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**TENNESSEE**  
HEALTH SCIENCE CENTER™

**At the Corner of Access and Quality: Community  
Pharmacy as a Public Health & Primary Care  
Destination**

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# Disclosure

The speaker has received grant funding for university-based research from Merck Sharp & Dohme

# Objectives

1

Describe what is driving the change in the community pharmacy practice model

2

Differentiate between existing and future pharmacist skillsets needed for public and population health

3

Describe the role of pharmacy technology in advancing patient care in the pharmacy

4

Define task shifting in the context of pharmacy technician roles



# Overview

What is driving community pharmacy practice change?

What are some examples?

What is the future?

# Introduction: Community Pharmacy Primed for Change

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Changes in **public perceptions** and **demand for healthcare** favor community pharmacy

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Changing **reimbursement landscape**: declining reimbursement for prescription product, increasing opportunities for value-based reimbursement (e.g., medication adherence, patient care outcomes)

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Shift in pharmacy **training and credentialing**: Doctorate level training, post-graduate residency and fellowship, board certification

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**90%** of American live within **5-miles** of a pharmacy

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Americans frequent pharmacies almost **2x more frequently** than prescriber offices

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Berenbrok LA, Gabriel N, Coley KC, Hernandez I. Evaluation of frequency of encounters with primary care physicians vs visits to community pharmacies among medicare beneficiaries. JAMA Network Open. 2020 Jul 1;3(7):e209132-.

Berenbrok LA, Tang S, Gabriel N, Guo J, Sharareh N, Patel N, Dickson S, Hernandez I. Access to Community Pharmacies: A Nation-Wide Geographic Information Systems Cross-sectional Analysis. Journal of the American Pharmacists Association. 2022 Jul 15.

# What the Patient (consumer) is now looking for

	Percent
Convenient location	46
Reputation	39
Personality	34
Convenient hours	32
Price I have to pay	31
Medical school/training of provider	16

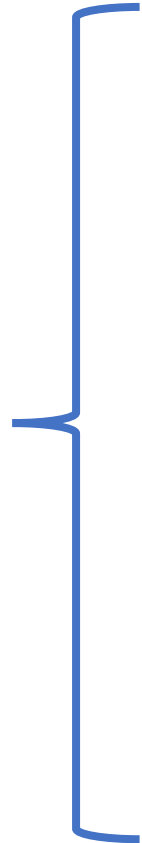
Deloitte 2018 Survey of US Health Care Consumers.

# 3 Pillars of Community Pharmacy-based Practice Change

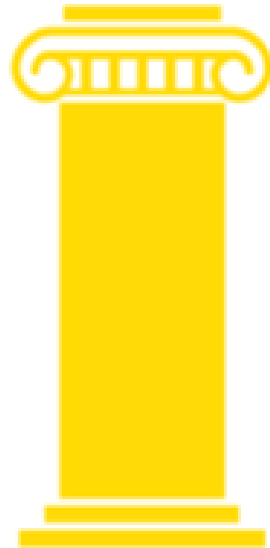


## Collaborative Practice Agreement

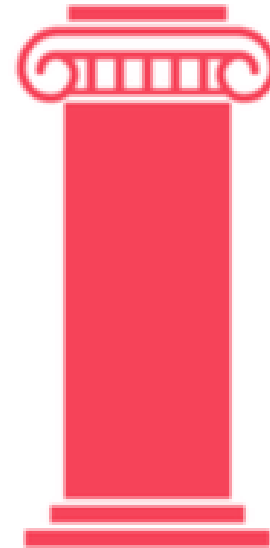
- Legal agreement
- Prescription authority
- Order laboratory tests
- Process for communication
- Available in most states



