

Translating an Efficacious Illness Management Intervention for Youth with Poorly Controlled Asthma to Real World Settings

Meghna Shukla, MSN, RN, CPNP-AC, Michael Mooney, DNP, RN, CPNP-AC, CNE, April Idalski Carcone, PhD, Wanda Gibson-Scipio, PhD, FNP, Nirupama Kannikeswaran, MD, Deborah A Ellis, PhD



WAYNE STATE UNIVERSITY

WAYNE STATE UNIVERSITY – DETROIT, MICHIGAN

INTRODUCTION

- 7.5% of US children have asthma
- Half (50.3%) of children with asthma have poorly controlled asthma leading to:
 - increased school absences
 - increased use of primary care
 - Increased hospitalizations
 - high rates of morbidity and mortality
- Urban low-income adolescents with asthma are at particular risk for
 - poor asthma management
 - frequent emergency department (ED) visits
- Asthma education interventions may be helpful in ameliorating health outcomes in high risk asthmatics, who demonstrate low adherence to asthma tasks, causing poor illness self-management.
- ED provider referral to behavioral health services may increase utilization, but rates are low

OBJECTIVE

- To explore barriers and facilitators to use of an ED electronic referral portal to link high-risk urban adolescents with asthma to community-based asthma education services

METHOD

- Participants
 - ED providers (MD, DO, NPs, PAs, etc.)
- Data Collection
 - Semi-structured qualitative interviews
 - Guided by Theoretical Domains Framework (TDF)
 - Two ED providers (NP and MD)
 - Audio recorded and transcribed

METHOD

- Data analysis
 - Directed Content Analysis
 - Code scheme derived from TDF literature
 - Same two ED providers coded the data
 - Inter-rater reliability: kappa = 0.74
 - Discrepancies coded to consensus
 - NVivo, v12

Theoretical Domains Framework (TDF) Domains and Example Questions

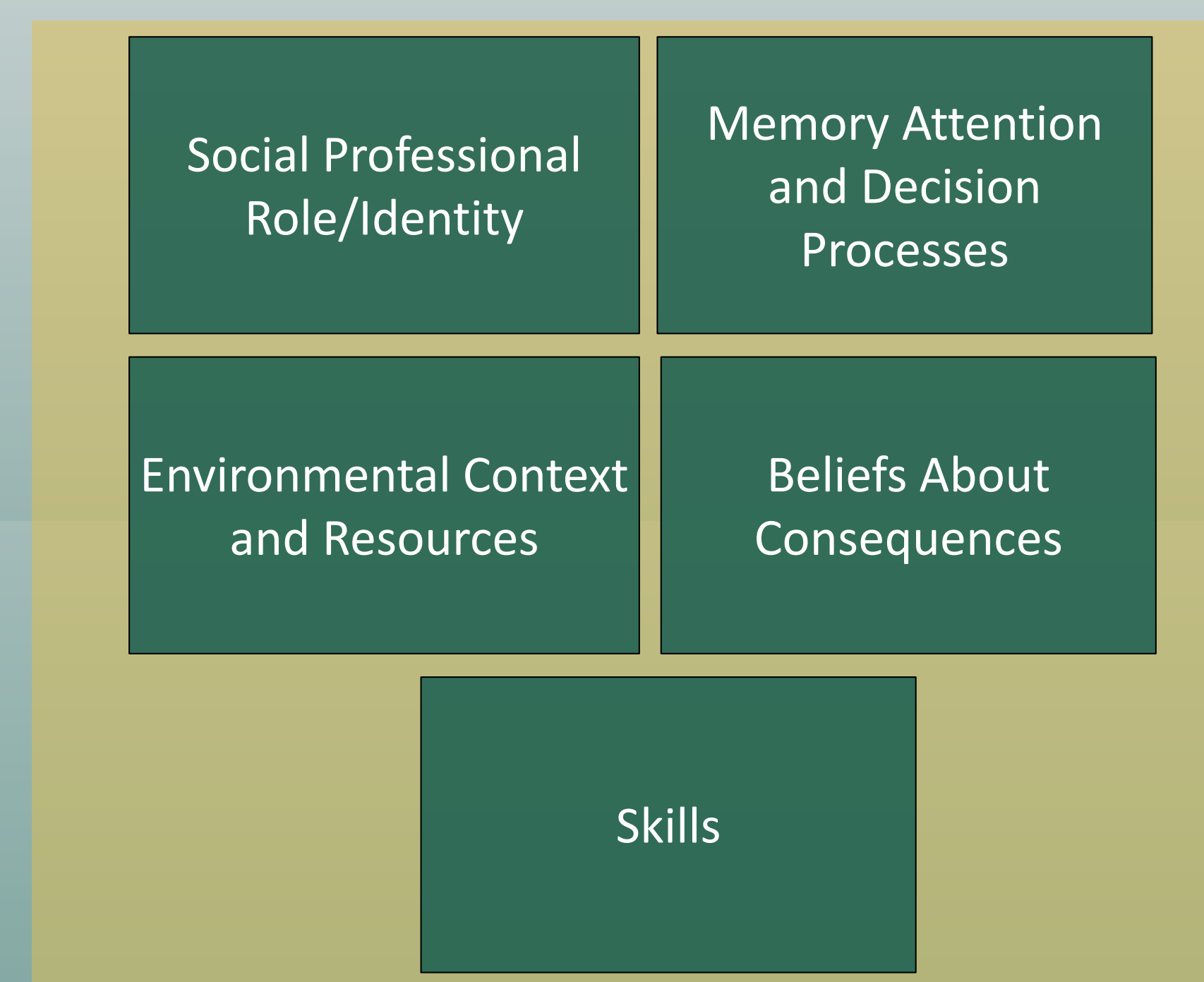
Domains	Example interview guide question
Knowledge	Are you aware of any other organizations that are providing primary prevention resources to the communities they serve?
Goals	As an ER provider, what are your primary goals in providing care to patients?
Social professional role and identity	What role do you think ER providers play in helping the community?
Beliefs about capabilities	Describe your comfort level in talking with families about a referral to preventive services.
Beliefs about consequences	In terms of outcomes, what impact do you think referring these patients will have on the ED?
Optimism	How do families usually respond when you tell them you want to make a referral?
Social influences	Are there any peer/opinion leaders who you feel influence your beliefs and practice?
Intention	How would organizational mandates affect your commitment to primary prevention?
Memory, Attention, and Decision Processes	How do barriers in the ED affect your use of the pathway?
Emotion	How important is it for you to use the pathway?
Reinforcement	How do incentives, such as pay for performance, affect your commitment to primary prevention?
Environmental Context and Resources	How much does your work environment influence your use of the pathway?
Skills	What experience do you have using any other referral pathways?
Behavioral regulation and nature of behavior	To what extent does your organization prioritize the needs of the community you serve?

