

# Increasing Access to Obesity Care through a Primary Care-Based Model

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THE UNIVERSITY  
*of* NORTH CAROLINA  
*at* CHAPEL HILL





# Getting Scientific Breakthroughs into OUR Communities



## Decentralized Comprehensive Obesity Care (2019)

- ABOM certified PCPs
- UNC Primary Care Network

## Learning Objectives:

- Discuss Obesity Disparities in NC
- Discuss **BARRIERS** to obesity care & **STRATEGIES** to decrease barriers
- Discuss impact of ABOM certified clinicians in low resourced settings



# “Mary” 42 y/o F

## BMI 76 (406 lbs), HTN, HLD, OSA, Pre-DM, MAFLD, Knee OA

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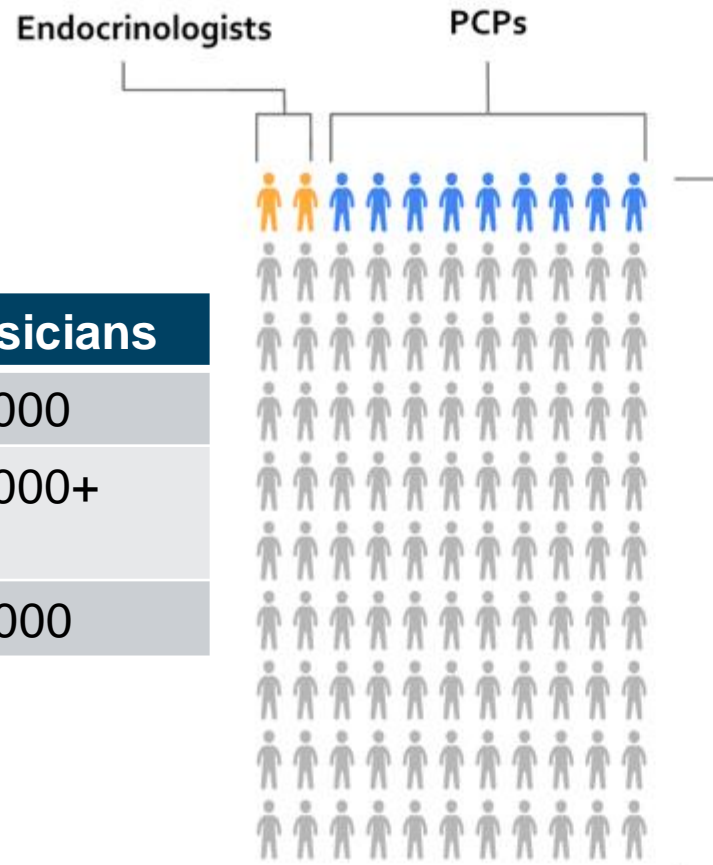
- Small Town NC
- Married, Mother of 3 kids, can't work due to weight
- **No coverage:**
  - Bariatric Surgery
  - GLP1 drugs
  - Nutrition Counseling Services
- Specialty WM clinic:
  - Can't afford specialty copays every two months (\$80)
  - Can't afford Hospital Facility Fees (\$280)
  - Mandatory Nutrition visit (\$250)
  - REFUSES to go back
- So **WHERE** can she get obesity care?



