Improving blood pressure control in a Family Medicine residency clinic by engaging social determinants of health and utilizing outpatient clinical pharmacists

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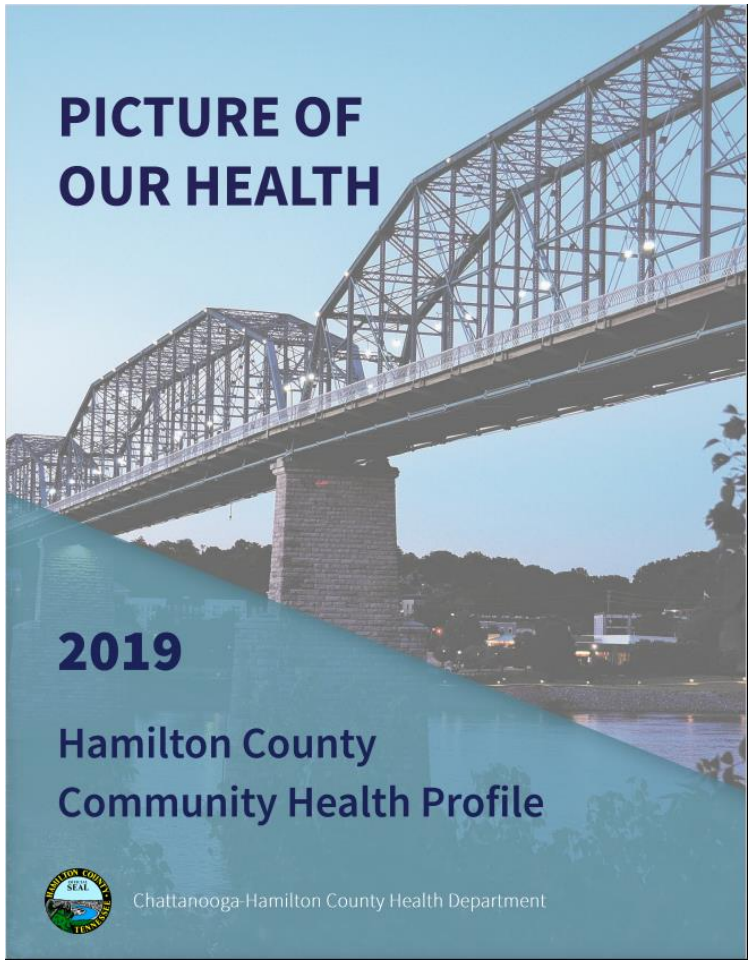
Disclosures

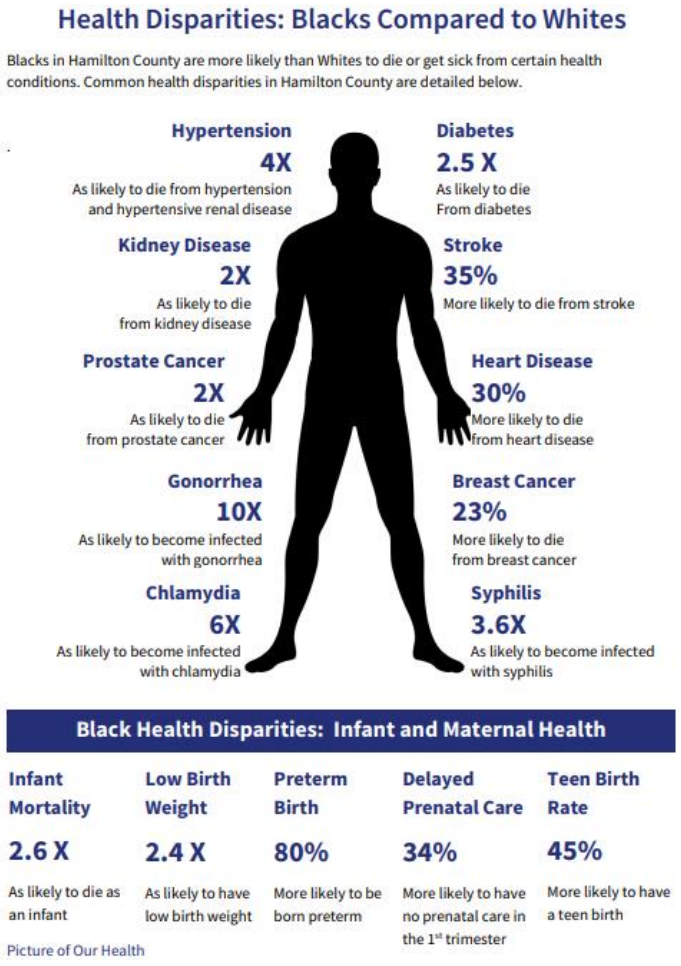
- Sponsor: None

- Project Start Date: October 2020
- Project End Date: October 2025

- Last Revised: January 2022

The Hamilton County Quality Gap





Hypertension

4X

As likely to die from hypertension and hypertensive renal disease

Heart Disease

30%

More likely to die from heart disease

Stroke

35%

More likely to die from stroke

The UTFP Quality Gap

- Only 35-40% of adult patients with HTN at the UTFP clinic were controlled below 140/90 mm Hg.
- Slightly below national averages 45-53% (1,2,3,4,5)

