



17th Annual Physical Therapy Education Leadership Conference

October 28-30 | Milwaukee, WI



a collaborative effort by:



AMERICAN COUNCIL OF
ACADEMIC PHYSICAL THERAPY



APTA
Academy of Education

A Component of the American
Physical Therapy Association

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ADDRESSING SOCIAL DETERMINANTS OF HEALTH USING THE PRECEDE-PROCEED MODEL THROUGH STUDENT-LED PRO BONO PHYSICAL THERAPY

17th Annual Physical Therapy Education Leadership Conference

Milwaukee, WI | October 28, 2022



PRESENTERS



Alexandria Wilson
PT, DPT, ATC

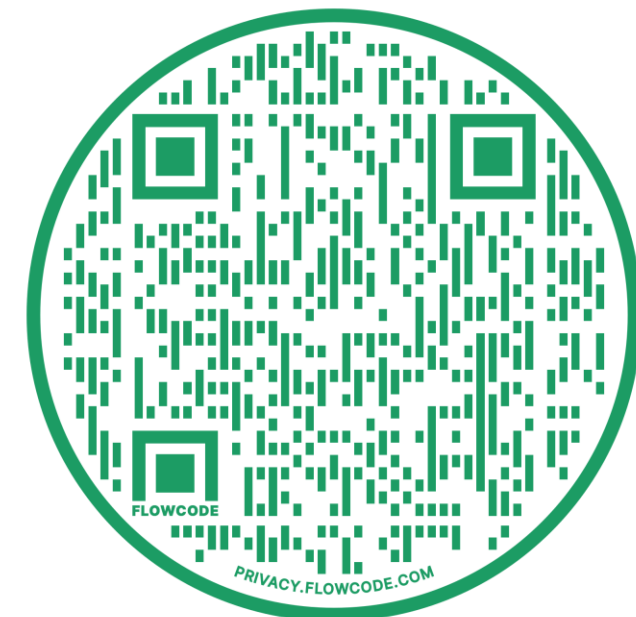


Morgan Forteith
PT, DPT
(she/her)



Ryan Pontiff
PT, DPT, PhD(c)

GETTING TO KNOW THE AUDIENCE



<https://pollev.com/alliewilson321>











OBJECTIVES

Define

Define the SDOH

Describe

Describe the PRECEDE-PROCEED model with utilization of the SDOH

Explain

Explain the benefits and challenges of the implementation of pro bono physical therapy services while focusing on SDOH

Understand

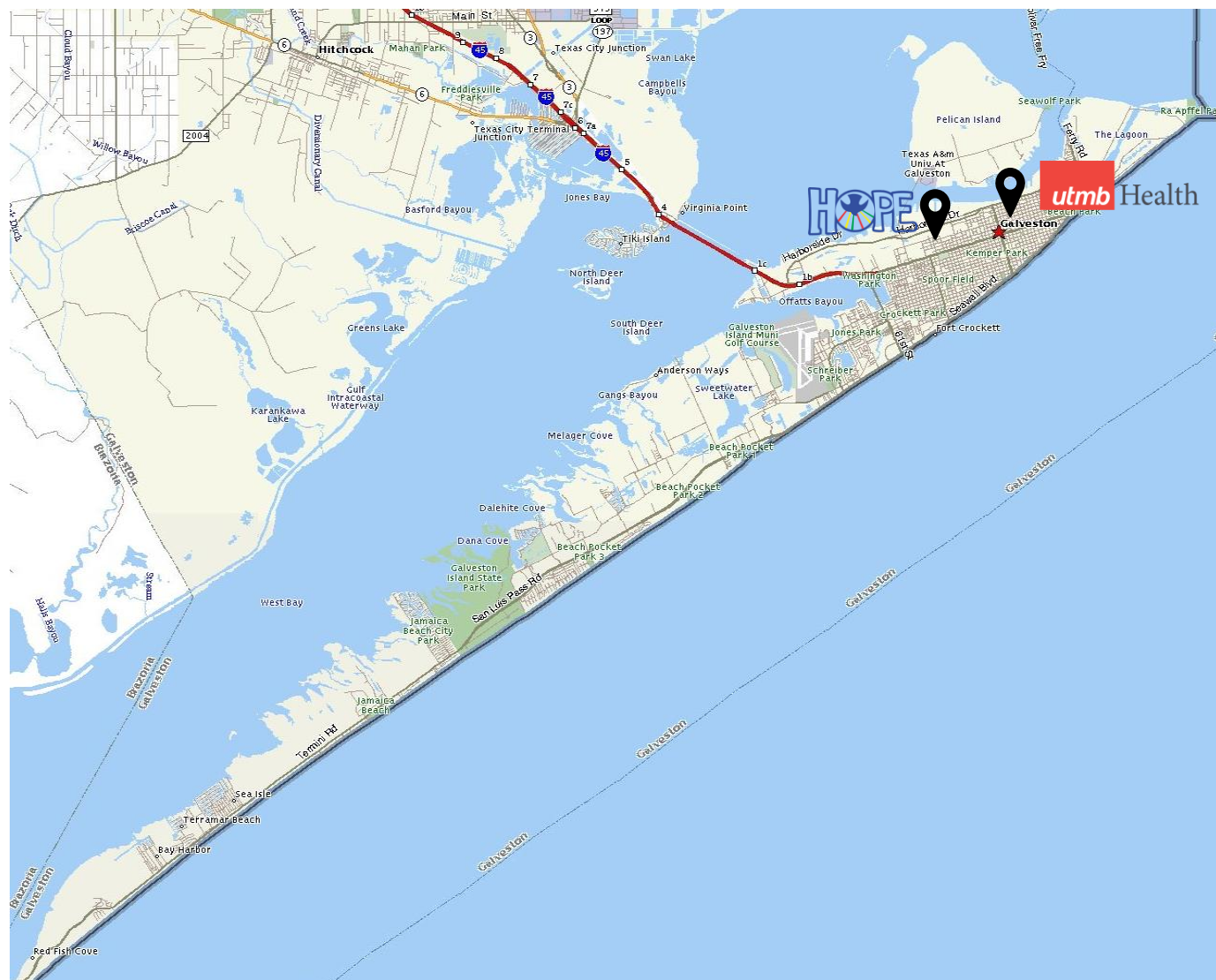
Understand how the SDOH relate to physical therapy practice

Demonstrate

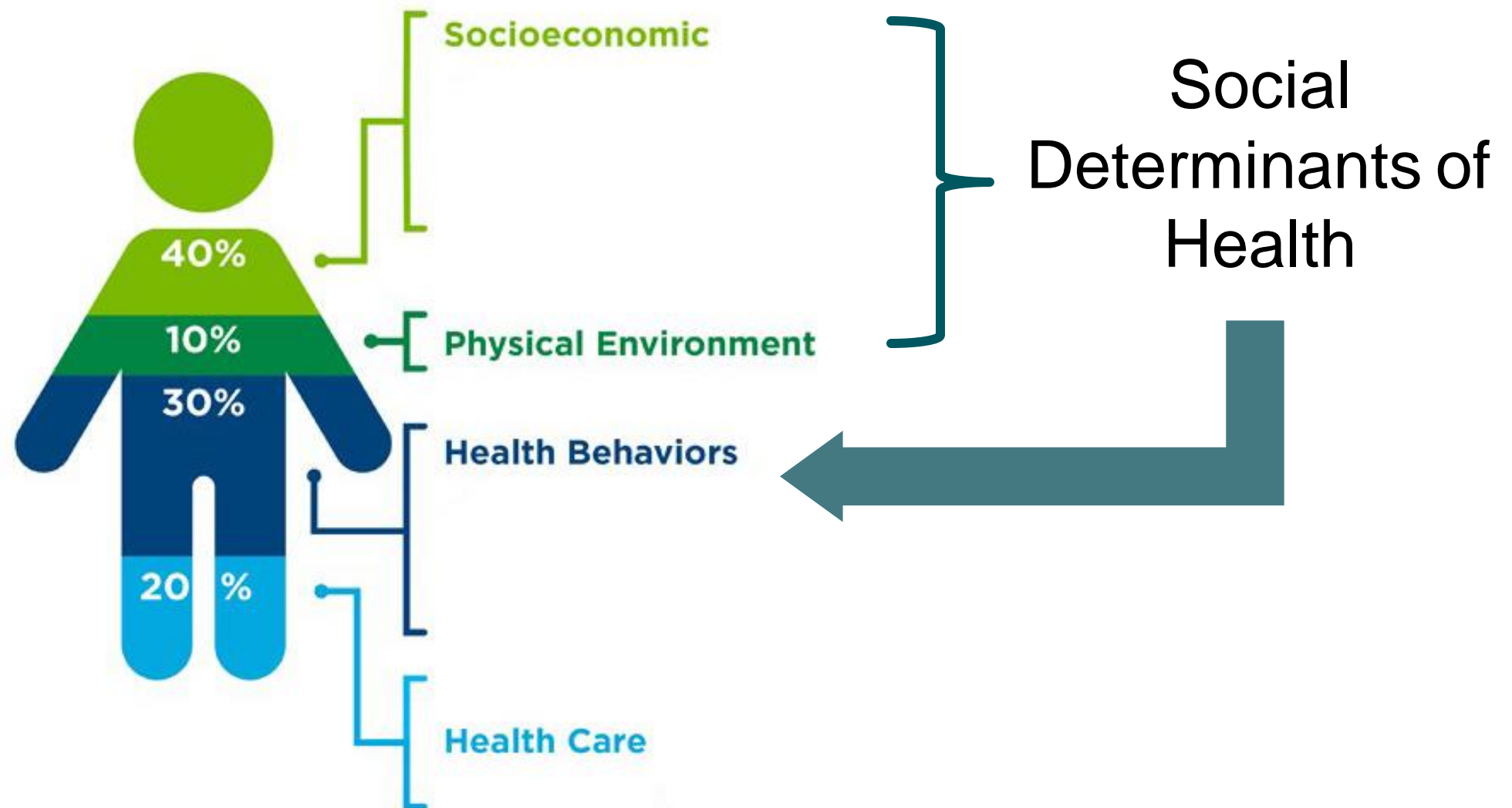
Demonstrate a sustainable model to be used which addresses the SDOH at a pro bono clinic

BACKGROUND

- Purpose: Outline implementation of quality improvement project at St. Vincent's Pro Bono Physical Therapy Clinic (STVPT) using PRECEDE-PROCEED Model of Public Health
- Project aim was two-fold:
 - Understand and identify social determinants of health (SDOH) needs
 - Offer resources to mitigate needs
- Guiding question: What are the barriers and facilitators to optimal quality of life (QoL) in the STVPT and Galveston community at large?