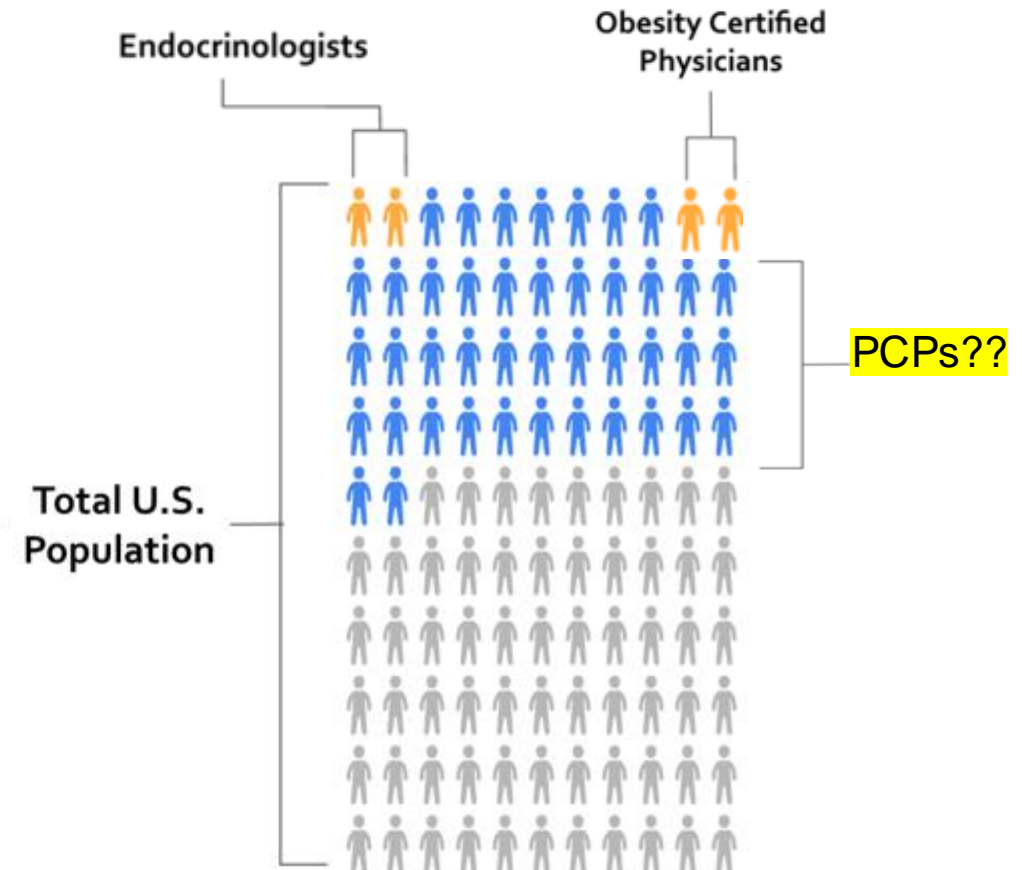


# WHO SHOULD TREAT OBESITY?

### Prevalence of Type II Diabetes Mellitus



### Prevalence of Obesity



| Specialist      | # Physicians |
|-----------------|--------------|
| Endocrinologist | ~ 9000       |
| ABOM Physicians | ~ 10,000+    |
| PCPs            | ~527,000     |

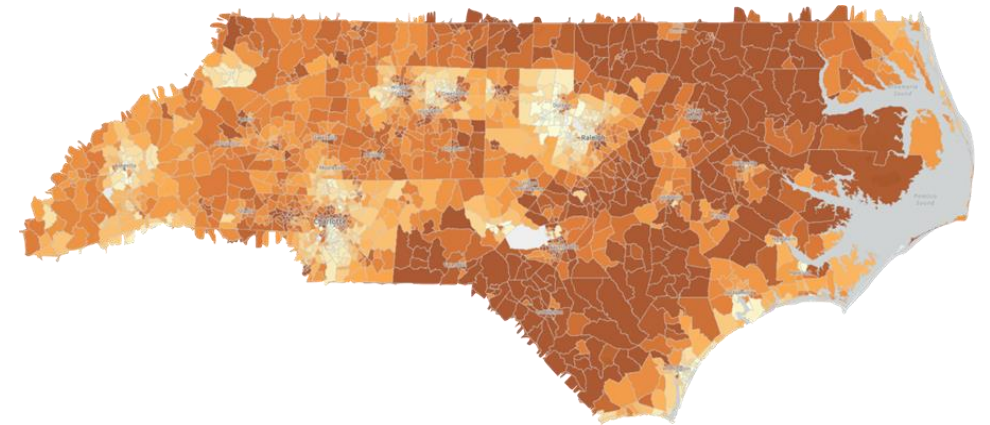


# North Carolina Obesity Statistics

- Obesity rate in NC: **34.1%**
- NC: 2<sup>nd</sup> largest population in US living in rural areas (3.4mil)
- NC Obesity Disparities:

|       | BMI $\geq$ 30 |
|-------|---------------|
| Urban | 32.6%         |
| Rural | <b>39.7%</b>  |
| White | 31.3%         |
| Black | <b>45.7%</b>  |

Prevalence of Obesity in NC



**Obesity disproportionately affects the socially vulnerable, rural, and minoritized communities**

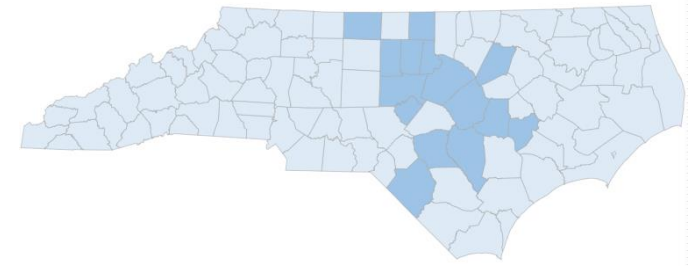
<sup>1</sup> America's Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System, United Health Foundation, AmericasHealthRankings.org, accessed 2024

<sup>2</sup> [Nation's Urban and Rural Populations Shift Following 2020 Census](#)

# UNC Physicians Network Community Practice Arm of UNC Health



|              | # Clinics | # Patients     | # NC Counties | # Patients BMI > 40  |
|--------------|-----------|----------------|---------------|----------------------|
| Primary Care | 83        | 350,000        | 16            | 27,000               |
| Specialty    | 43        | 190,000        | 16            | 14,500               |
| <b>TOTAL</b> |           | <b>540,000</b> |               | <b>41,500 (7.7%)</b> |



**As an institution, how do we provide equitable access to obesity care for the masses?**

“The impact of obesity is felt acutely across North Carolina at inpatient and outpatient centers of UNC Health daily.”

“Specialty care cannot serve as the main access point for scalable weight management interventions.”