Current AIM 2021-2022

- By March 31, 2022, 50% of the UTFP [enrolled] patients aged 18 and older with HTN will have a blood pressure under the personalized goal for two consecutive UTFP visits

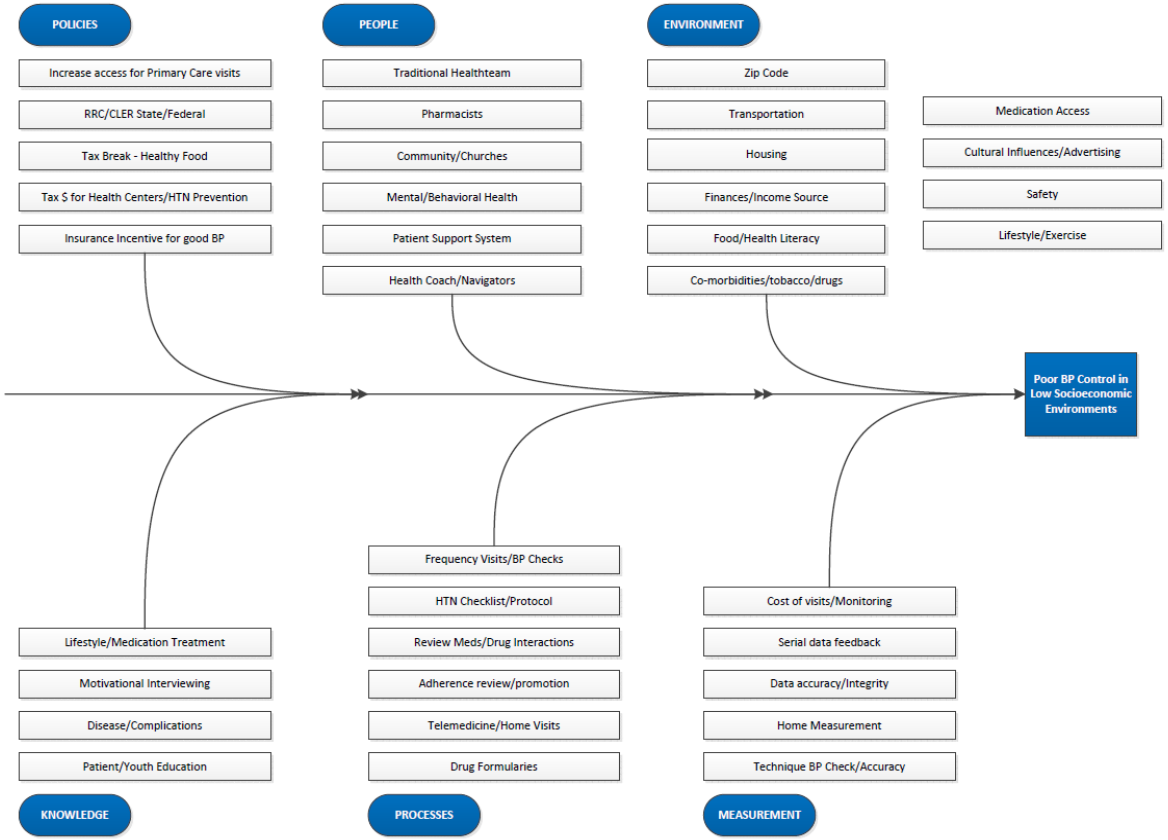
Measures

- Outcome Measure = $\frac{\text{number of patients with controlled BP}}{\text{total number of patients enrolled in cohort}}$