WHAT INFLUENCES HEALTH OUTCOMES?



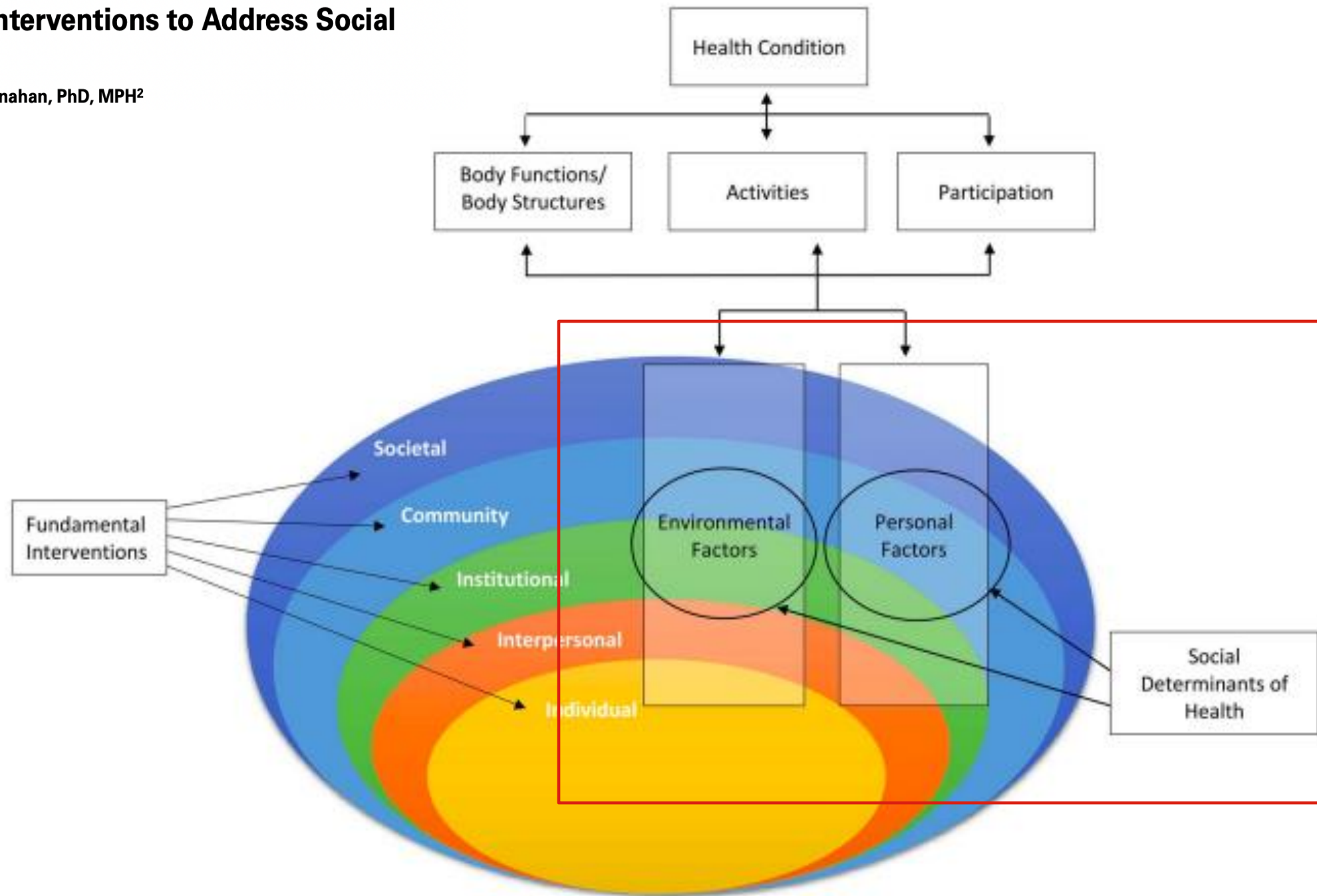
Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

SOCIAL DETERMINANTS OF HEALTH



Theory-Informed Clinical Practice: How Physical Therapists Can Use Fundamental Interventions to Address Social Determinants of Health

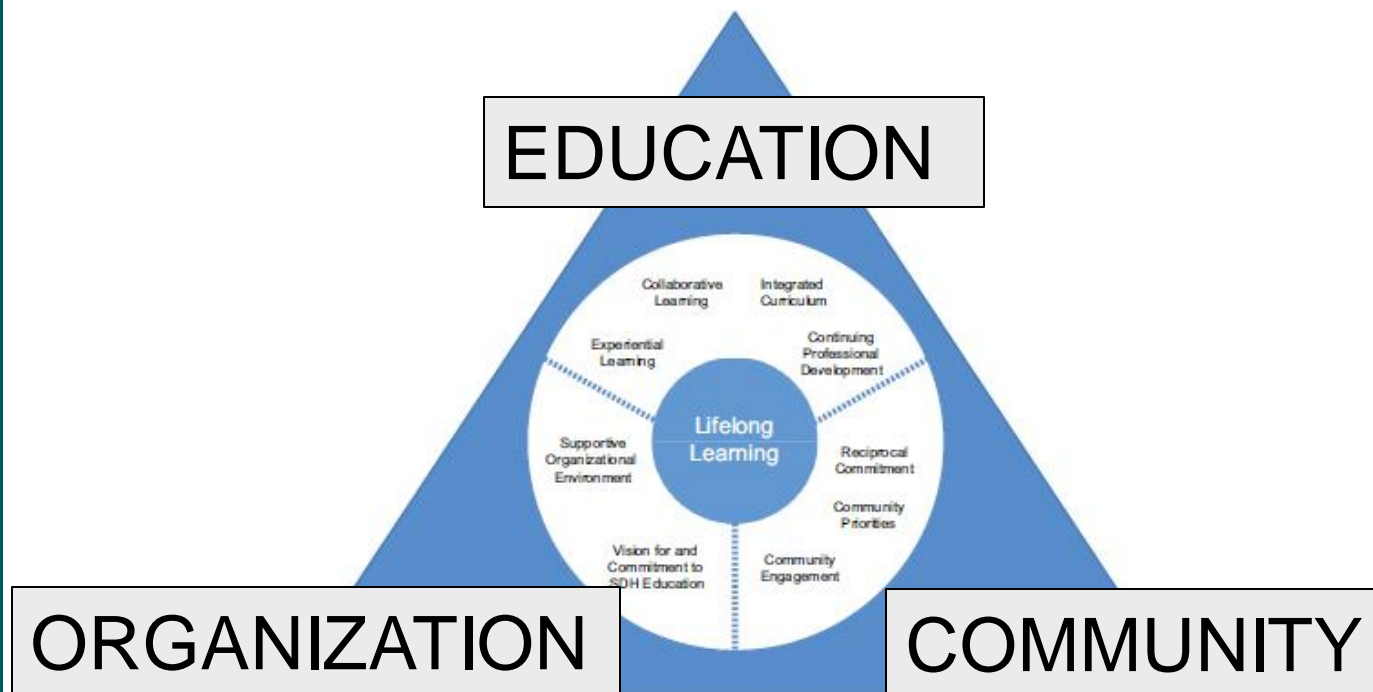
Dana McCarty, PT, DPT^{1,*}, Meghan Shanahan, PhD, MPH²



CALLS FOR HEALTHCARE EDUCATION REFORM

A Framework for Educating Health Professionals to Address the Social Determinants of Health

National Academies of Sciences, Engineering, and Medicine. 2016. *A framework for educating health professionals to address the social determinants of health*. Washington, DC: The National Academies Press.



**EXCELLENCE FRAMEWORK
for Physical Therapist Education** 2022

Population Health, Prevention, Health Promotion, and Wellness Competencies in Physical Therapist Professional Education: Results of a Modified Delphi Study

Dawn M. Magnusson, Zachary D. Rethorn, Elissa H. Bradford, Jessica Maxwell, Mary Sue Ingman, Todd E. Davenport, Janet R. Bezner 2020

PRO BONO CARE CONSIDERATIONS – THE WHY

- Academic curricula -> building confidence, create positive attitudes and behaviors regarding pro bono - Goupil and Kinsinger, 2020
- Students: naturally caring, altruistic -> pro bono and charity activities.
- Pro bono opportunities -> increased affective and psychomotor skill formation + positive impact on the community.
- Pro bono care -> health care accessibility and socioeconomic factors. Identified by the **World Health Organization** to be related to the SDOH
 - Health care rationing and patient advocacy can be indirectly affected.
- **APTA** Code of Ethics: Principle #8 Physical therapists shall participate in efforts to meet the health needs of people locally, nationally, or globally
 - (Core Value: Social Responsibility) 8A. Physical therapists shall provide pro bono physical therapist services or support organizations that meet the health needs of people who are economically disadvantaged, uninsured, and underinsured. (2020)

PRO BONO CARE CONSIDERATIONS – THINGS TO KEEP IN MIND

- Legal and ethical issues
 - 9% increase in pro bono work in areas with immunity.
 - The need for insurance
- Staffing
 - Volunteers or staff
- Topography
 - Will affect patient ability to get to clinic but also the patient type
- Funding
 - Free care or minimal pay care
 - Charitable donations, grants, alumni support, institutional operating budget
- Space
- Marketing
- School curricula
 - Can it be a part of a school and where would it fall in the curriculum

PRECEDE-PROCEED MODEL

PRECEDE (evaluation phase): Understanding the needs of STV Pro Bono PT Clinic

Administrative
and Policy
Assessment

Educational
and Ecological
Assessment

Epidemiological
Assessment

Social
Assessment

Implementation

Process
Evaluation

Impact
Evaluation

Outcome
Evaluation

PROCEED (intervention phase): Implementing an intervention to address identified clinic needs