Lynne Fiscus, MD, MPH  
President & CEO  
UNC Physicians Network





# Barriers to Weight Management Services

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## Patient Barriers:

- **COST:**
  - Specialty copays
  - Hospital Facility Fees
  - Commercial Weight Loss Programs
- **Geography**
- **Time Burden:**
  - Dietician
  - Physical Therapy
  - Intensive Beh. Therapy (26 sessions/year)

## Healthcare System Barriers:

- **Specialty Obesity Clinic:**
  - Lack capacity
- **Primary Care Clinics:**
  - PCPs lack training and time
  - Lack Structure/ Capacity
- **Health Insurance:**
  - Poor GLP1-RA coverage
  - Poor Nutrition Counseling coverage



# Reducing Barriers: Pilot Weight Management Program 2019



| Barriers  | UNC Solutions  |
|---|--|
| Specialty Obesity Care:<br>Lack capacity                                    | Primary Care Footprint<br>(83 Primary Care Clinics)            |
| Specialty Copays,<br>Hospital facility fees,<br>Commercial WM programs fees | Primary Care Copays  |
| PCPs lack Obesity Medicine<br>TRAINING                                      | PCPs with ABOM Certification in<br>existing primary care sites |
| PCPs lack TIME  | More time (WM visits)  |
| Geographical Challenges   | Providing WM services within local<br>communities              |
| Time Burden (Patients)<br>(Intensive Beh Therapy 26/yr))                    | 4 visits: 6% Weight Loss<br>8 visits: 10% Weight Loss          |

- Launched Pilot Community-based WM Program:
  - 3 ABOM-Certified PCPs
  - 3 Primary Care Clinics
- Foundation WM Program
  - Accessible Pharmacotherapy
  - Simplified Evidence-Based Lifestyle Counseling Strategies
- UNC Institute for Healthcare Quality Improvement (IHQI)
  - Implementation
  - Patient Registry (IRB Approved)

# UNCPN Weight Management Program Results (2019-2024)



# UNCPN Weight Management Program

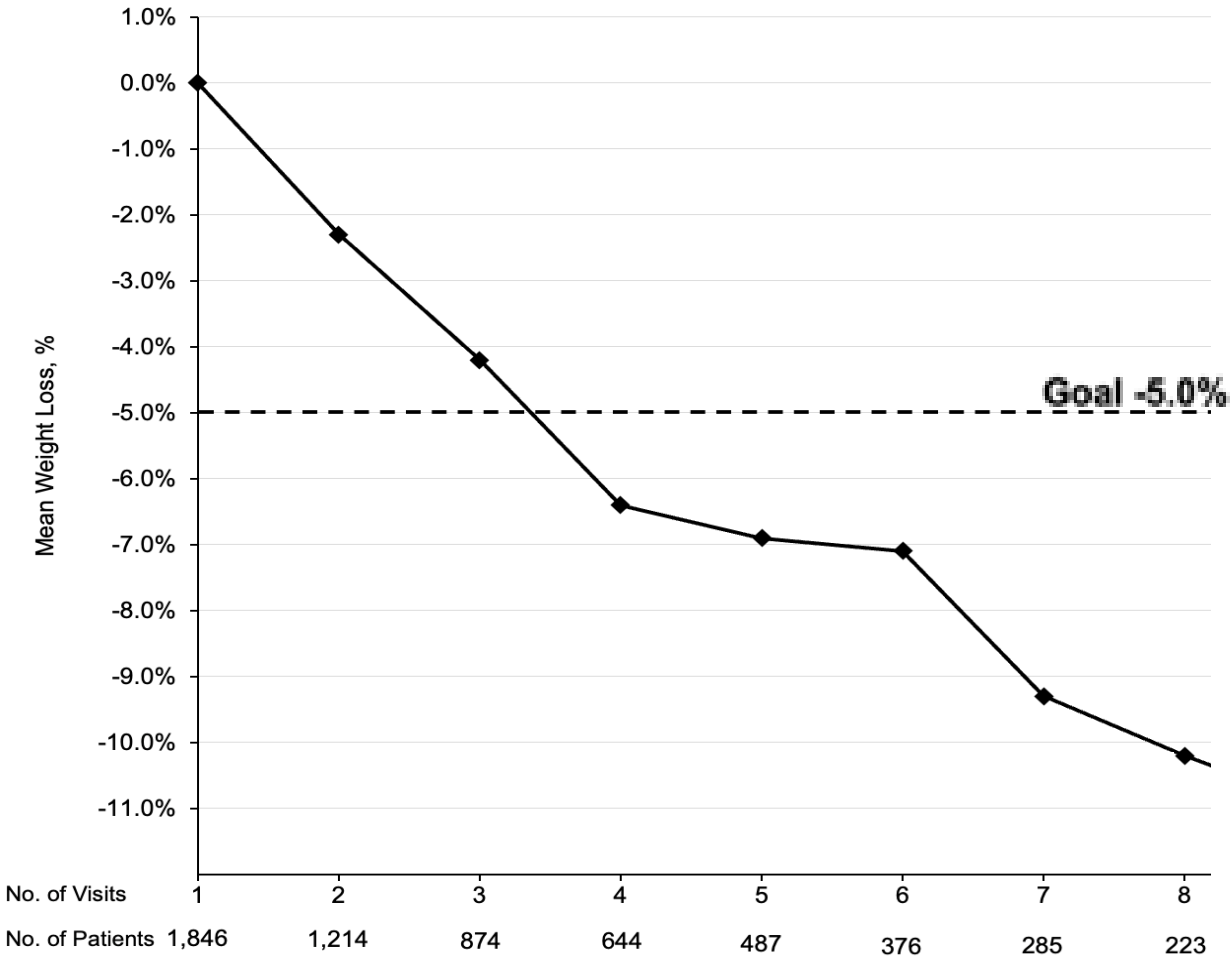
## Patient Baseline Characteristics 2019-2024