- Process Measures = quarterly review of cohort data

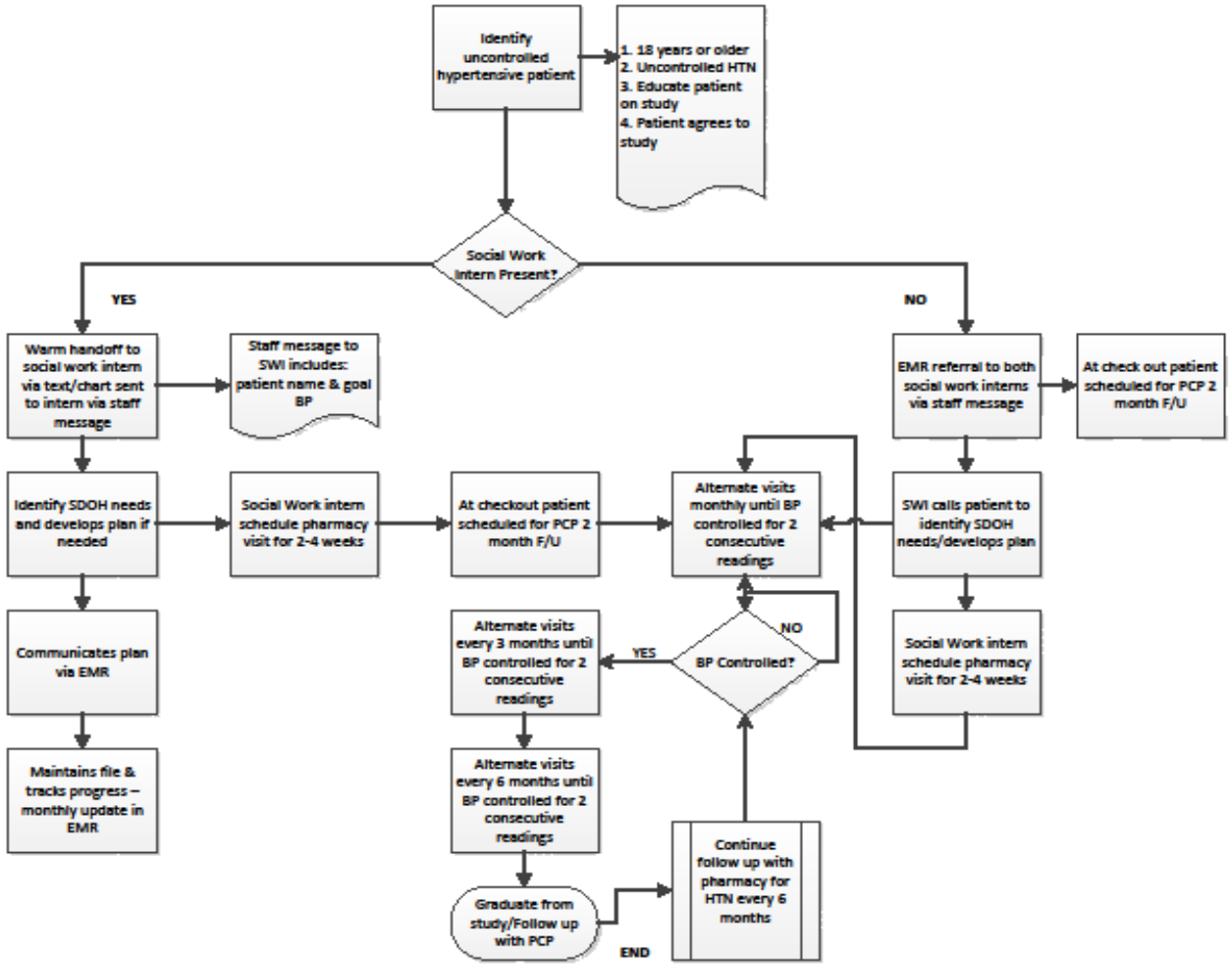
- Balance Measures
  - Customer satisfaction
  - Provider satisfaction
  - Worsening comorbidity

Project Recap 2020-2021



Operational Definitions

- HTN Flow Chart
- Goal BP
  - <130/80 mm Hg
  - 2017 ACC/AHA Guidelines
- Alternating monthly office visits with Pharmacist and PCP
- Social work engagement to mitigate SDOH risk factors
- Quarterly grouped cohorts



Multiple PDSA Attempts

Dear UT Family Practice Patient:

The physicians here at the University of Tennessee Family Medicine office have identified high blood pressure (hypertension) as a major health concern because uncontrolled high blood pressure can lead to more serious problems such as heart attack and stroke, it is very important that we do our best to control it.

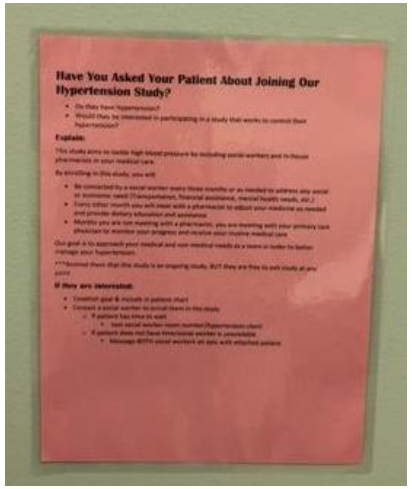
As part of our efforts to successfully treat high blood pressure the physicians here are partnering with in-house social workers and pharmacists. Involving pharmacists and social workers in the care of high blood pressure has proven to be quite successful at getting and keeping blood pressure under control across our nation. Pharmacists will assist the physician in following your blood pressure and determining the best combination of medicines for you. Social workers will help evaluate if there are non-medical reasons that prevent you from reaching your target blood pressure (for example, transportation to your medical visits, ability to pay for your medications).

