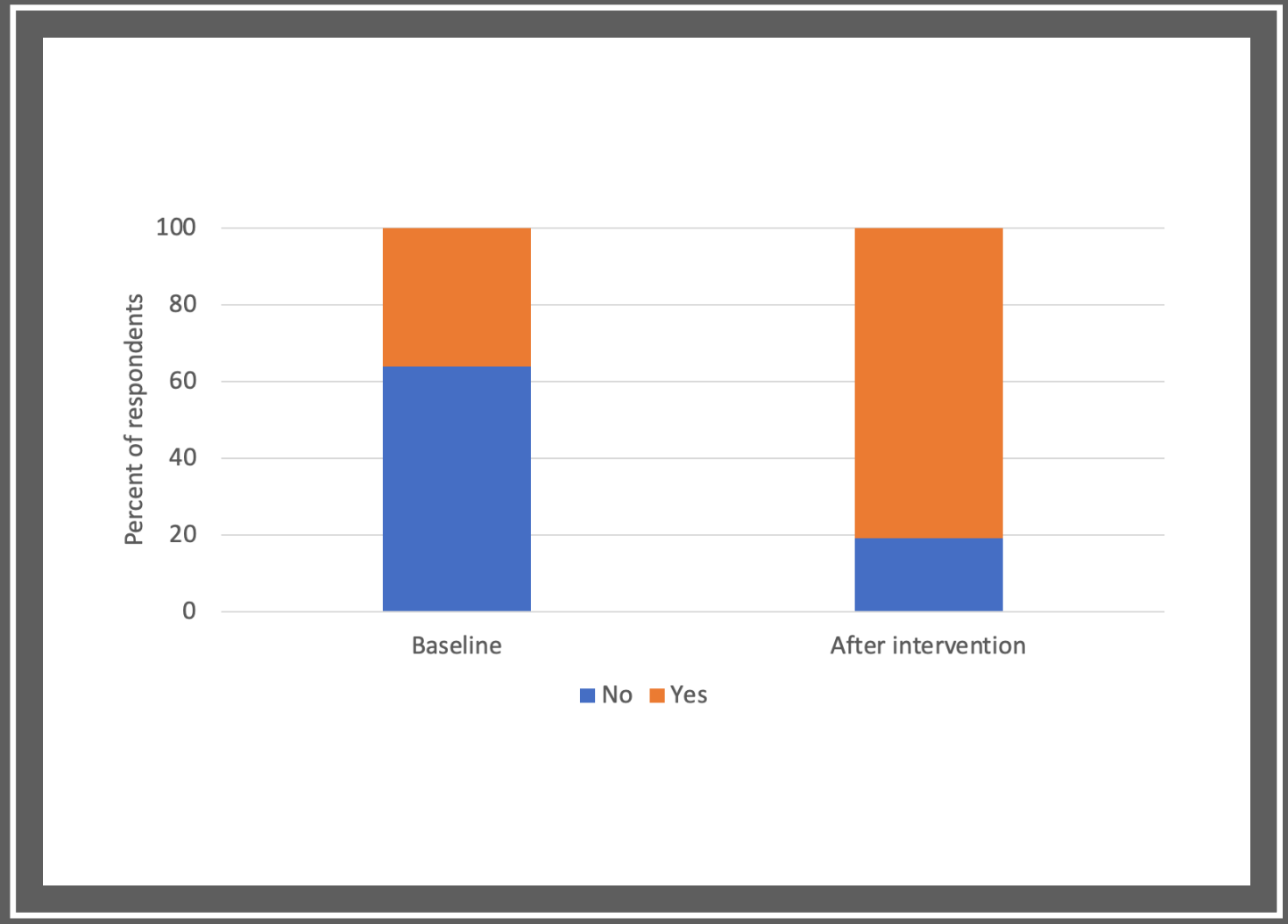
Post-intervention survey

POST-INTERVENTION SURVEY

- 27 providers responded
  - 9 residents (75% response rate), did not include PGY-1s
  - 18 attendings (80% response rate)
- Imperfect pre/post survey
  - Provider turnover
  - Missing unique identifiers

AWARENESS

Are you aware that DPPs are currently available for free to all North Carolina residents at high risk for diabetes, regardless of insurance?



PROVIDER SELF-EFFICACY

How confident are you in your ability to identify which patients are eligible for the DPP?

IMPACT OF REFERRAL

When I treat a patient with prediabetes, I consider a referral to the DPP.