| Characteristic                | Total N=1846 | UNC Health | North Carolina |
|-------------------------------|--------------|------------|----------------|
| Age, mean (SD), Years         | 52 (13.9)    |            |                |
| BMI, mean (SD)                | 40 (8.2)     |            |                |
| Weight, mean (SD), lbs        | 246 (57.1)   |            |                |
| Female, No. (%)               | 1526 (83%)   |            |                |
| White No. (%)<br>Non-Hispanic | 1200 (64.9%) | 64.8%      | 60%            |
| Black No. (%)<br>Non-Hispanic | 471 (25.5%)  | 21.7%      | 21%            |
| Hispanic No. (%)              | 123 (6.7%)   | 6.1%       | 11%            |
| Asian No. (%)                 | 30 (1.6%)    | 3.5%       | 3.6%           |

# UNCPN Weight Management Program 2019-2024

## Weight Loss % vs. Number of Visits



**N=1846**  
**4<sup>th</sup> visit: Av. ~6% Weight Loss**  
**8<sup>th</sup> visit: Av. ~10% Weight Loss**





## Change in Weight/BMI for Patients with $\geq 4$ Visits (2019-2024)

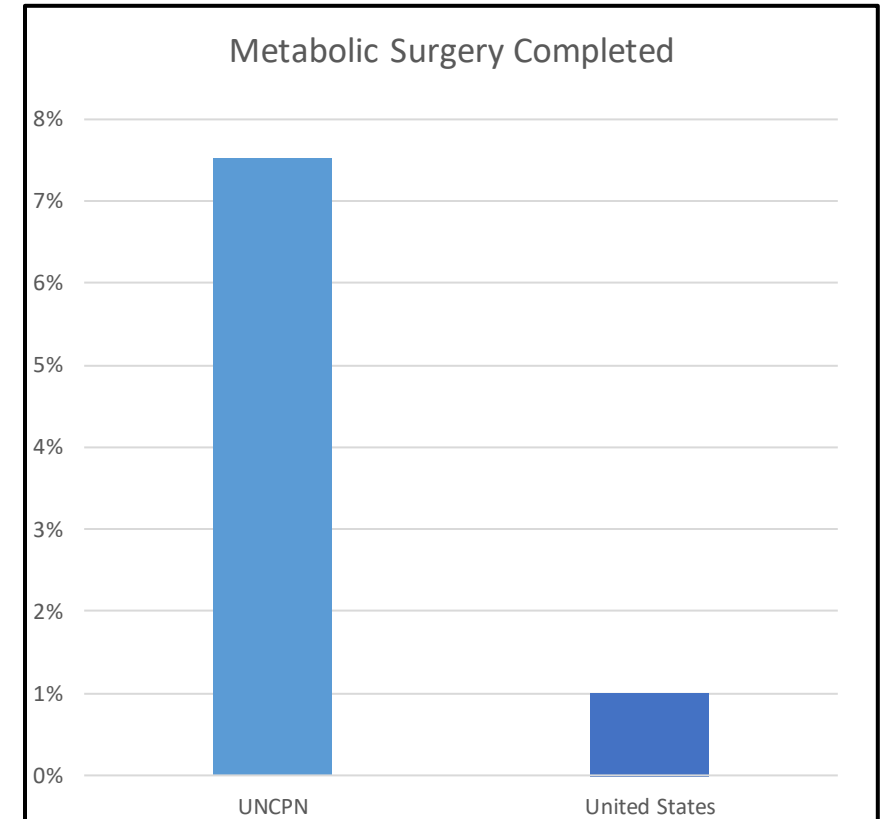
|  | Total Patients with $\geq 4$ Visits<br>(N=651) Mean (SD) |
|--|--|
| Avg 1 <sup>st</sup> BMI (Kg/m <sup>2</sup> ) | 39.8 (SD 7.7)  |
| Avg Last BMI (Kg/m <sup>2</sup> )            | 37.1 (SD 7.7)  |
| Change in BMI                                | -2.7   |
| Avg 1 <sup>st</sup> Weight (lbs)             | 242 (SD 54.4)  |
| Avg Last Weight (lbs)                        | 225 (SD 53.2)  |
| Change in Weight                             | -16.4  |
| > 5% Weight Loss                             | 58% (380/651)  |
| > 10% Weight Loss                            | 35% (233/651)  |