If your blood pressure is high (over 130/80) at this office visit and you have a history of high blood pressure, please ask your physician how you can be involved in the hypertension project to help get your blood pressure under control. You will have free access to social workers and pharmacists to assist your physician in controlling your blood pressure.

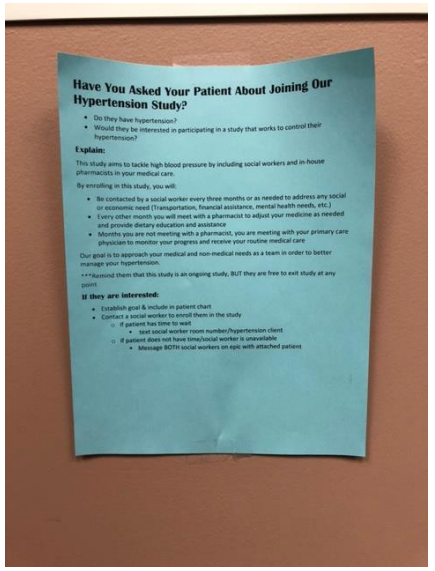
Thank you for your time and we look forward to working with you to meet your blood pressure goals!

Sincerely,

Your UT Family Practice Team



Have You Asked Your Patient About Joining Our Hypertension Study?



Have You Asked Your Patient About Joining Our Hypertension Study?

- Do they have hypertension?
- Would they be interested in participating in a study that works to control their hypertension?

Explain:

This study aims to tackle high blood pressure by including social workers and in-house pharmacists in your medical care.

By enrolling in this study, you will:

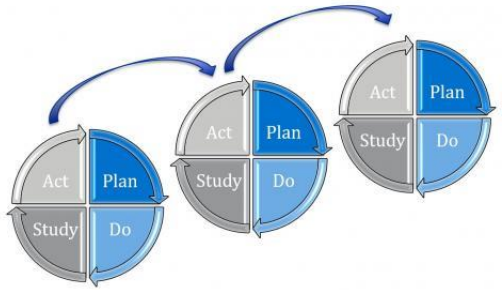
- Be contacted by a social worker every three months or as needed to address any social or economic need (Transportation, financial assistance, mental health needs, etc.)
- Every other month you will meet with a pharmacist to adjust your medicine as needed and provide dietary education and assistance
- Months you are not meeting with a pharmacist, you are meeting with your primary care physician to monitor your progress and receive your routine medical care

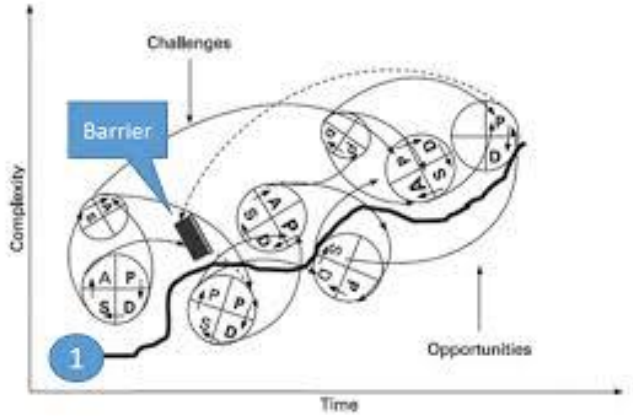
Our goal is to approach your medical and non-medical needs as a team in order to better manage your hypertension.