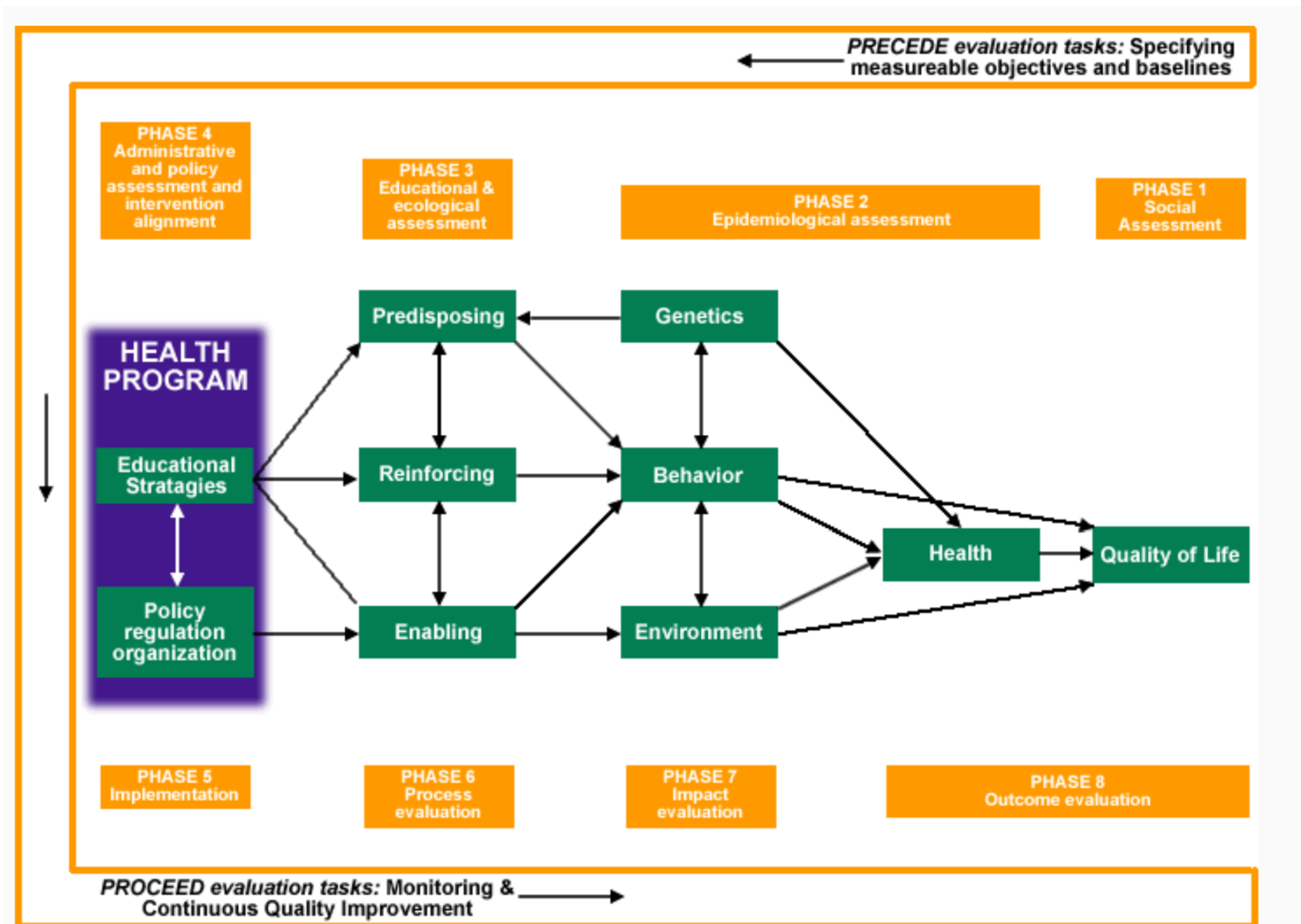


FIGURE 1. GENERIC REPRESENTATION OF THE PRECEDE-PROCEED MODEL. FROM L. GREEN AND M. KREUTER. (2005). HEALTH PROMOTION PLANNING: AN EDUCATIONAL AND ECOLOGICAL APPROACH (4TH ED.). MOUNTAIN VIEW, CA : MAYFIELD PUBLISHERS.

The Behavioral Matrix

This helps to identify targets where the most effective intervention measures can be applied.

	More Important	Less Important
More Changeable	High Priority Quadrant I	Low Priority Except for Political Reasons Quadrant III
Less Changeable	Priority for Innovations Assessment Crucial Quadrant II	No Program Quadrant IV

Behavioral Objectives are created from Quadrants 1 and 2 . Quadrant 3 is used more for political reasons

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PROCEED (intervention phase): Implementing an intervention to address identified clinic needs

METHODS – PRECEDE

Social Assessment

- Demographic data collection on STVPT and Galveston community

Epidemiological Assessment

- Survey distribution to STVPT stakeholders
- Thematic analysis of survey results

Educational and Ecological Assessment

- Identification of predisposing, enabling, and reinforcing factors influencing QoL within community

Administrative and Policy Assessment

- Examination of STVPT clinic resources

PRECEDE-PROCEED MODEL

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PROCEED (intervention phase): Implementing an intervention to address identified clinic needs

SOCIAL ASSESSMENT

Methods

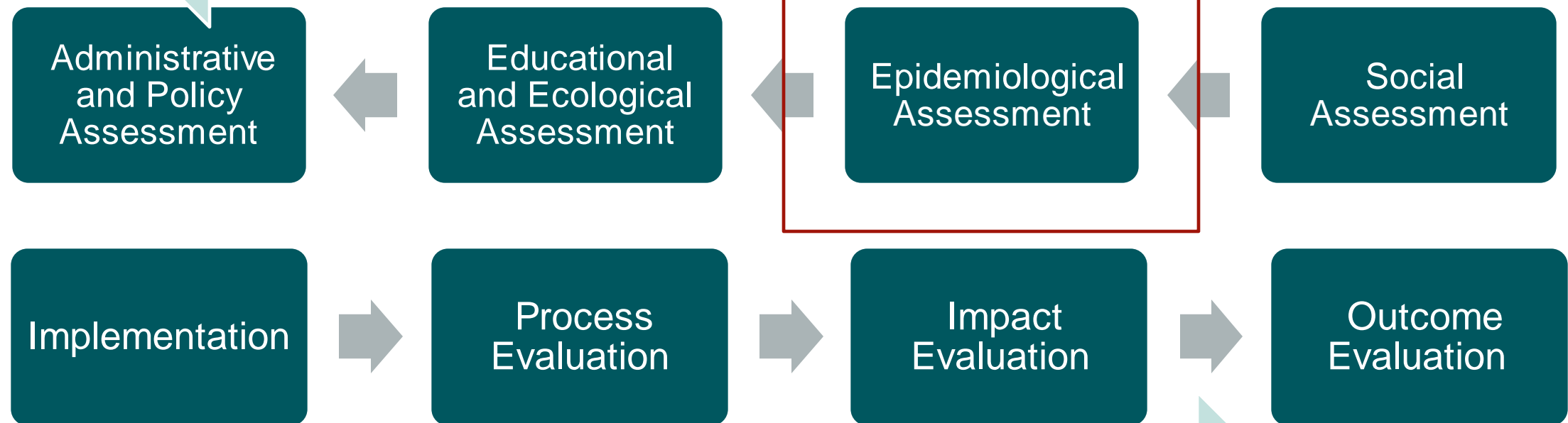
- Demographic data collection on Galveston and STVPT
 - Taskforce of student physical therapists
 - Explored the 5 SDOH domains and their impact on the community

Results

- STVPT Patient Demographics
 - Medically uninsured residents of Galveston County
 - Culturally and racially diverse
 - Wide spectrum of neuromuscular, musculoskeletal, and cardiopulmonary conditions
- Areas of concern relevant to 5 SDOH:
 - Food access and availability, economic stability, built environment

PRECEDE-PROCEED MODEL

PRECEDE (evaluation phase): Understanding the needs of STV Pro Bono PT Clinic



PROCEED (intervention phase): Implementing an intervention to address identified clinic needs

EPIDEMIOLOGICAL ASSESSMENT

Methods

- Stakeholder input via open-ended surveys to patients, student volunteers, and faculty of PT/IP clinics
 - 17 patients
 - 35 student physical therapists
 - 7 PT faculty members
 - 3 IP clinic faculty members
- Thematic analysis of survey results

Results

- Emergent Themes of Stakeholder Surveys
 - SDOH limiting factor to optimal QoL
 - Many health conditions are chronic and preventable in nature
 - Poor health literacy
 - Robust social resources available in the community
 - Knowledge of available social resources is lacking

CONCEPT MAP

Major Themes

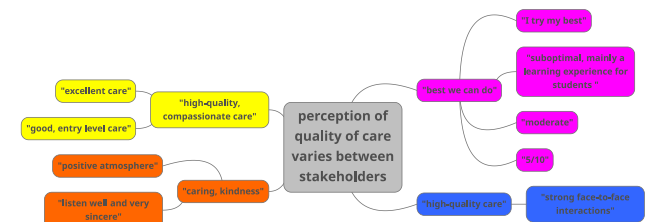
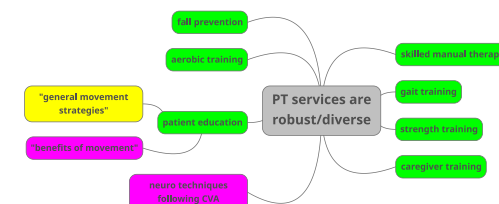
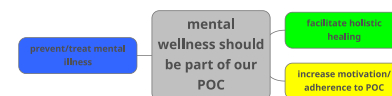
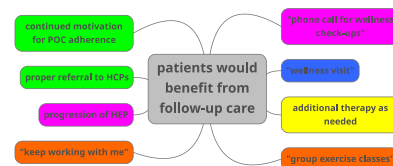
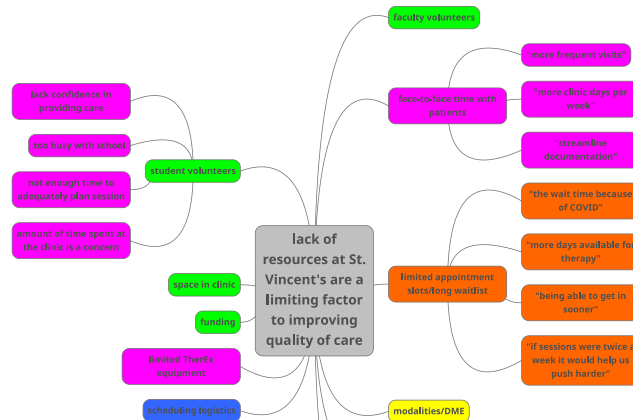
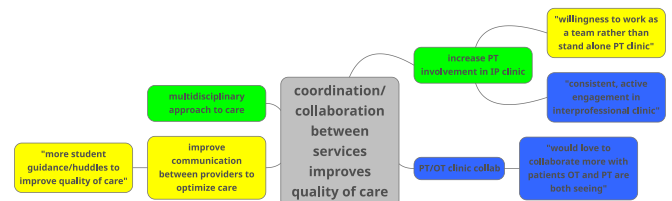
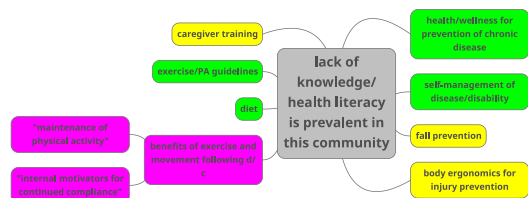
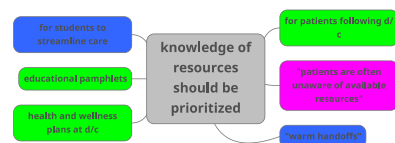
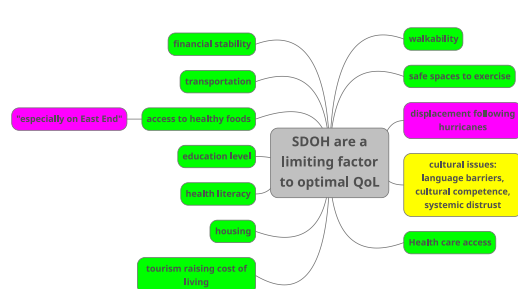
Common Stakeholder Codes