## Table 4: Commonly used Anti-Obesity Medications in our WM Program (FDA approved and Off Label)

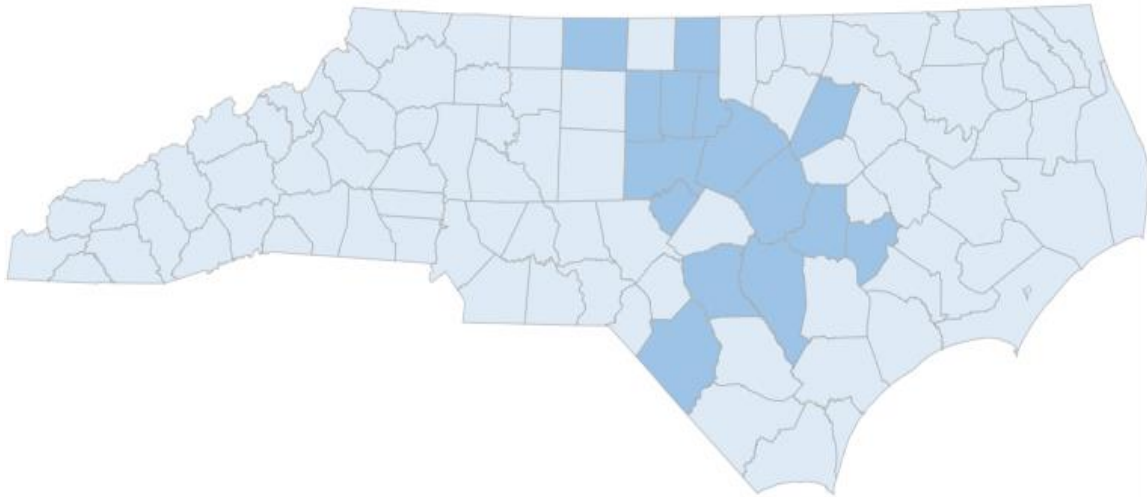
(To lower cost for our patients, separate generic medications were used instead of FDA approved combination medications)

| Anti-Obesity Medications   | Number of Prescriptions Filled |
|----------------------------|--------------------------------|
| Metformin                  | 1146                           |
| Topiramate                 | 912                            |
| <u>Semaglutide</u>         | 775                            |
| Bupropion                  | 569                            |
| Phentermine                | 386                            |
| Liraglutide                | 312                            |
| <u>Tirzepatide</u>         | 186                            |
| Empagliflozin              | 94                             |
| Naltrexone                 | 92                             |
| Dulaglutide                | 58                             |
| Phentermine/ Topiramate ER | 51                             |
| Bupropion/ Naltrexone      | 33                             |
| <u>Dapagliflozin</u>       | 21                             |
| Diethylpropion             | 1                              |
| Orlistat                   | 1                              |

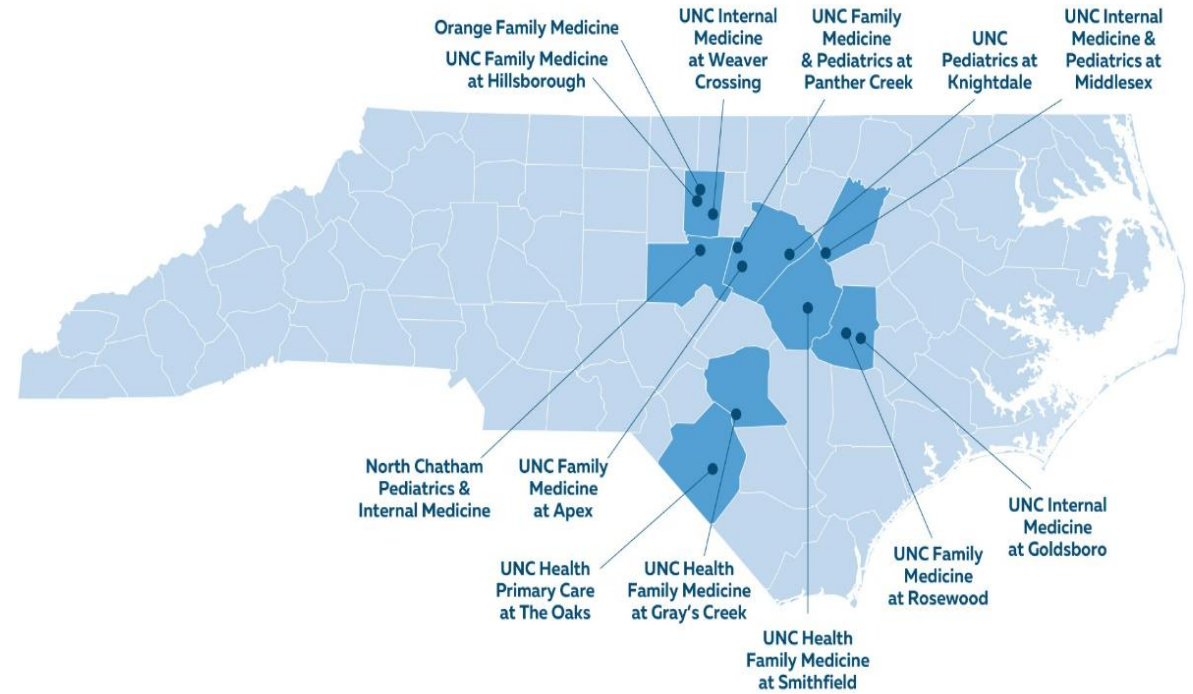


Clapp, Benjamin et al. Surgery for Obesity and Related Diseases, Volume 20, Issue 5, 425 - 431