***Remind them that this study is an ongoing study, BUT they are free to exit study at any point

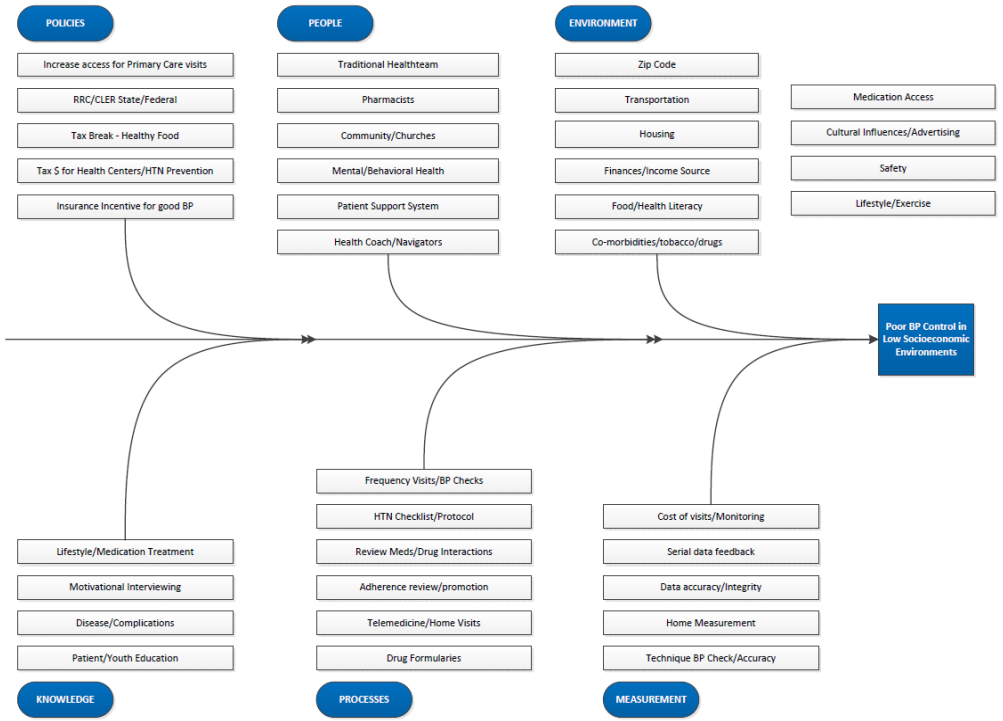
If they are interested:

- Establish goal & include in patient chart
- Contact a social worker to enroll them in the study
  - if patient has time to wait
    - text social worker room number/hypertension client
  - if patient does not have time/social worker is unavailable
    - Message BOTH social workers on epic with attached patient