IP Faculty Codes

PT Faculty Codes

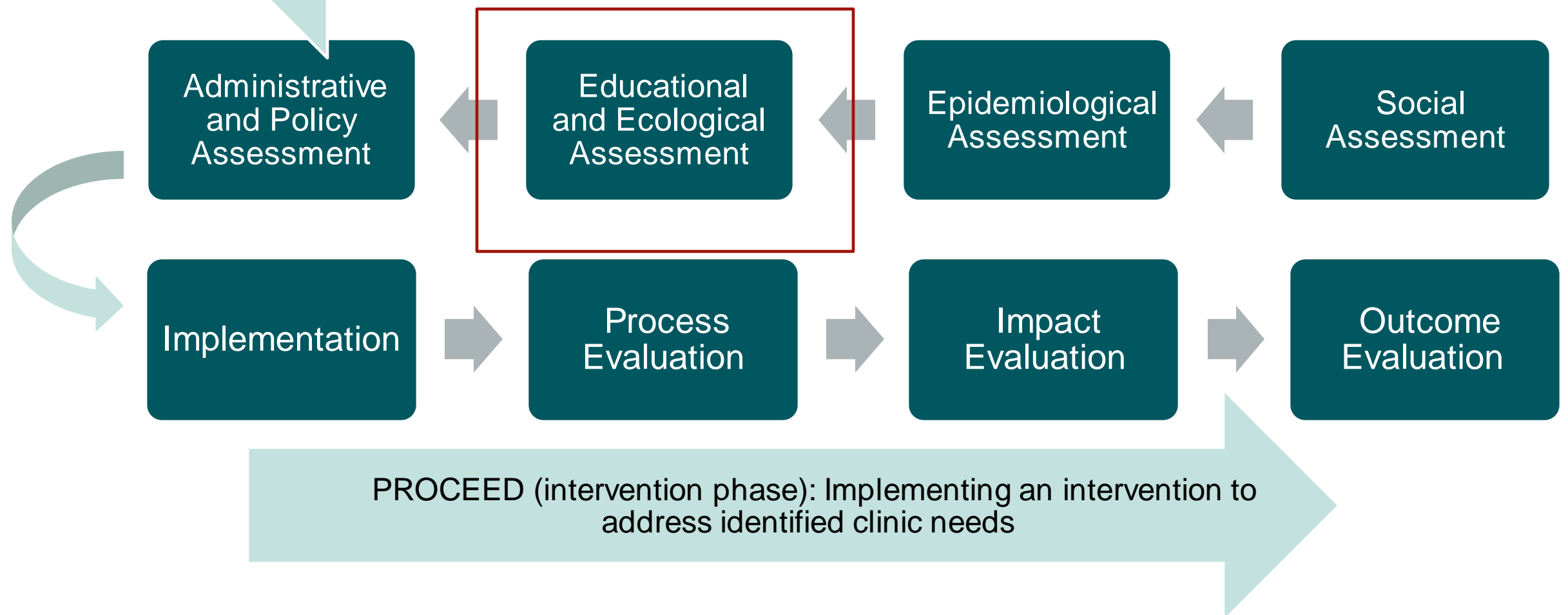
PT Student Codes

Patient Codes



PRECEDE-PROCEED MODEL

PRECEDE (evaluation phase): Understanding the needs of STV Pro Bono PT Clinic



EDUCATIONAL AND ECOLOGICAL ASSESSMENT

Methods

- Identification of predisposing, enabling, and reinforcing factors influencing QoL within community

Results

- Predisposing factors
 - Health literacy within community
 - Poor awareness of STVPT resources
- Enabling factors
 - Lack of access to basic healthcare needs
 - Limited administrative resources
- Reinforcing factors
 - Lack of follow-up care
 - Return to "island lifestyle"

PRECEDE-PROCEED MODEL

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PROCEED (intervention phase): Implementing an intervention to address identified clinic needs

ADMINISTRATIVE AND POLICY ASSESSMENT

Methods

- Examination of available clinic resources for development of a sustainable intervention

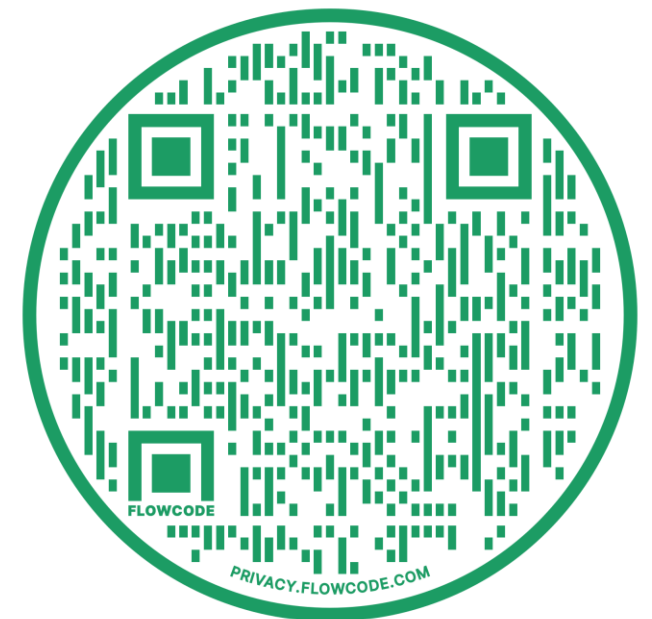
Results

- Barriers
 - Time
 - Personnel
 - Financial
 - Structural
- Facilitators
 - High-quality care
 - Available social resources
 - Curriculum integration

STVPT BEHAVIORAL MATRIX

	More Important	Less Important
More Modifiable	<ul style="list-style-type: none"> • Limited parks and free recreational facilities for physical activity • Lower levels of physical activity than national average • Limited resources to improve health literacy 	
Less Modifiable	<ul style="list-style-type: none"> • Food insecurity • Lack of public transportation • High school education levels lower than national average • Extreme climate conditions • High poverty levels, specifically affecting younger individuals • Long waitlists for public housing 	<ul style="list-style-type: none"> • High violent and property crime rates • Low rates of home ownership

LET'S HEAR FROM YOU



<https://pollev.com/alliewilson321>





PRECEDE-PROCEED MODEL

PRECEDE (evaluation phase): Understanding the needs of STV Pro Bono PT Clinic

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PROCEED (intervention phase): Implementing an intervention to address identified clinic needs

METHODS – PROCEED

Implementation

- Development and pilot of intervention at STVPT.

Process Evaluation

- Is the intervention being implemented and reaching student volunteers and STVPT patients?

Impact Evaluation

- Is the intervention successfully impacting student volunteers and STVPT patients?

Outcome Evaluation

- Did the intervention address the SDOH that influence our patient's during PT and post-discharge?

PRECEDE-PROCEED MODEL

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PROCEED (intervention phase): Implementing an intervention to address identified clinic needs

IMPLEMENTATION




Methods

- Creation and Implementation of
 - Social Needs Screening Tool
 - ANCHOR Database
 - Resources Instilling Self-Empowerment (RISE Guide)
 - SDOH Student Volunteer Training
 - Two Virtual Zoom Sessions