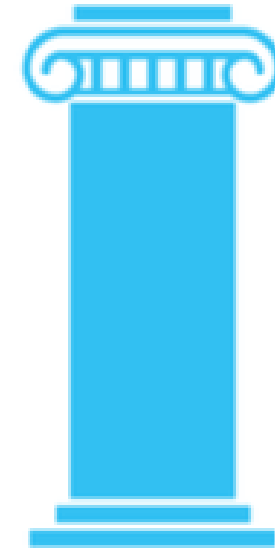
Behavior Change Techniques



Integration of Technology

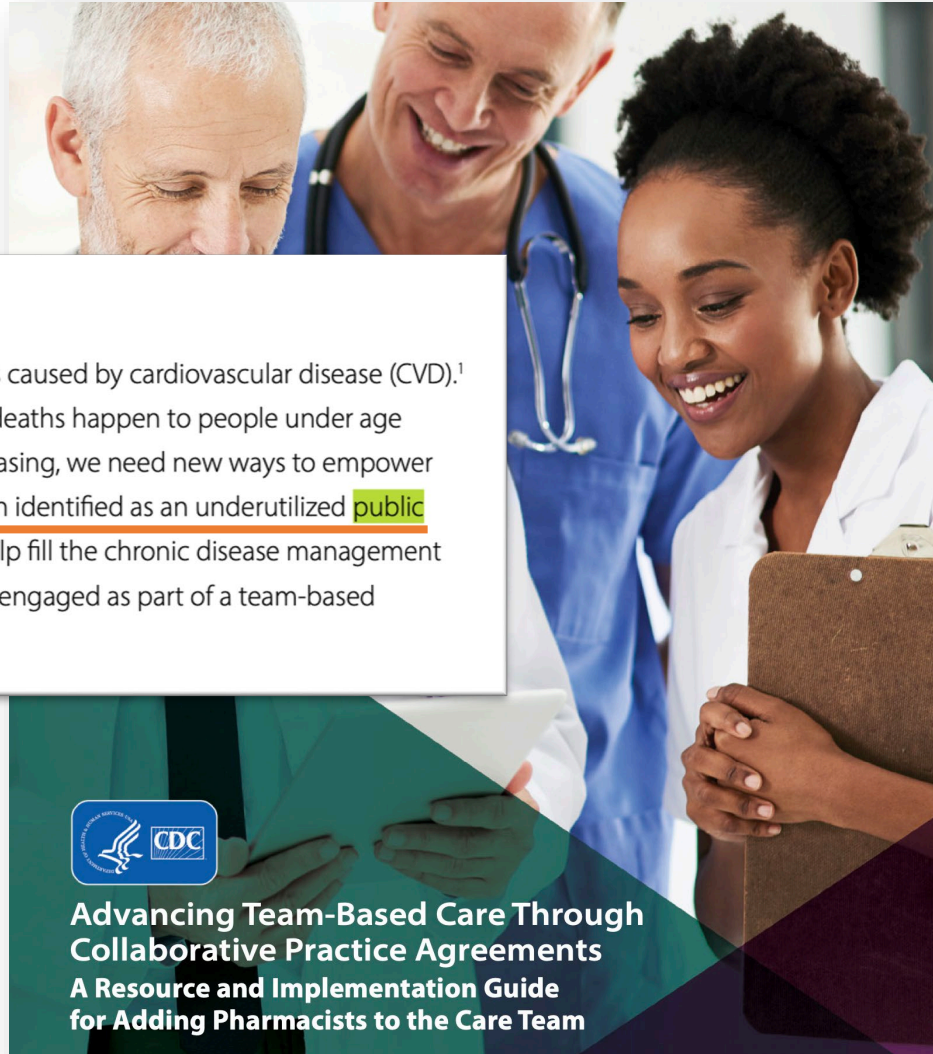


Pharmacy Technician Task Shifting





# Collaborative Practice Agreements



Dear Pharmacists and Collaborating Prescribers:

Nearly one in every three deaths in the United States is caused by cardiovascular disease (CVD).<sup>1</sup> Sixty percent of preventable heart disease and stroke deaths happen to people under age 65.<sup>2</sup> With the burden of chronic disease in the US increasing, we need new ways to empower patients and improve care. Pharmacists have long been identified as an underutilized public health resource.<sup>3</sup> Pharmacists are well positioned to help fill the chronic disease management gap and can make a difference when they are actively engaged as part of a team-based care approach.