PROVIDERS' EVALUATION OF THE REFERRAL

PHASE III: SUMMARY

- Providers were educated about the DPP through a variety of channels and are actively referring patients.
- 290 patients have been referred across the health system, mostly from Duke Family Medicine.

PHASE IV: NEXT STEPS

Further refinement of referral

Roll out to other clinics

Development of a “Best Practice Advisory” (BPA)

SUMMARY

THE DPP: BARRIERS TO UTILIZATION

~~Cost~~

Difficulty identifying eligible patients

Cumbersome faxed referral process

Low provider and patient awareness and buy-in

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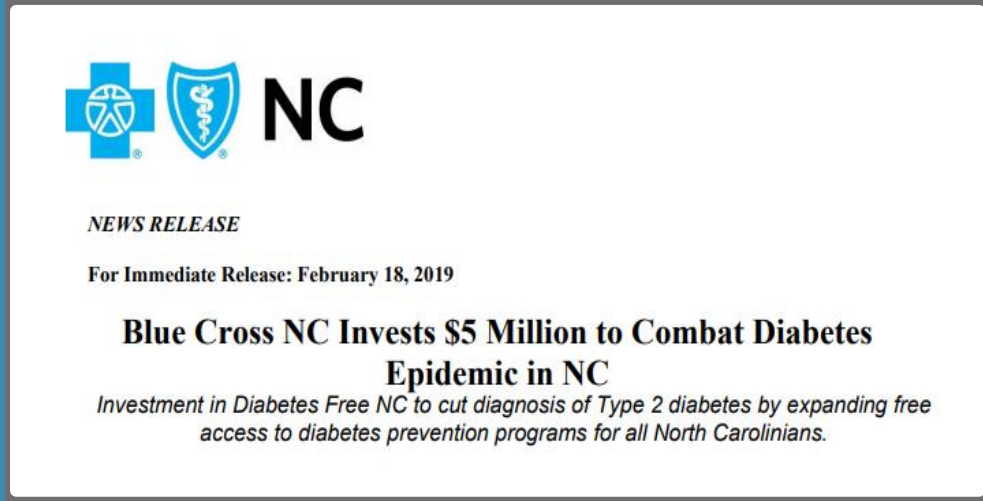

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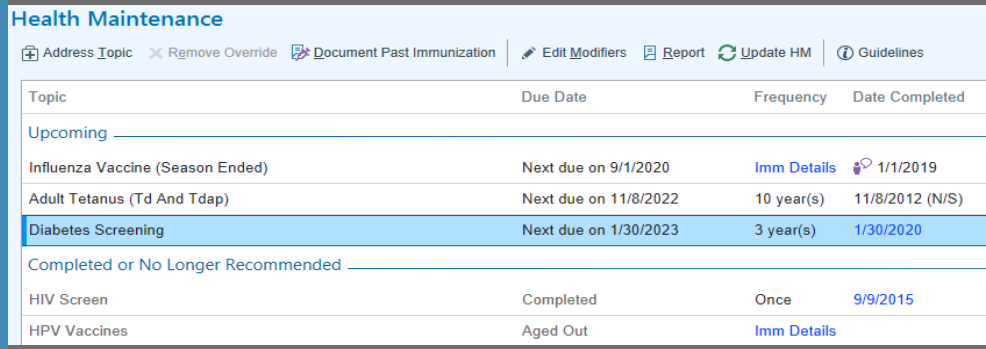
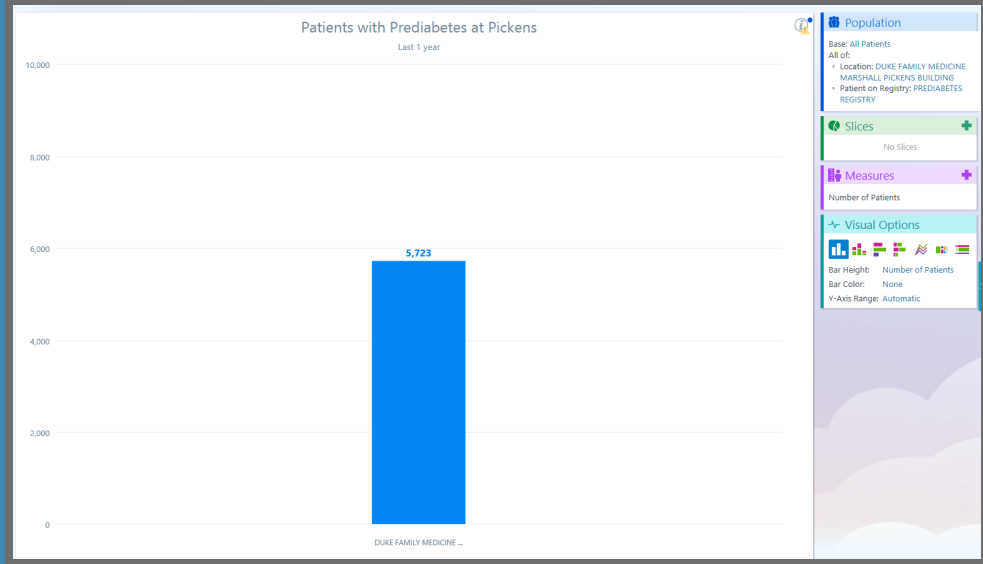
Cumbersome faxed referral process