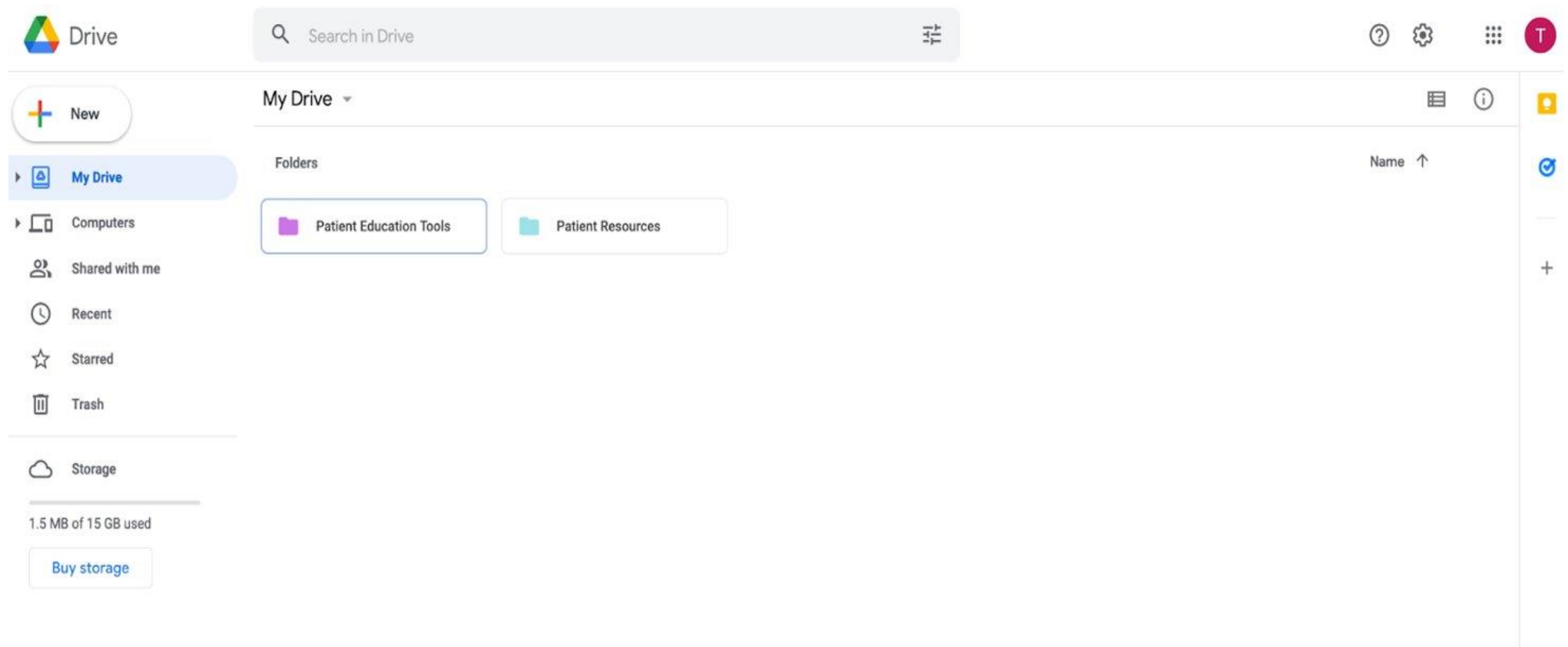
Results

- Social Needs Screening Tool
- Anchor Database
- Resources Instilling Self-Empowerment Guide
- SDOH Student Volunteer Training
 - Attendance 81 student volunteers

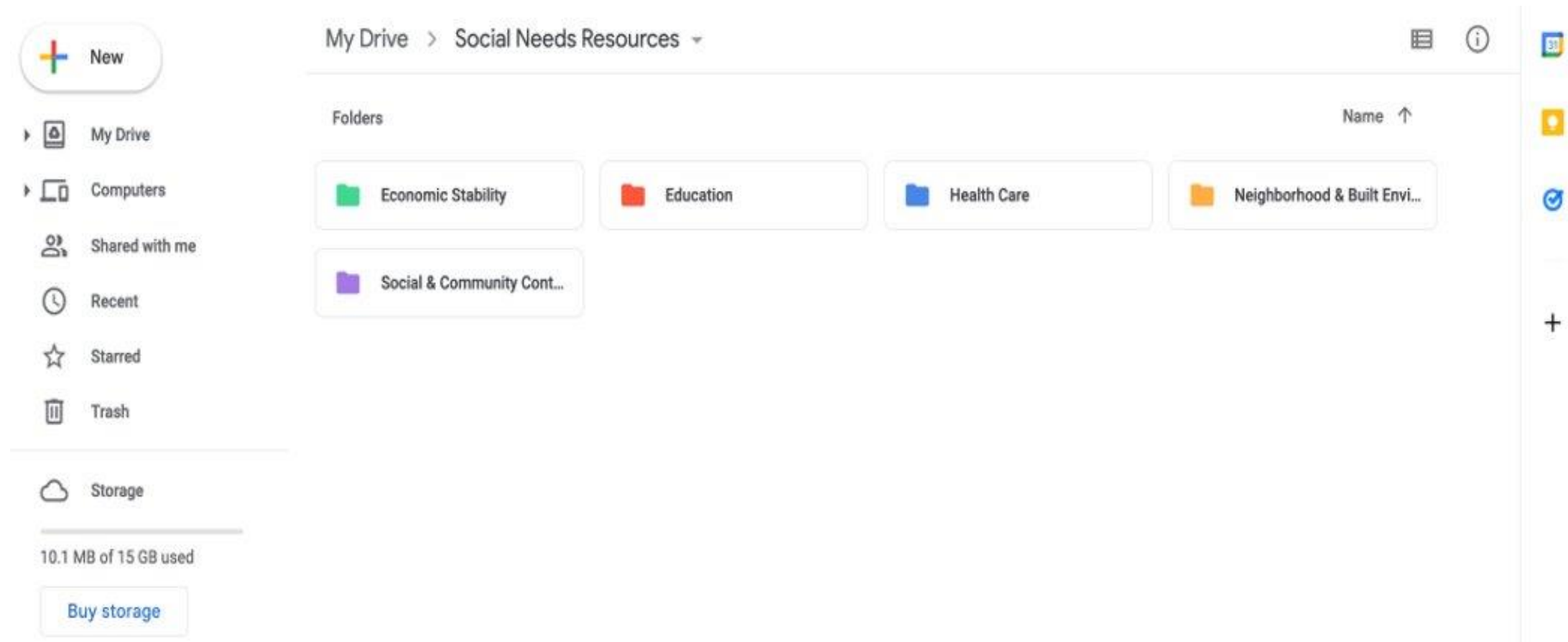
SDOH SCREENING TOOL

Domain	Question	Response	ANCHOR resource provided:
Economic Stability 	In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food? (Health Leads)	YES NO If yes, would you like help with this? Y/N	
Economic Stability 	Do you think you are at risk of becoming homeless? (HLBMC)	YES NO If yes, would you like help with this? Y/N	
Economic Stability 	Do you have trouble paying your heating or electricity bill? (HLBMC)	YES NO If yes, would you like help with this? Y/N	

ANCHOR DATABASE



ANCHOR DATABASE



ANCHOR DATABASE

The screenshot shows a Notion page titled "Economic Stability" with a star icon and a share button. The page content is as follows:

Economic Stability

Food Assistance

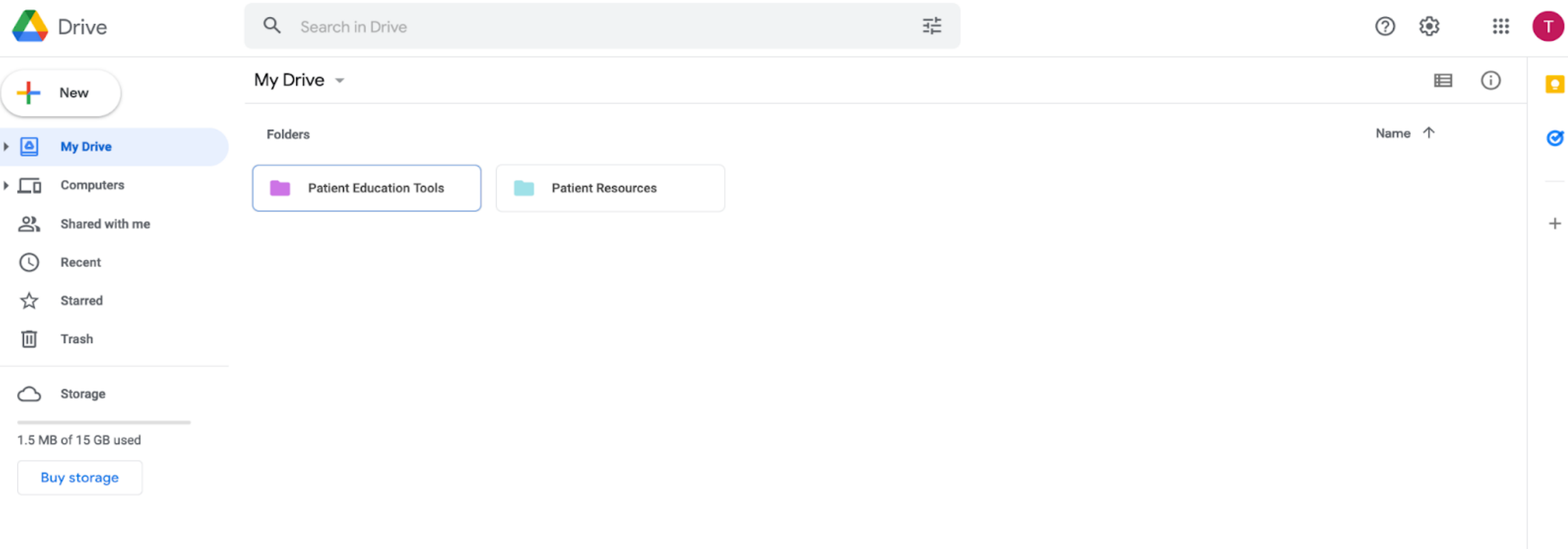
United Way Galveston

- Provides: Advocacy and Referrals, Substance Abuse Services, Victims' Services, Shelter and Housing, Basic Living Needs, Utilities Assistance, General Community, Counseling/Therapy, Mental and Behavioral Health Services, Healthcare, Employment Assistance, Veterans' Services, Treatment Resources, Medication Assistance, Senior Citizens' Services, Children and Youth Services, Spanish/Hispanic Services
- Website: www.unitedwaygalvestoncountymainland.org
- Phone Number: 409-948-4211
- Location: 2800 Texas Avenue, Texas City, TX 77590
- To Qualify: Contact for further information