RESULTS

- 23 ED Providers interviewed

Credentials of ED provider	N
Advanced Practice Providers (NP and PA)	8
Trauma Physicians (MD and DO)	10
Fellows (MD and DO)	2
Pediatricians (MD and DO)	3

Most Frequently Mentioned TDF Domains: these domains helped organize commentary related to barriers and facilitators to pathway



BARRIERS TO REFERRAL

- Time constraints
 - Forgetfulness
 - Lack of knowledge about the community agency
 - Working with multiple team members
 - Getting a working phone number from the families
 - Work environment (understaffing, high patient volumes)
- “The pathway itself is easy to use, remembering to use it is the hard part”
- “It would be nice if we knew exactly what services the agency provides, so that we can educate our patients and families during the referral.”
- “Working in a team environment, my assigned residents routinely forget to place the referral order”
- “It’s not hard to use, but I don’t always have time for it”

FACILITATORS OF REFERRAL

- Re-education of providers
 - EMR alerts/pop-ups
 - Signage in ED
 - Person who can remind at the beginning of each shift to use the pathway
 - Having a research team member come talk to families
 - Having a care manager help with referrals
- “Having someone show up at the beginning of my shift to remind me to hey use the pathway for your asthma patients today”
- “Having an electronic pop-up alert identifying the eligible patient at discharge or diagnosis”
- “More emails will not help. I need an EMR alert that will stop me in the chart and remind me to place the order”
- “Having a care management team to do these referrals would take the burden off medical providers who have more pressing patient issues to attend to”

CONCLUSION

In sum, TDF helped elucidate several important barriers and facilitators to ED providers’ use of a referral portal for behavioral care for high-risk asthmatic youth. The results provided examples of specific barriers and facilitators, which now can be worked on real-time within this particular organization to help improve pathway utilization.

Additional studies can be performed using TDF as a guideline to develop effective strategies to increase usage of such ED referrals, which can lead to better health outcomes for high-risk urban youth with asthma.

PUBLIC HEALTH IMPLICATIONS

- Referral to community-based asthma education services may decrease usage of ED services for non-emergent asthma care, reduce health disparities, and decrease morbidity and mortality rates.
- Understanding barriers and facilitators of clinical pathways usage may also inform ED provider referral to ancillary support services for other chronically ill populations
- Reducing use of ED by chronically ill patients for nonemergency care may decrease ED wait times and overloading hospitals already operating at capacity

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