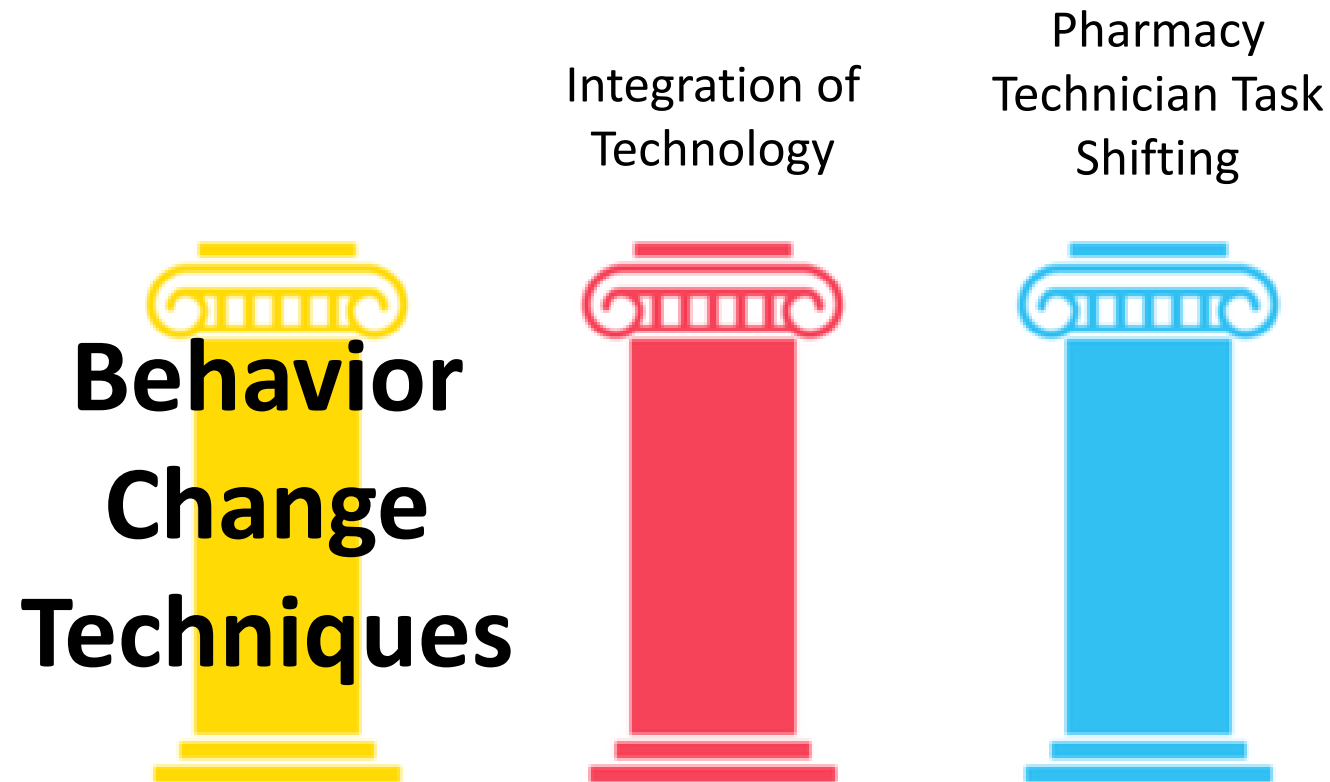
<https://www.cdc.gov/dhbsp/pubs/docs/cpa-team-based-care.pdf>

*The **CPA** is the catalyst for pharmacy's impact in public health and primary care*



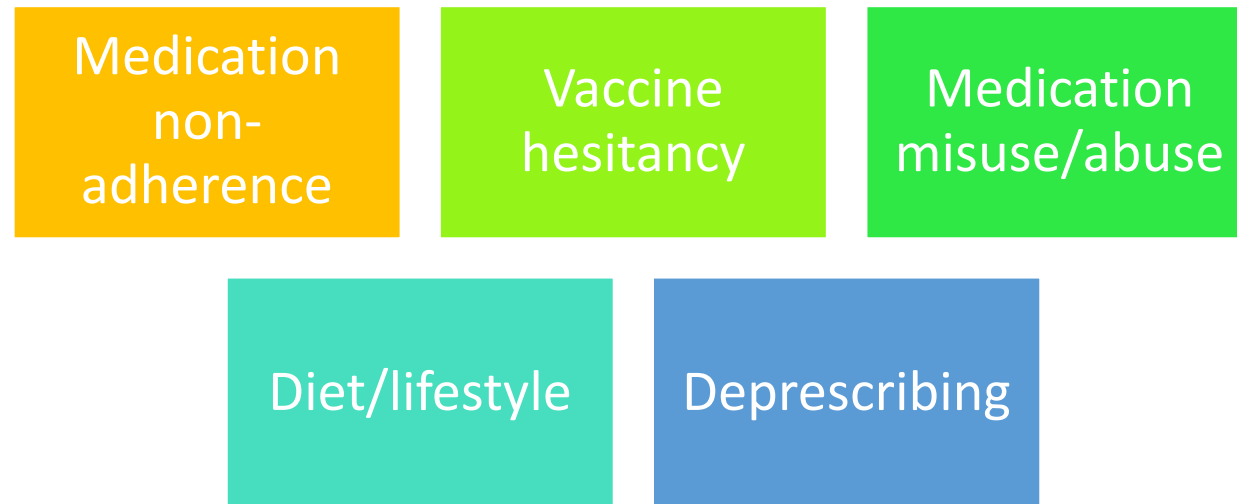
**Advancing Team-Based Care Through Collaborative Practice Agreements**  
**A Resource and Implementation Guide for Adding Pharmacists to the Care Team**