## 83 UNCPN Primary Care Clinics (16 Counties)



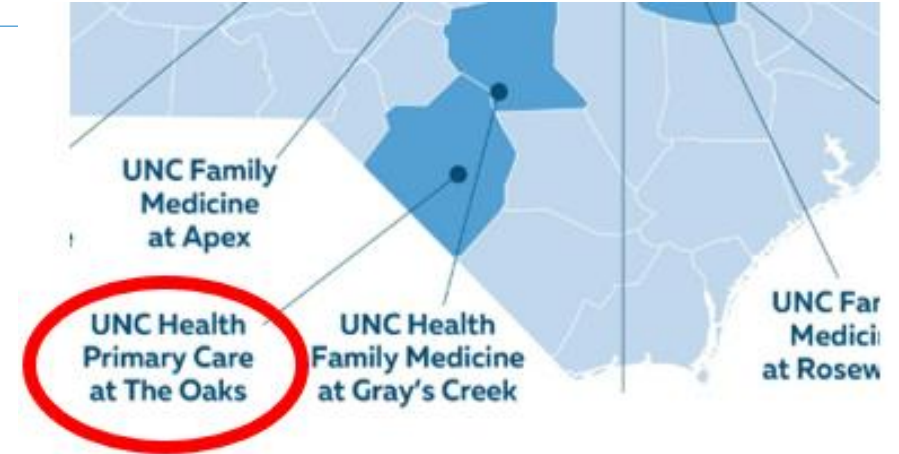
## 13 UNCPN Weight Management Clinics (8 Counties)



# Robeson County, NC



- Ranks the LOWEST in health outcomes in NC:
  - Highest Obesity Prevalence
  - Lowest Life Expectancy
  - Lowest Quality of Life
- No Weight Management Resources
- January 2024
  - Obesity Certified PCP in Robeson County
  - UNCPN WM Program Resources:
    - Epic clinical tools
    - Patient Education tools
    - Clinical Training/ Shadowing
    - 1:1 Mentorship
    - Monthly Obesity Education Conference
    - Immediate Impact:
      - Obesity Med Knowledge—PCPs ↑
      - Obesity Champion
      - Furthering reach WM principles



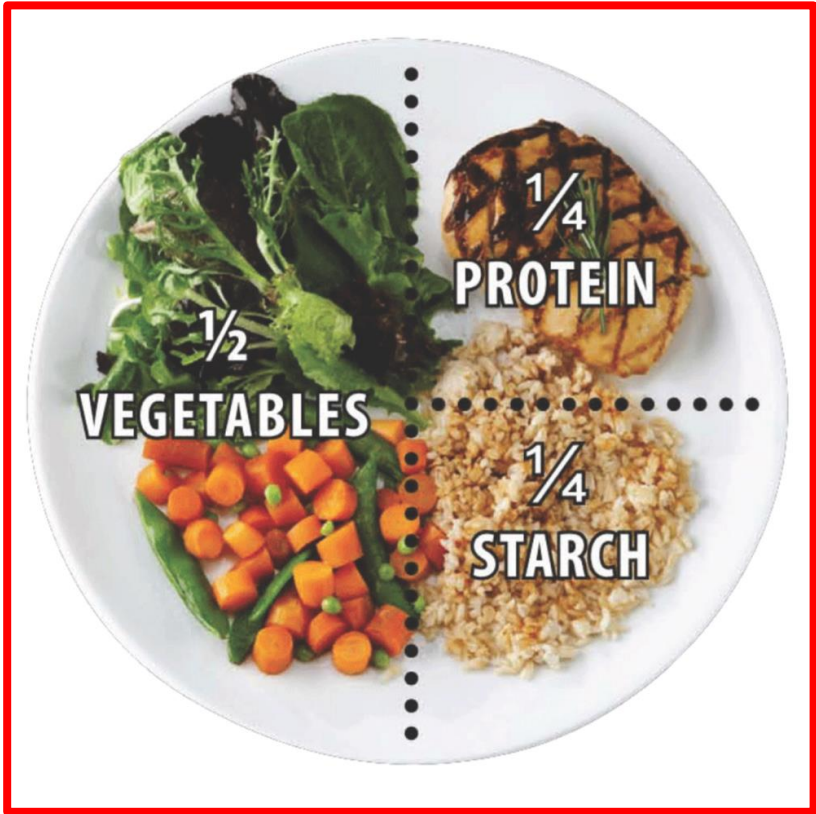
|                       | Robeson County | NC   | U.S   |
|-----------------------|----------------|------|-------|
| Adult Obesity         | 45%            | 36%  | 34%   |
| Life Expectancy       | 72.8           | 78.1 | 77.5  |
| Adults in Poor Health | 31.2%          | 18%  | 19.5% |
| Diabetes Type 2       | 16.9%          | 11%  | 10.4% |





# If Lifestyle Change is the FOUNDATION of Obesity Care...

- And many lack access to Nutrition & Behavioral Counseling services...
- How do we get our patients from **HERE** to **THERE**?