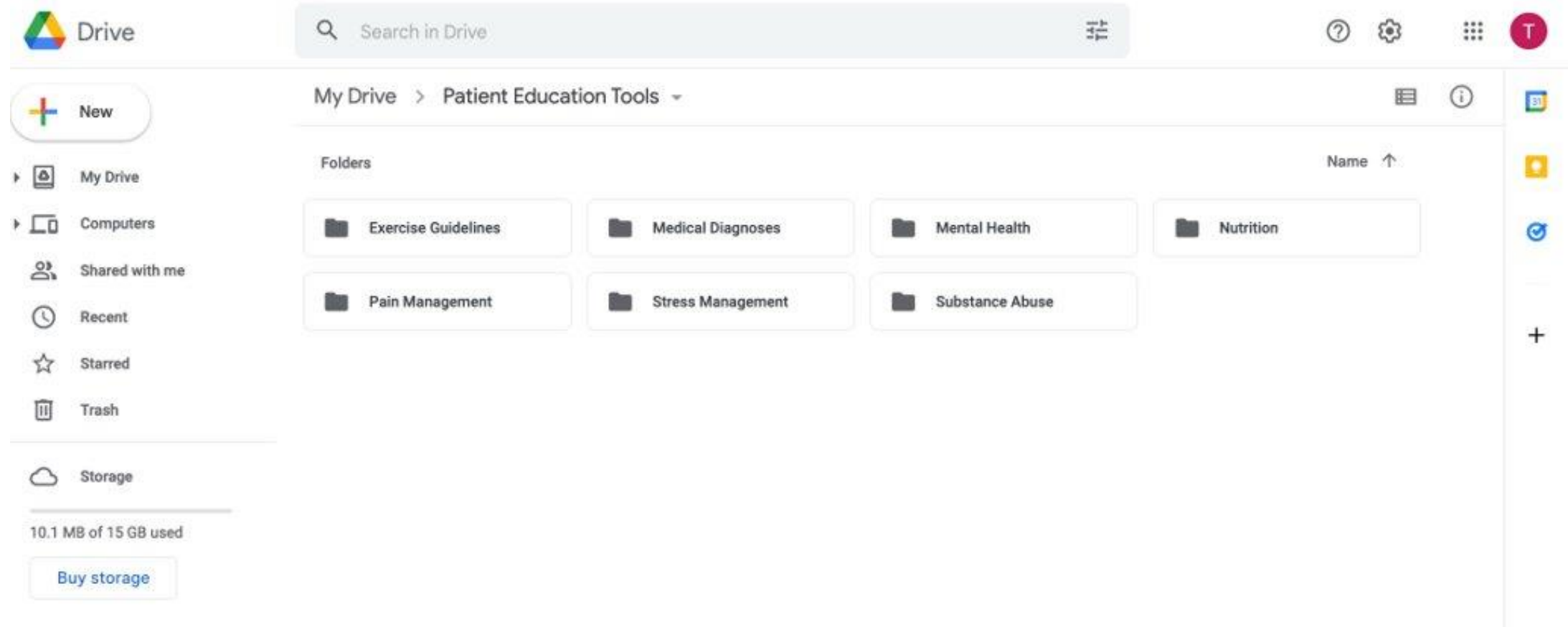
Galveston County Food Bank

- Provides: Food assistance to those in need in Galveston County via various food pantries and mobile delivery services
- Website: <https://www.galvestoncountyfoodbank.org/find-help/>
- Phone Number: (409) 945-4232