# 3 Pillars of Community Pharmacy Practice Transformation



# Behavior Change Techniques in Pharmacy

- **Defined:** Assist patients to engage in healthy behaviors to improve or prevent diseases or health conditions<sup>1</sup>
- **Today's patient care requires skills for:**



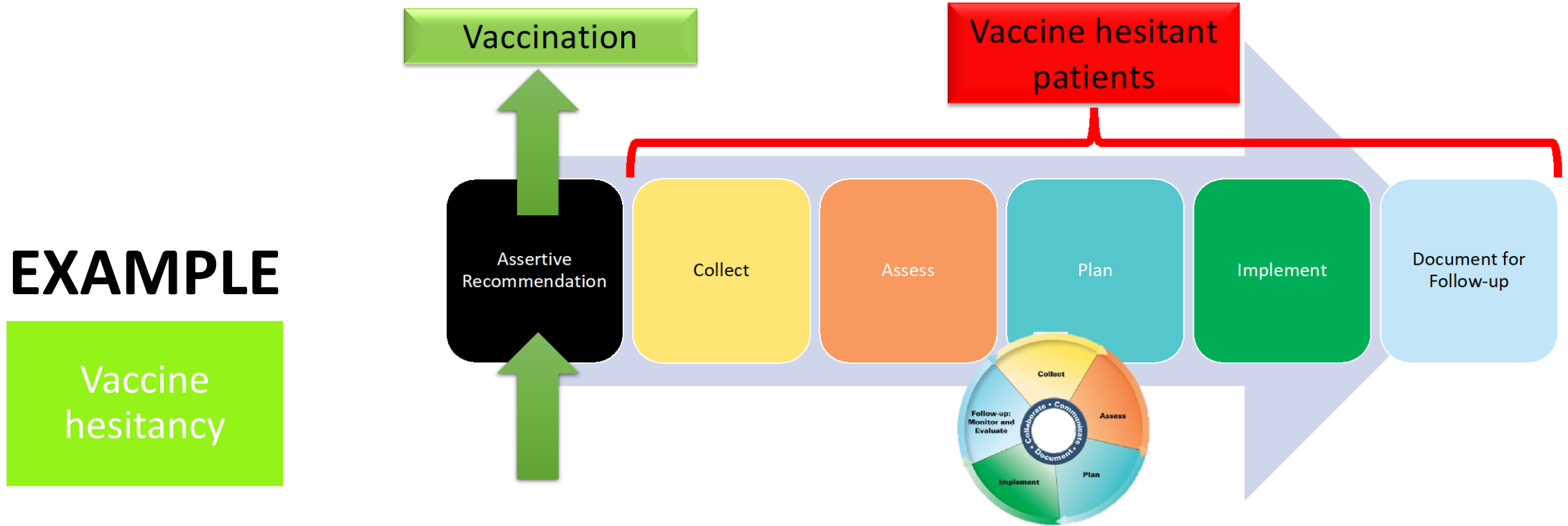
# Behavior Change Techniques in Pharmacy

## EXAMPLE

Vaccine  
hesitancy

- **Study title:** Facilitating Pharmacist Assertiveness in Promoting Pneumococcal Vaccination among High-Risk Adults: A Simulation-Based, Data-Driven Training Program
- **Community partner:** Walgreens (Memphis/Nashville, TN)
- **Objective:** Improve pneumococcal vaccination recommendations made by pharmacists using theories of behavior change

# Quality Recommendation Pathway



- ✓ Transtheoretical model
- ✓ Motivational interviewing

# EXAMPLE

Vaccine  
hesitancy

## Results:

- Pharmacist **self-efficacy increased** across the 6 items measured ( $p>0.05$ )
- **~25% difference in vaccination rates** between control and intervention ( $p>0.05$ )

## Lessons learned:

- BEHAVIOR CHANGE TRAINING IS **UNIQUE/CHALLENGING**
- Simulation on-campus → **in-situ**
- Training:Practice ratio 2:1 → **flip it**
- Train-the-trainer model (**reinforce and scale**)