# What Advice do PCPs give to Patients with obesity to lose weight?

## A qualitative content Analysis of 159 recorded interactions

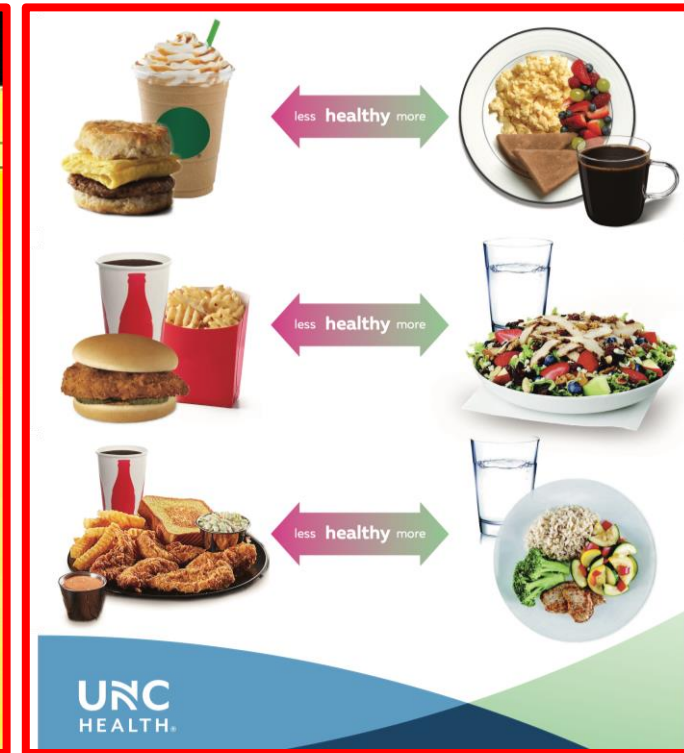
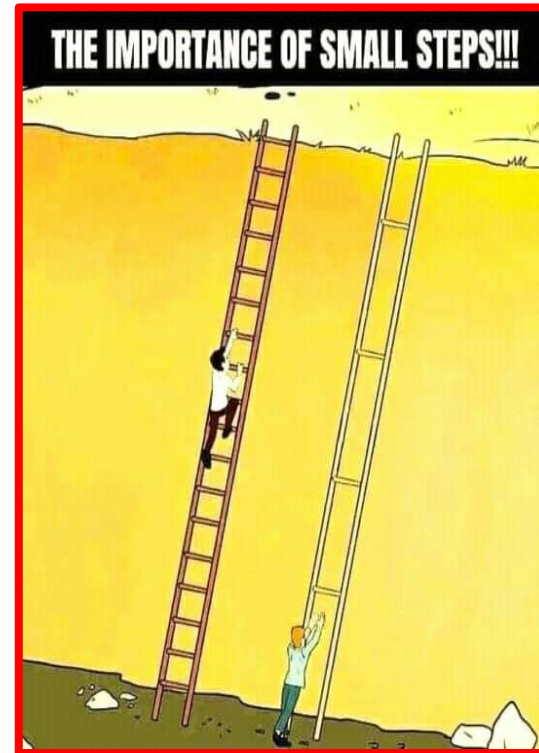
- Dominant Approach:
  - Generic message: **Eat less carbs, Move more**
  - Not tailored to pts' existing knowledge or behaviors
  - Scientifically unsupported
  - Pts say generic advice **UNHELPFUL**
- Conclusion:
  - Clinicians need clear guidelines on **WHAT TO SAY** to patients with obesity about weight loss. (Evidence-based, Personalized, Specific, Effective).