Low provider and patient awareness and buy-in





Carroll J, Winters P, Fiscella K, Williams G, Bauch J, Clark L, et al. Process evaluation of practice-based Diabetes Prevention Programs: what are the implementation challenges? Diabetes Educ 2015;41(3):271–9.

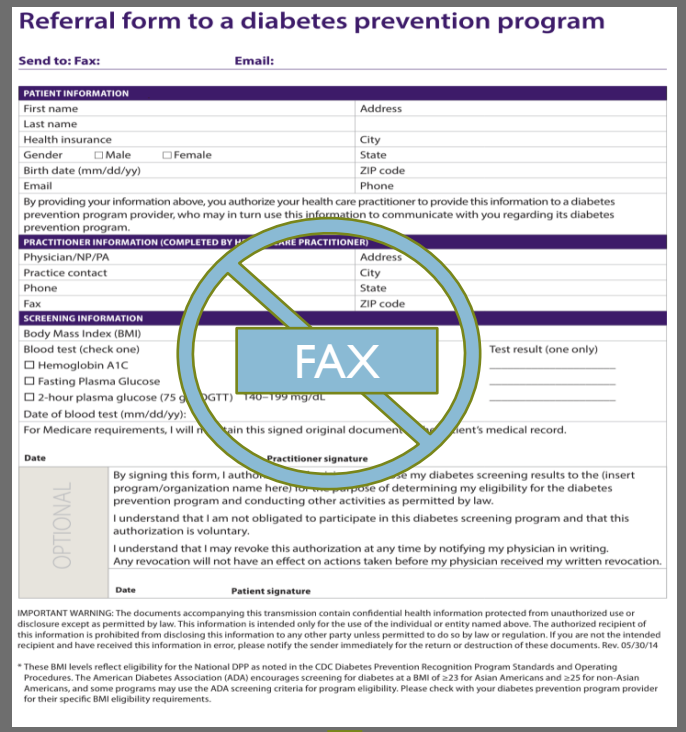
THE DPP: BARRIERS TO UTILIZATION

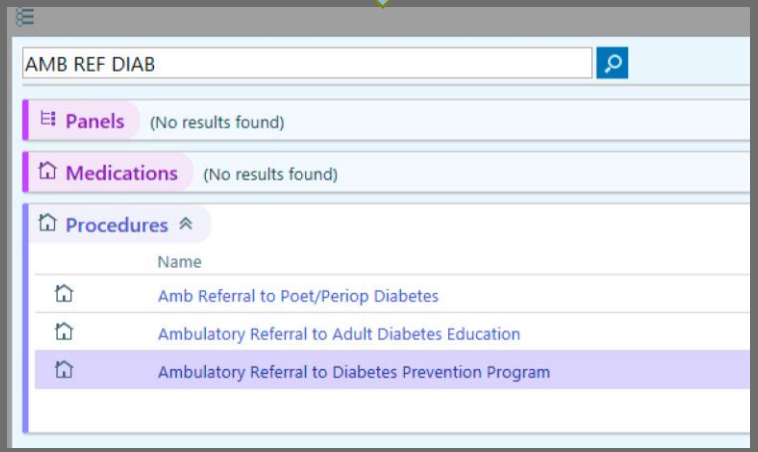
~~Cost~~

~~Difficulty identifying eligible patients~~

~~Cumbersome faxed referral process~~

Low provider and patient awareness and buy-in





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THE DPP: BARRIERS TO UTILIZATION

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- Presentation at monthly provider meeting
- Information in weekly clinic newsletter
- Presentation at department Grand Rounds
- Laminated fliers posted in clinic
- Patient education via providers and information in After Visit Summaries

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