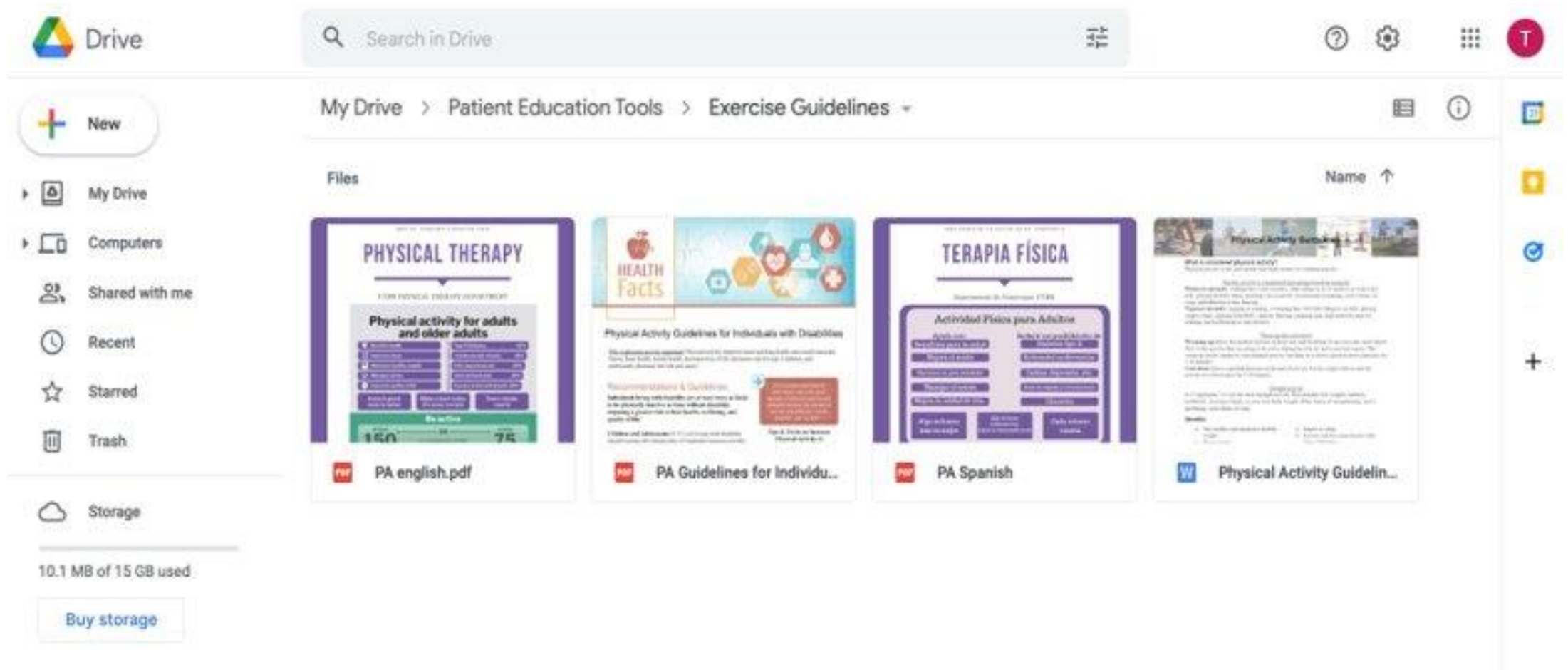
ANCHOR DATABASE



ANCHOR DATABASE



ANCHOR DATABASE



RESOURCES INSTILLING SELF-EMPOWERMENT (RISE) GUIDE



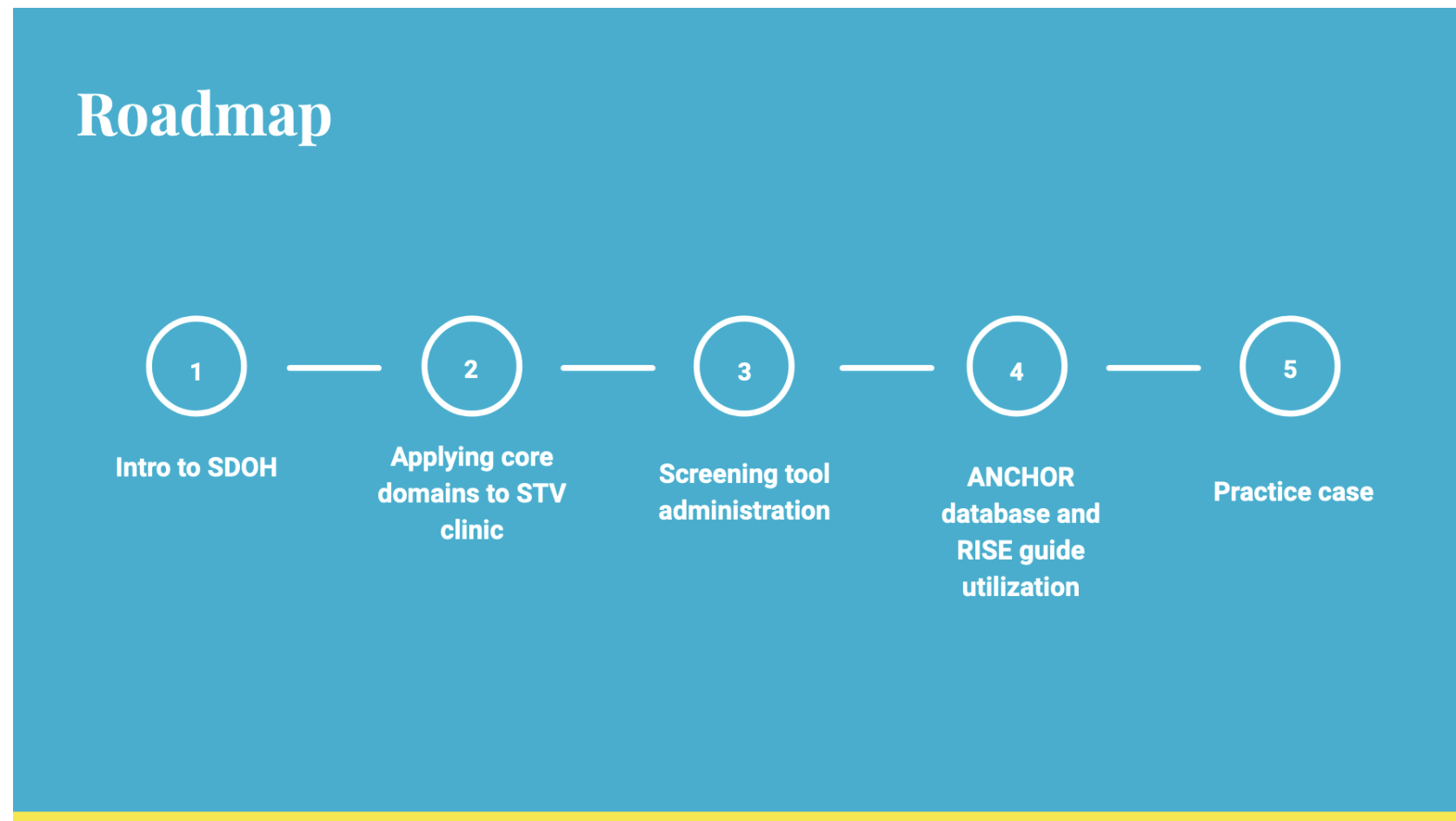
SDOH Resources



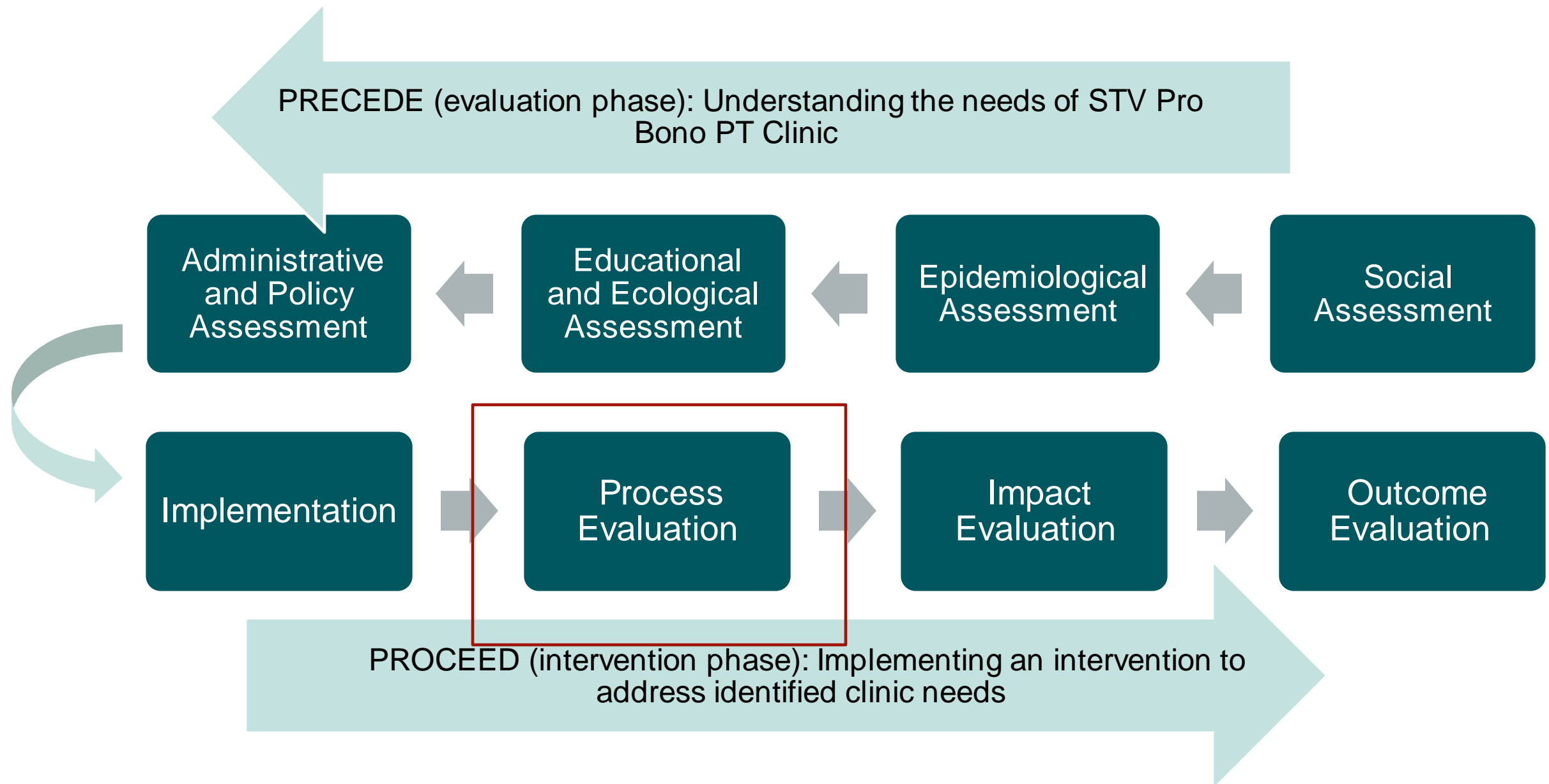
Patient Education



SDOH VIRTUAL TRAINING



PRECEDE-PROCEED MODEL



PROCESS EVALUATION

Methods

- Social Needs Screening Tool
 - How many patients screened, how many social needs identified.
- SDOH Student Volunteer Training
 - How many students attended.

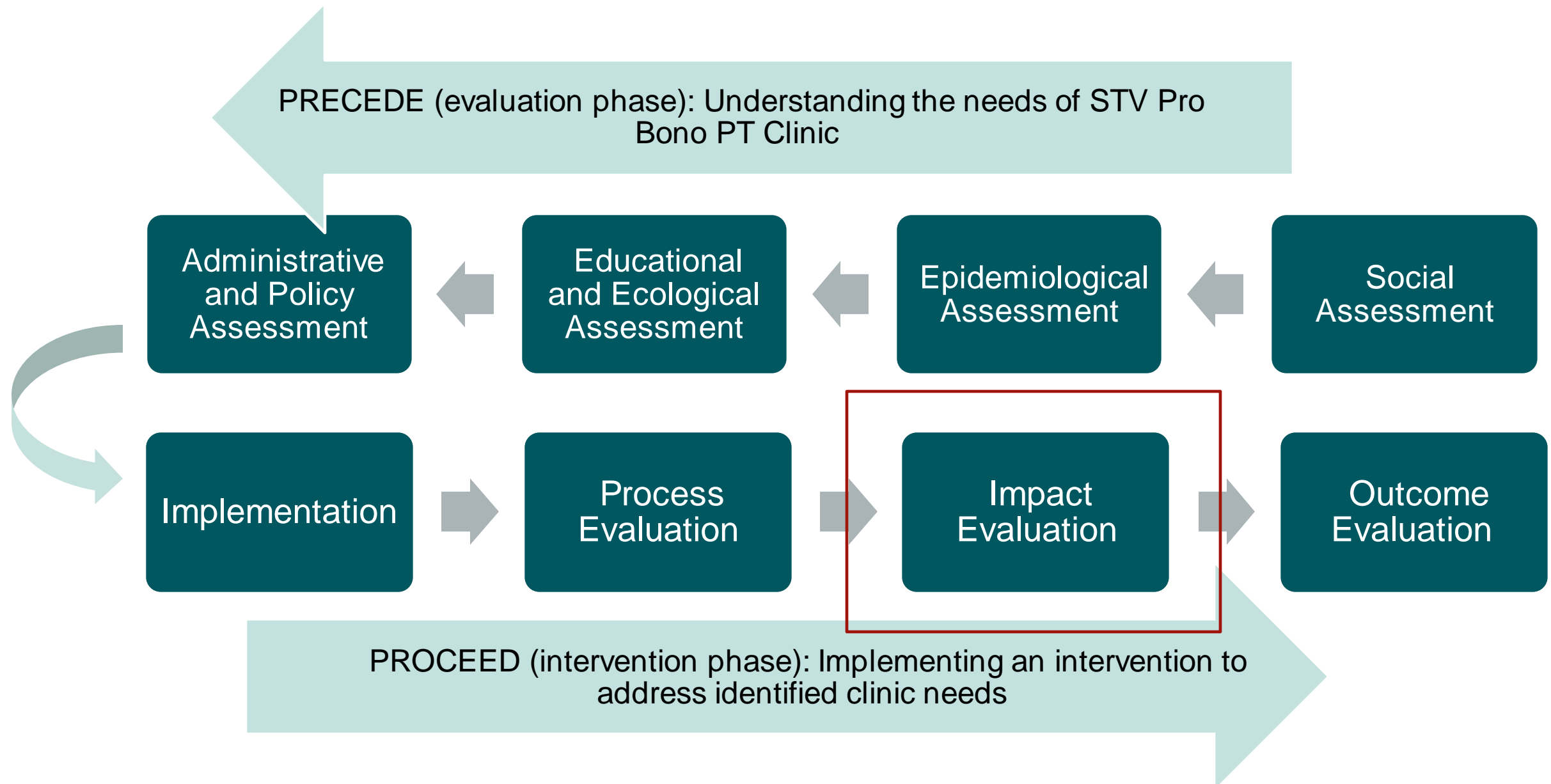
Results

- Social Needs Screening Tool
 - 13 patients screened over 11 clinic days
 - 32 total social needs identified
- SDOH Student Volunteer Training
 - 81 Students attended

Social Needs Screening Tools Distributed	13 patients
Total Identified Social Needs	32 needs
Food Insecurity (Economic Stability)	1
Homelessness (Economic Stability)	2
Utility Assistance (Economic Stability)	1
Employment/Job Training (Economic Stability)	1
GED Assistance (Education)	3
Health Care Provider Access (Health)	9
Stress (Health)	8
Safe Space for Exercise (Neighborhood/Built Environment)	4
Immigration Rights (Social/Community Context)	1
Lack of Companionship (Social/Community Context)	2

Social Determinants of Health Domain	Number of Identified Social Needs
Economic Stability	5
Education	3
Health	17
Neighborhood/Built Environment	4
Social/Community Context	3

PRECEDE-PROCEED MODEL



IMPACT EVALUATION

Methods

- Social Needs Screening Tool
 - How many patients screened, how many social needs identified.
- SDOH Student Volunteer Training
 - Pre- and post- knowledge assessment survey distributed