# Simplified Lifestyle Counseling Approach

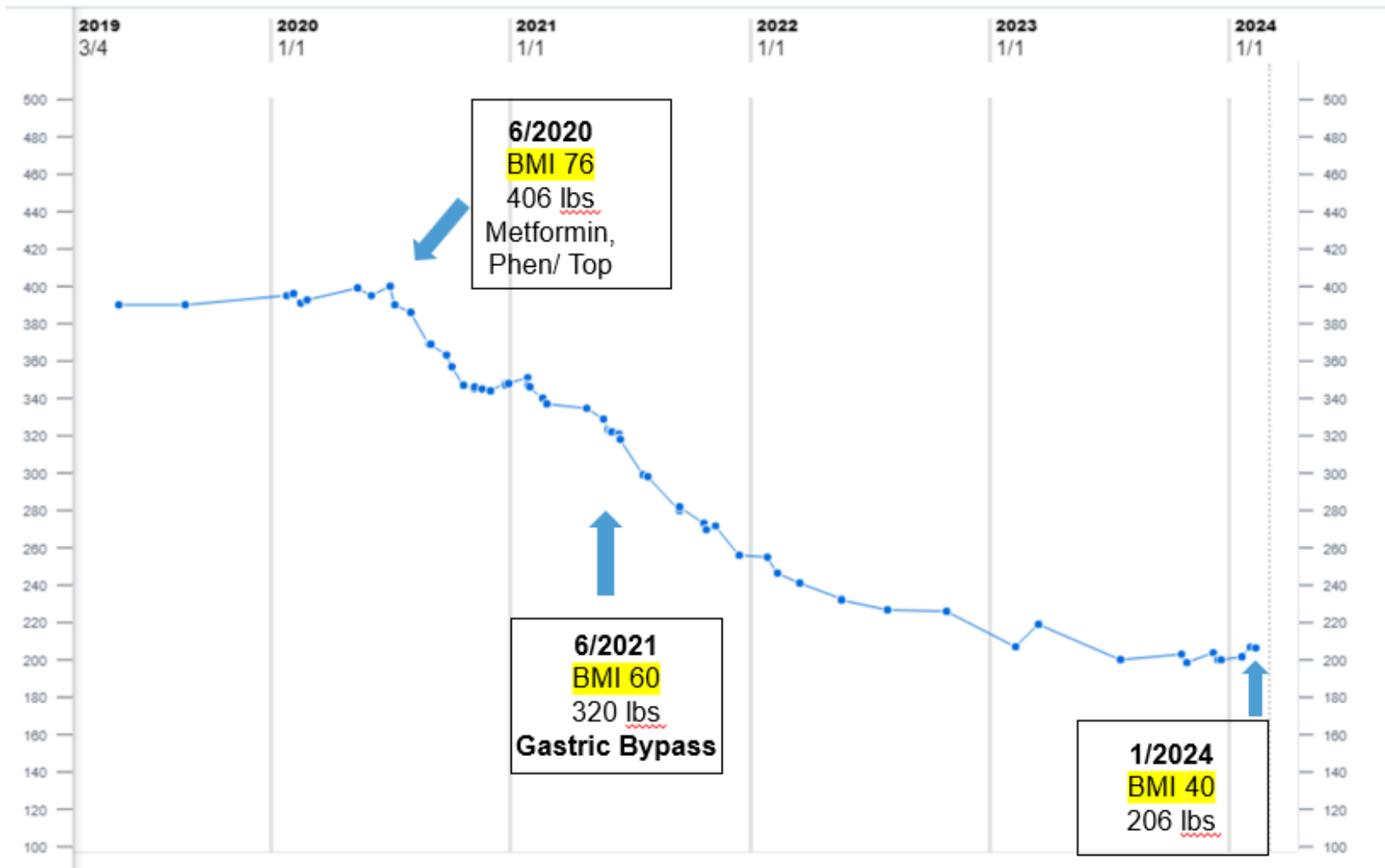


1. Comprehensive Lifestyle Inventory Form
2. Link high consumption of Ultra Processed Foods (UPF) to patients' metabolic health and obesity.
3. **Small Steps** to decrease UPF consumption:
  - Simple “Food” Language
  - Avoiding abstract nutrient language (polyunsaturated fat)
  - Specific, Measurable, Achievable, Relevant, Timely (SMART)
    - Swap 3 cans Soda/day to 1 can Soda/day
4. Cost sensitive
5. Culturally appropriate
6. **All team members trained in same approach**
  - WM Clinicians, RDs, CPPs, LCSW, (PCPs)



Modify with InsShu L, Zhang X, Zhou J, Zhu Q, Si C. Ultra-processed food consumption and increased risk of metabolic syndrome: a systematic review and meta-analysis of observational studies. Front Nutr. 2023 Jun 9;10:1211797. doi: 10.3389/fnut.2023.1211797. PMID: 37360294; PMCID: PMC10288143.

# Mary 42 y/o F BMI 76 (406 lbs)





# Population Level Obesity Treatment (Based on Severity of Comorbidities) UNC Health Model



## **HIGHEST RISK:**

**ABOM certified Endocrinologists  
(within 4 wks)**

BMI >30 with one of the following:

- Pre-Organ transplant
- Idiopathic Intracranial HTN
- Severe CHF/ LVAD
- Post-bariatric surgery
- T1DM (12 wks)

## **MODERATE RISK:**

**ABOM certified PCPs (within 3 mos)**

BMI >30 with one of the following:

- CVD
- CKD
- T2DM
- OSA
- MAFLD/ MASH/ Cirrhosis
- Pediatric Obesity
- Pre- surgery weight loss

**Comprehensive & Longitudinal Care**

## **LOW RISK:**

**Primary Care Clinicians**

- BMI 27-32 w/o comorbidities
- **Weight Prioritized Visits**
- Simplified Questionnaire & Treatment Guided Pathway for PCPs
- Obesity Medicine Education Modules



# Expanding the Reach & Impact of Weight Management Program

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- **Obesity Education Conference**

- Monthly virtual series
- For community clinicians (>200)
- Topics:
  - Pharmacotherapy, Effective LS counseling strategies
  - MAFLD, PCOS, Post-Bariatric Surgery care for PCPs,
  - Pediatric Obesity 101, Obesity Disparities, OSA, Binge Eating Disorder....
- Sponsored by:
  - UNC Physicians Network WM Program
  - UNC School of Medicine WM Program

- **Advocacy Work in the State of NC**

- NC Medicaid Anti-Obesity Medication coverage age>12
  - August 1, 2024
- NC Medicaid Nutrition Counseling Coverage
  - Letter writing campaign



## Lessons Learned

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1. Obesity **disproportionately** affects socially vulnerable, rural and minoritized communities
2. Accessible Anti-Obesity Medications + Evidence-based Simplified Lifestyle Interventions improve health and promote weight loss
3. Healthcare Systems (HCS) need a **PARADIGM SHIFT** in obesity care:
  - Specialty Clinics in HCS **cannot** serve as main ACCESS point for scalable WM services
  - **REDUCING BARRIERS** and adding **Decentralized Network** of trained obesity clinicians in local communities are essential in increasing access to all populations.

**Primary care-based model increases ACCESS to obesity care for ALL**

# Thank You!

## It Takes a Village



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