# Behavior Change Techniques in Pharmacy

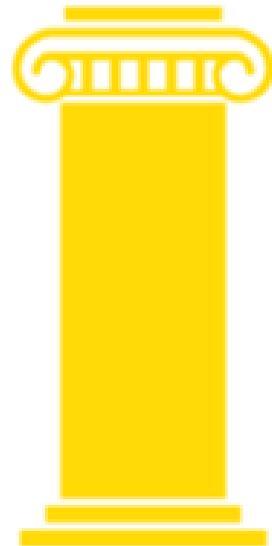
## Future Directions:

- Work with experts in motivational interviewing training to design behavior change interventions (Co-use Opioid/EtOH)
- Explore and describe patient reported goals (MOUD, HPV Vaccine)
- Identify pharmacist impact in other areas (Primary Non-adherence, Opioid Use Disorder)

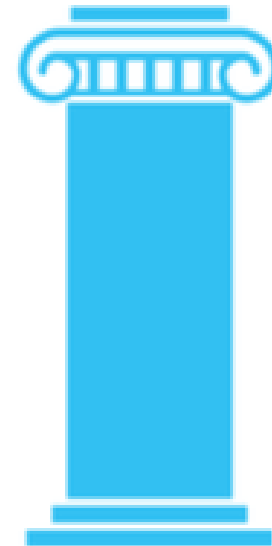


# 3 Pillars of Community Pharmacy Practice Transformation

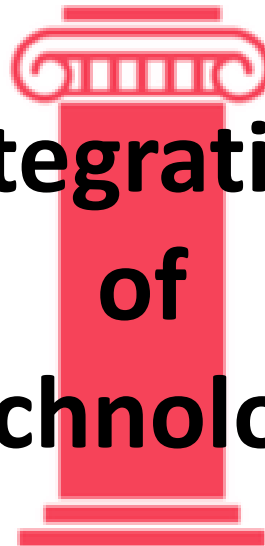
Behavior  
Change  
Techniques



Pharmacy  
Technician Task  
Shifting



**Integration  
of  
Technology**

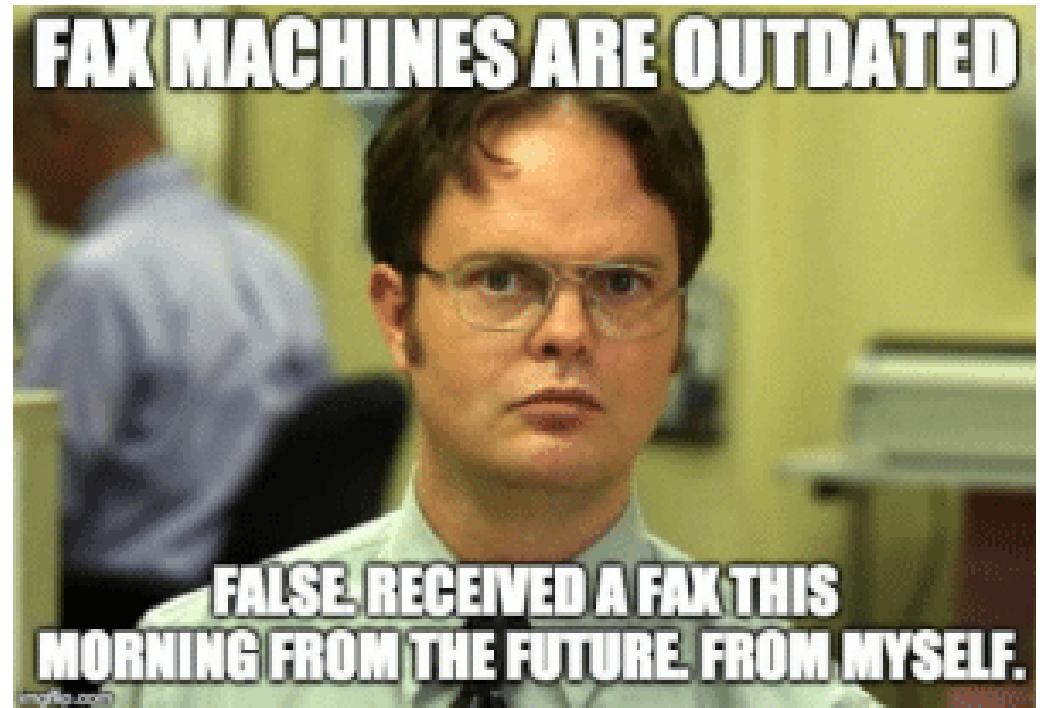




## Technology to Advance Pharmacy Practice

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- Majority of collaboration between pharmacists and other providers today occurs over **fax** or **telephone**<sup>1</sup>:
  - Inefficient
  - Prone to errors
  - Difficult to track