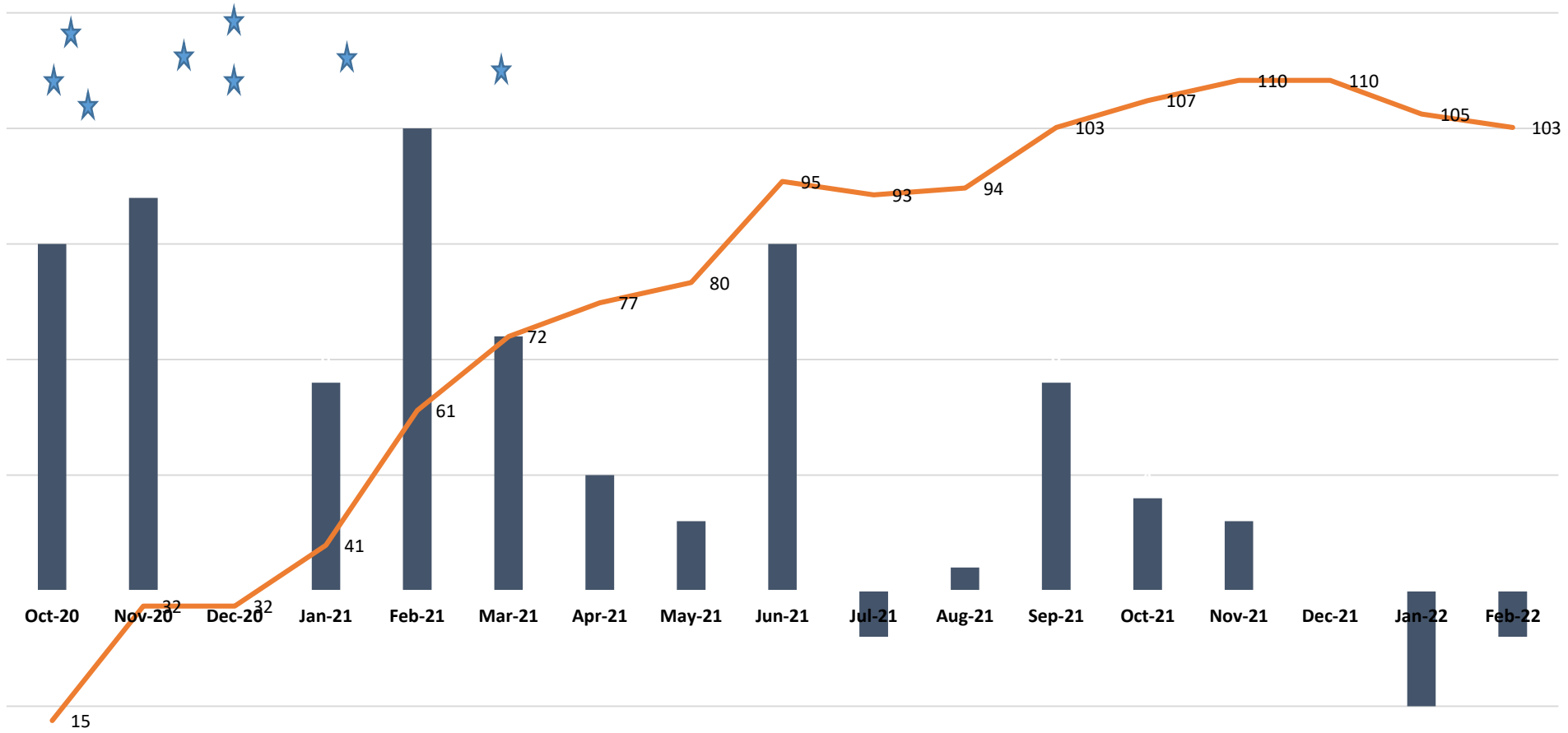
Quality Gap Problems



: Single Problem

- PDSA Attempts

Monthly Enrollment & Cumulative Total
Oct 2020 - Feb 2022



PDSA 2022- Physician enrollment

- **Plan**
  - Problem- decreasing physician enrollment
  - Prediction- If we make an announcement then referrals will increase
- **Do**
  - 03/16/22- UTFP Didactic Conference Announcement
  - Data was collected

PDSA 2022- Physician enrollment

- **Study**
  - 6 referrals in one month after a single intervention
  - Physician directed education improves referral number
  - Caregiver awareness improves outcomes

PDSA 2022- Physician enrollment

- **Act**
  - Multiple resident groups complete quarterly PDSA cycle to close quality gap
  - Single third year resident
    - Compile PDSA data for quarterly reviews of progress and assessment
    - Guide project
      - Balancing measures
      - Refocus efforts