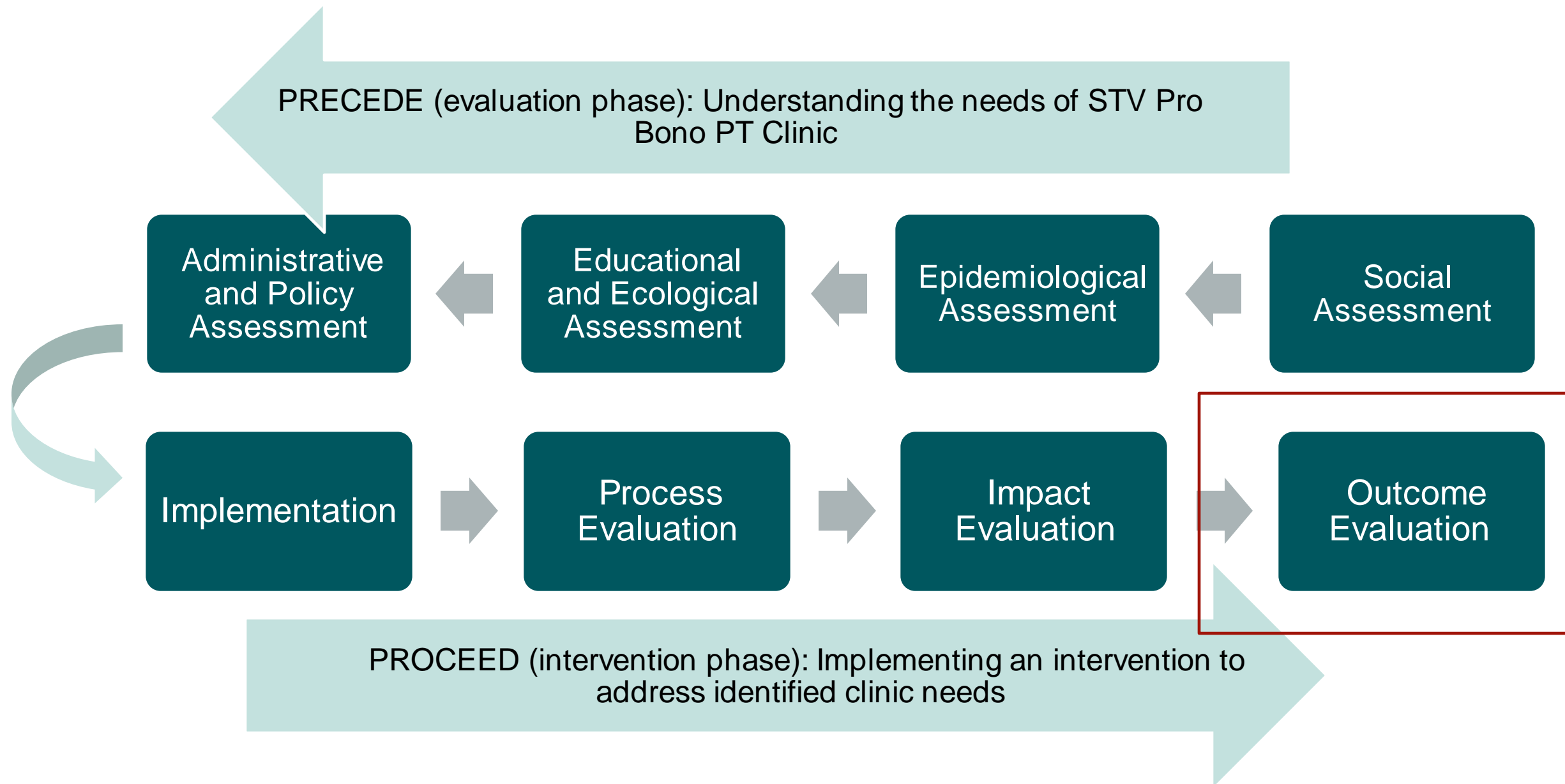
Results

- Social Needs Screening Tool
 - 13 patients screened over 11 clinic days
- SDOH Student Volunteer Training
 - Students displayed significant improvements in SDOH understanding, screening, and awareness of resources

IMPACT EVALUATION

	Pre-Training (n=81)	Post-Training (n=79)	P-value
From 0-10, please rate your current understanding of the social determinants of health.	5.47	8.71	<0.0001
From 0-10, please rate your current confidence level in screening patients for social needs.	4.19	7.95	<0.0001
From 0-10, please rate your current confidence level in addressing identified patient social needs.	4.25	7.80	<0.0001
From 0-10, please rate your current level of awareness of available community resources for patients at St. Vincent's.	3.07	6.86	<0.0001

PRECEDE-PROCEED MODEL



OUTCOME EVALUATION

Methods

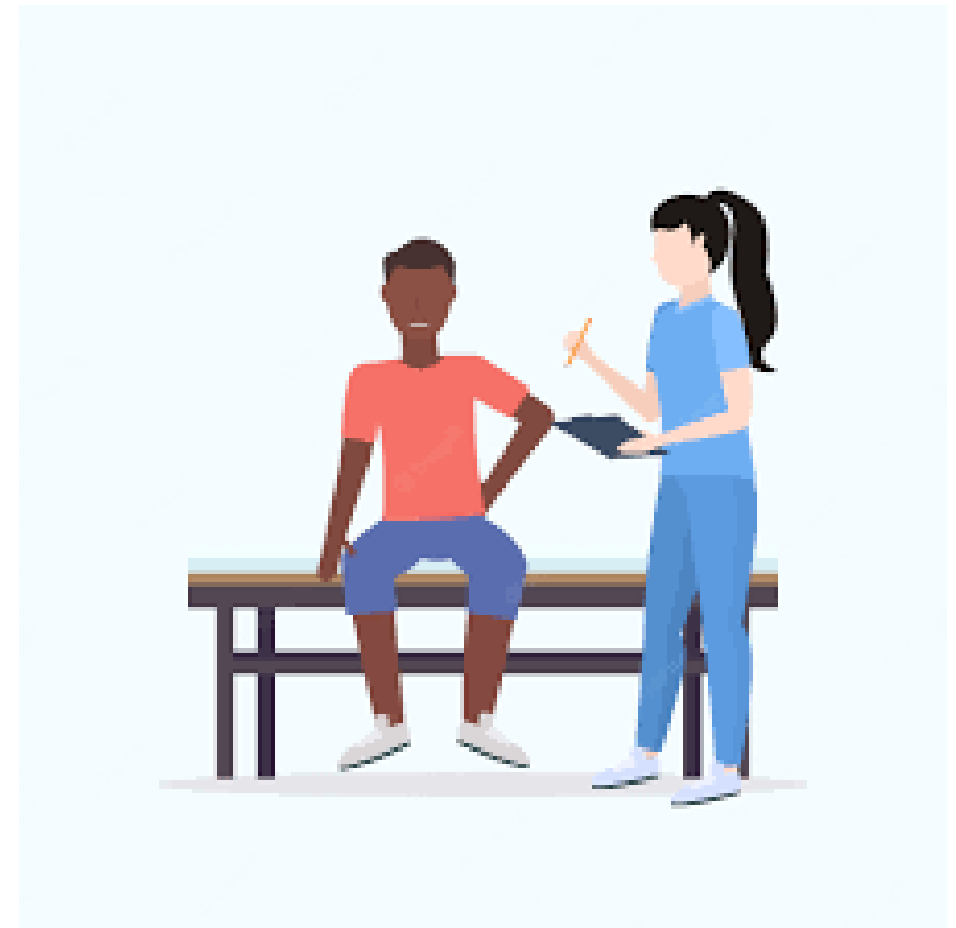
- Observation of continuation of intervention at STVPT

Results

- Student Outcome
 - SDOH screening tool, ANCHOR database, RISE guide, and recording of SDOH training are now part of processes of STVPT
- Patient Outcome
 - In Progress

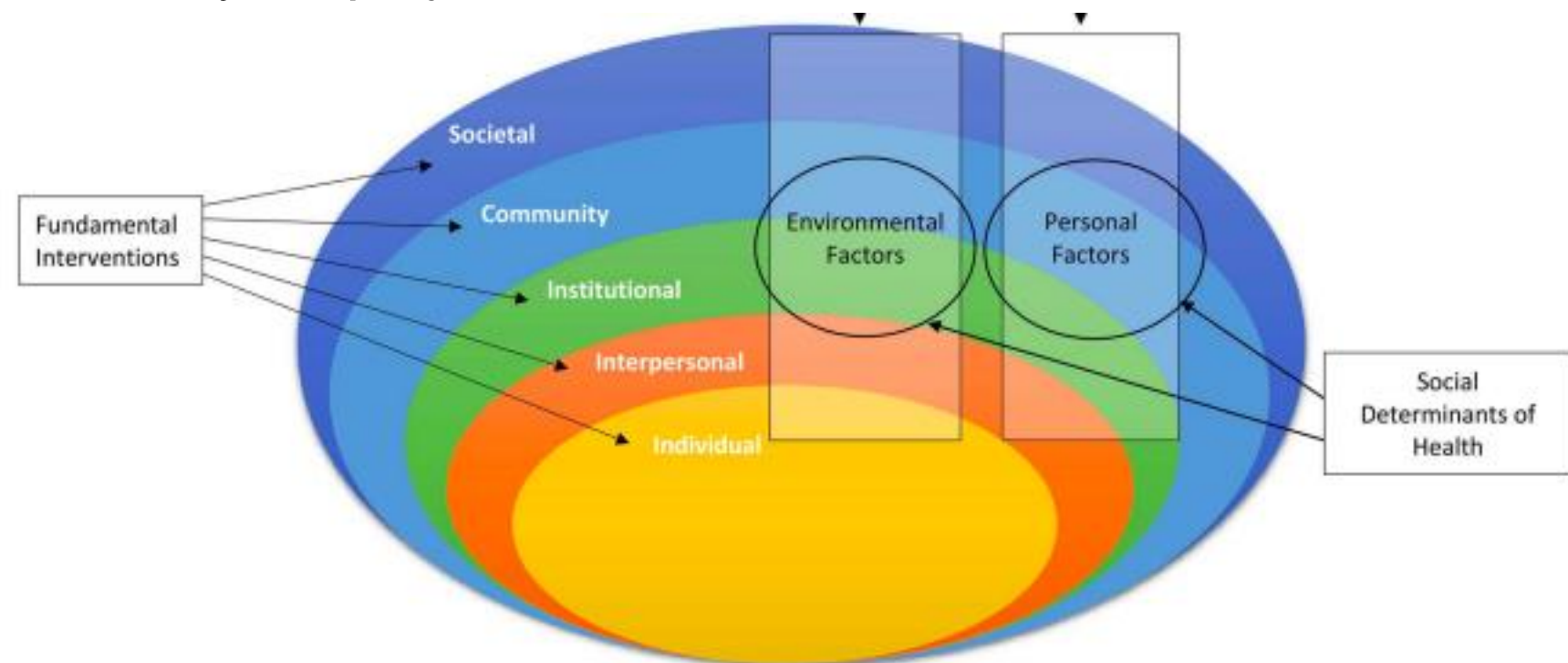
SUMMARY

- Intervention aimed at student volunteers and STVPT patients:
 - Understand and identify the SDOH needs at STVPT
 - Offer resources to mitigate those needs
 - Educate students on what the SDOH are and how to address them



GROUP DISCUSSION

- What types of programming have you all experimented with regarding
 - Healthy People 2030
 - Social Determinants of Health
- How do you feel you could apply the PRECEED-PROCEED or other models to your program or clinic?
 - What barriers or resources do you have access to that could challenge/enable your project?



CONCLUSION

- Utilizing the PRECEDE-PROCEED model allowed for a mindful and community informed quality improvement initiative to be implemented at St. Vincent's.
- What we learned, challenges, and looking forward.
- Potential to serves as a model for other programs and pro bono clinics to help teach, identify, and distribute resources regarding SDOH.

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RESOURCES

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THANK YOU!!

- Dr. Pontiff
- Dr. Galloway and all STVPT faculty volunteers
- Taskforce members
 - First Years: Quinn Stewart, Hunter Summers
 - Second Years: Jenna Allen, Chelsea Banawis, Caroline Welch
 - Third Years: Jincy Arthungal, Ryan Berkey, Christine Brown, Alli Reynolds
 - Alumni: Megan Cornelison
- STVPT student volunteers
- STVPT patients
- APTR Paul Ambrose Scholars Program



Join us for ELC 2023 in Philadelphia!

Save the date:

October 13-15, 2023

pteducationleadershipconference.org