# Technology to Advance Pharmacy Practice

## Implementation of a health information exchange into community pharmacy workflow

- Health information exchange (HIE) integration within the workflow of the pharmacy
- **Design:** A mixed-methods design was used to explore HIE workflow:
  - pharmacist and pharmacy technician perceptions survey,
  - mapping steps involved in HIE use in workflow
  - and quantitatively reporting discordant medications found on medication reconciliation



# Technology to Advance Pharmacy Practice

## Implementation of a health information exchange into community pharmacy workflow

### Results

- All 25 patients (100%) had at least 1 discordant medication - HIE access was used for 60% of patients
- Community pharmacists were confident in their abilities to perform medication reconciliation with the use of the HIE within workflow
- The average time spent per patient for HIE-facilitated transitional care was 21 minutes.

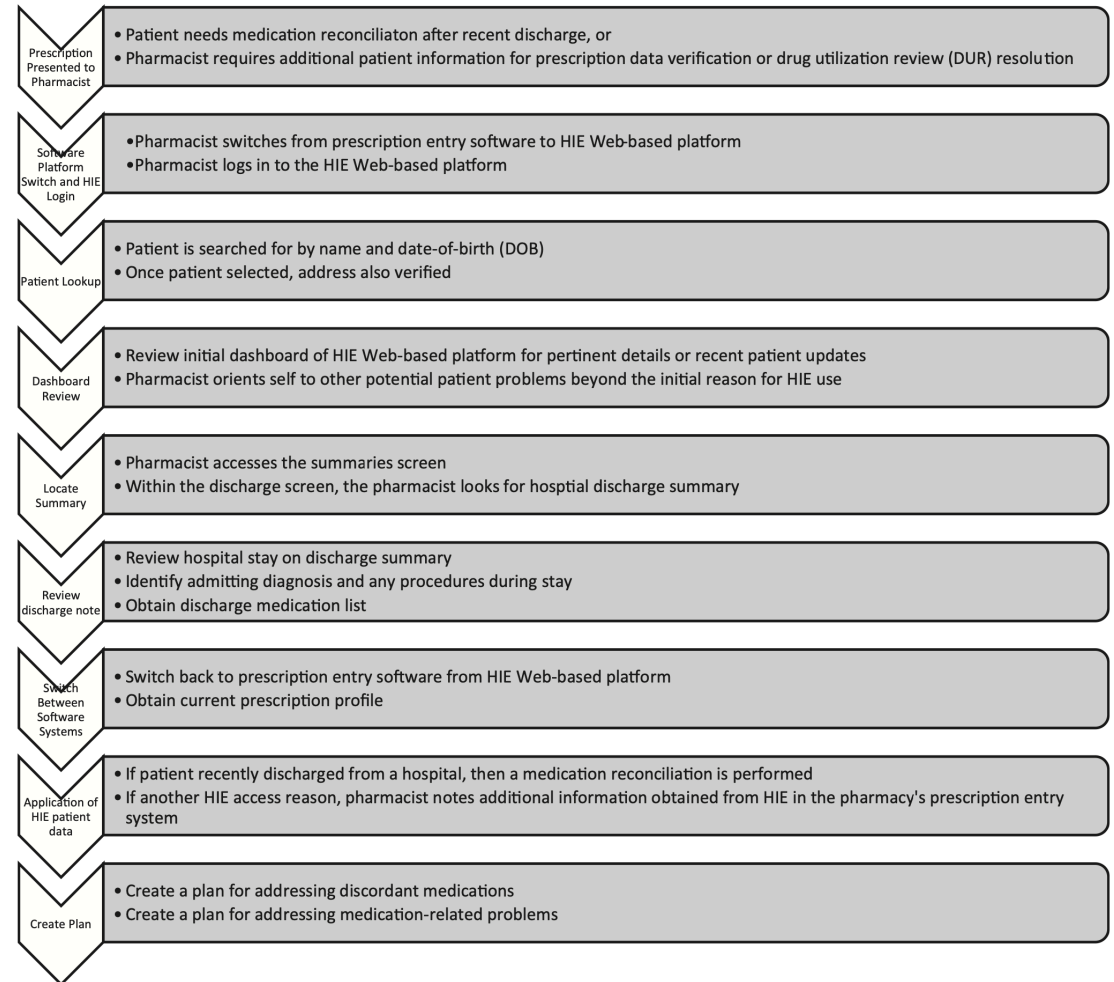


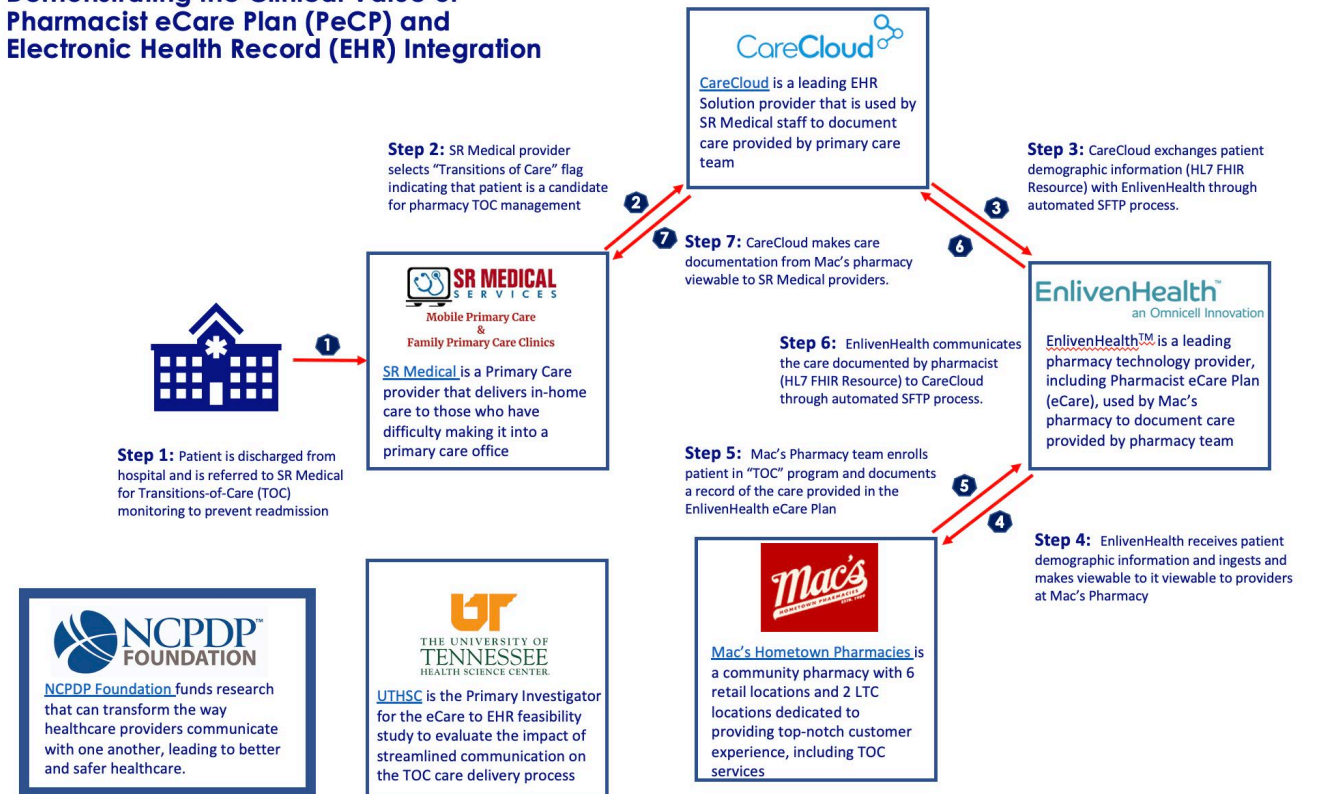
Figure 2. Patient enrollment. Abbreviation used: Med Rec, medication reconciliation.

# Technology to Advance Pharmacy Practice

## • Future Directions

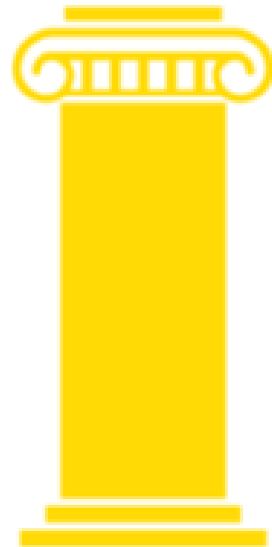
- Continue collaboration with HIE in Tennessee
- Pharmacist eCare Plan (PeCP) integration into EHR (NCPDP Foundation funded)

### Demonstrating the Clinical Value of Pharmacist eCare Plan (PeCP) and Electronic Health Record (EHR) Integration

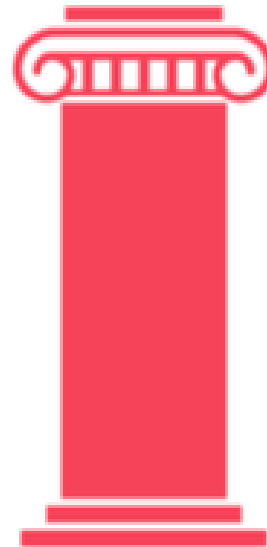


# 3 Pillars of Community Pharmacy Practice Transformation

Behavior  
Change  
Techniques



Integration of  
Technology



**Pharmacy  
Technician  
Task Shifting**



Sorry, I've just got too much on my plate!