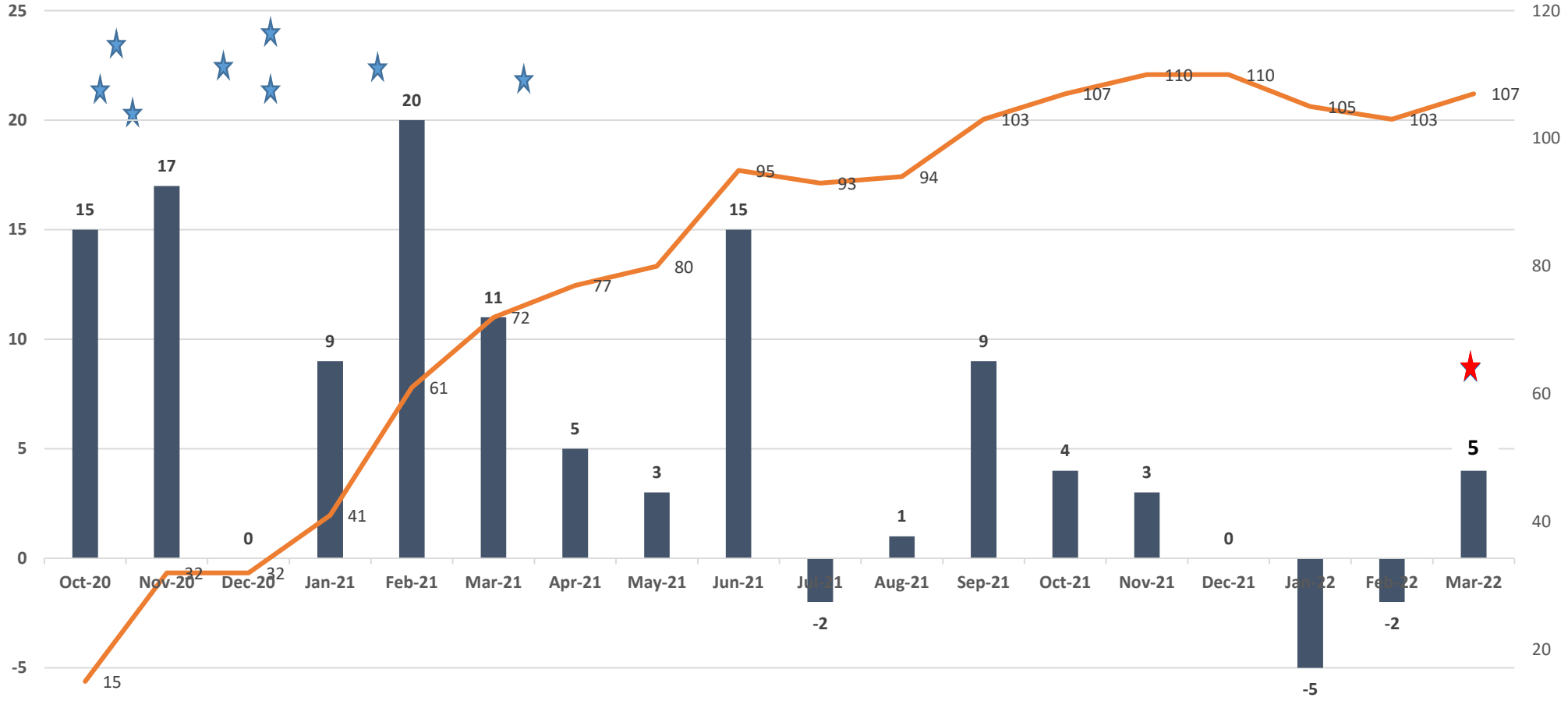
PDSA Attempts 2021

PDSA 2022

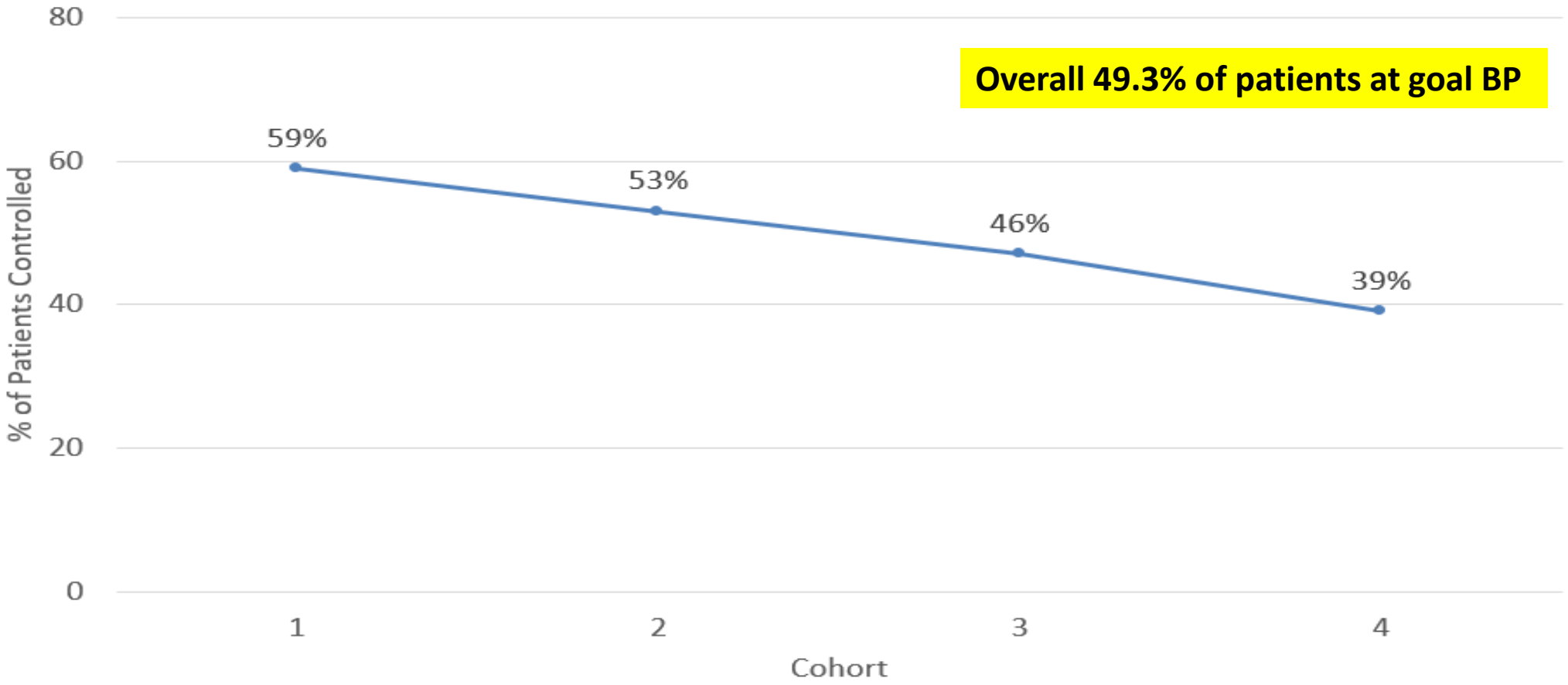
UTFP SDOH/HTN Program Enrollment

Monthly Enrollment & Cumulative Total

October 2020 - February 2022

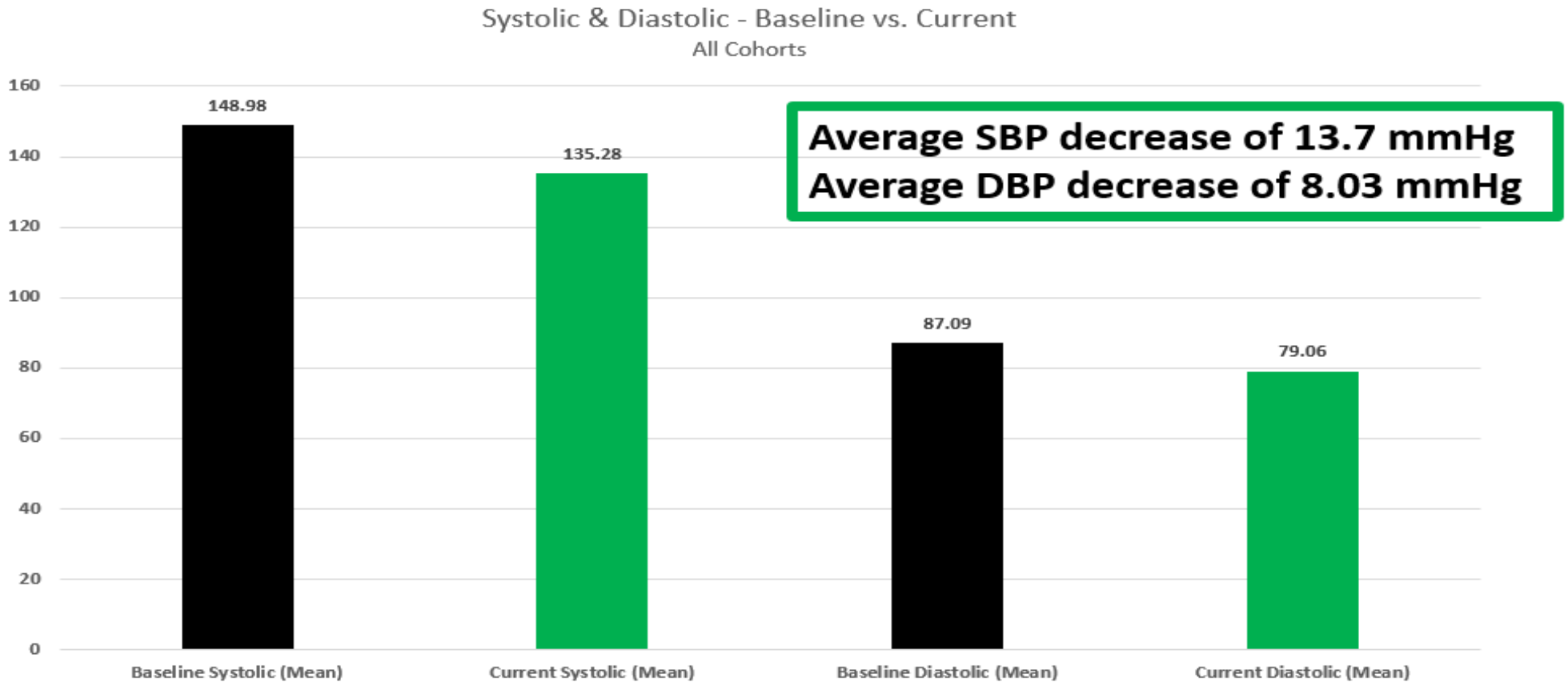


Percent of Patients Currently at Goal in Each Cohort



Overall 49.3% of patients at goal BP

Average SBP and DBP Readings from Enrollment to Present



SDOH and MD/Pharm Visit Number

		ABSOLUTE RISK REDUCTION
• Food Insecurity	11 to 5	(↓ 18%)
• Housing	9 to 5	(↓ 12%)
• Financial Risk	3 to 1	(↓ 6%)
• Physical Inactivity	19 to 23	(↑ 12%)
• Smoking	9 to 8	(↓ 3%)

No correlation to BP control

- Physician Visit number versus Pharm Visit number

Discussion

- Understanding QI principles- essential
- UTFP HTN program works but not clear why
- Consider stopping SDOH monitoring
- Multidisciplinary care is vital to QI
- Next steps: PDSA 2022 ACT plan

Barriers/Lessons Learned 2020-2022

- Patient compliance with appointments
- Resident culture
- Social Work Intern availability
- COVID, COVID, COVID
- Key stakeholder changes

References

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4) Hypertension Prevalence and Control Among Adults: United States 2011-2014. Sung Sug Sarah Yoon et al; NCHS Data Brief; Nov 2015; (220):1-8

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Team Members

Team (Past Members)

- Alan Kohrt MD UTCOM-C Quality Oversight
- Nicole Ford CMBB QI Project Coach, Data Analyst
- Erlanger Informatics Team- Lee Ramsey, Anthony Darling, Dora Ryder
- Social Work Team-Jenna Barsoumian, Anna Despeaux, Haily Calhoun, Nicole Beuhrle
- Pharm Team- numerous
- UTFP Graduates 2021

Team Members (Active Members)

- James Haynes MD, Primary Investigator
- Lacie Bradford PharmD, Co-Investigator
- Robert Zylstra LCSW, Co-Investigator
- UTFP resident/medical student et al
- Pharm resident et al
- Social Work et al

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