# Pharmacy Technician Task Shifting

Increasing evidence that “task shifting”<sup>1,2</sup> can **increase care access** and may lead to **better patient care outcomes**

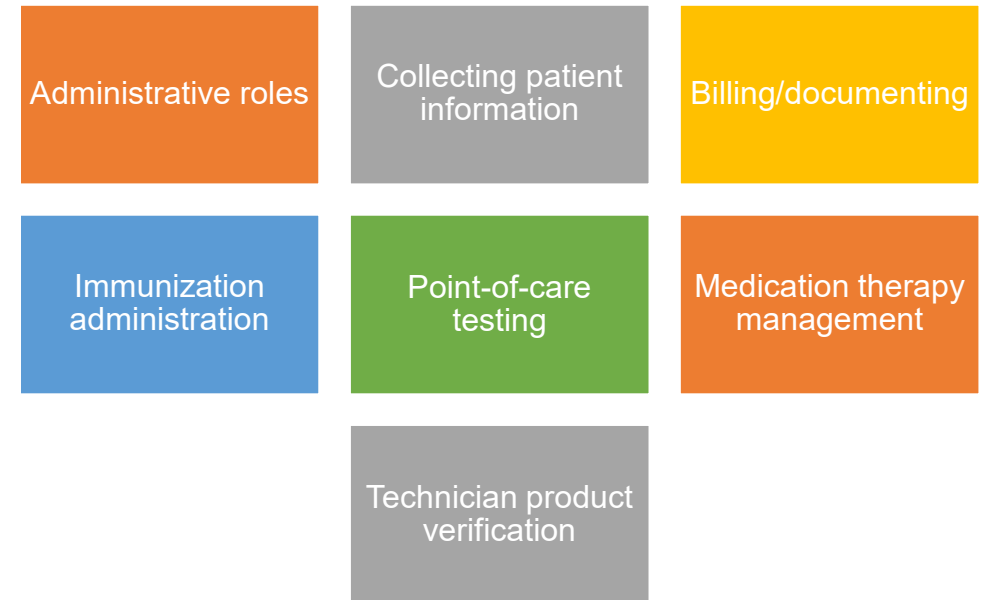
- *Provider entrusting specific responsibilities to another member of their team who has adequate training and comfort to meet the expectations of the provider and patient*

1. Yarnall KS, Østbye T, Krause KM, Pollak KI, Gradison M, Michener JL. *Prev Chronic Dis.* 2009 Apr;6(2):A59. Epub 2009 Mar 16.

2. Altschuler J, Margolius D, Bodenheimer T, Grumbach K. *The Annals of Family Medicine.* 2012 Sep 1;10(5):396-400.

# Pharmacy Technician Task Shifting

- Increased medication safety<sup>1</sup>
- Improved patient outcomes<sup>1-4</sup>
  - Prevention (e.g., immunizations, point-of-care laboratory testing)
  - Treatment (i.e., test-to-treat influenza programs)
  - Medication use (i.e., adherence)











1. Hohmeier KC, Sain A, Garst A, Shell L, Desselle S, Gatwood J, Cost M. The Optimizing Care Model: Final findings of a novel community pharmacy practice model to enhance patient care delivery using technician product verification. *J Am Pharm Assoc.* 2022;62(1):112-9.
2. Adams AJ, Bright D, Adams J. Pharmacy technician-administered immunizations: A five-year review. *J Am Pharm Assoc.* 2022;62(2):419-23.
3. Mattingly AN, Mattingly II TJ. Advancing the role of the pharmacy technician: A systematic review. *J Am Pharm Assoc.* 2018;58(1):94-108.
4. Klepser D, Dering-Anderson A, Morse J, Klepser M, Klepser S, Corn C. Time and motion study of influenza diagnostic testing in a community pharmacy. *Innov Pharm.* 2014;5(2):1-2.

# Pharmacy Technician Task Shifting

## Technician Product Verification<sup>1-3</sup>

- Tech-check-tech
- After data entry verification by pharmacist, a technician verifies correct product selection
- Requires state-specific regulatory approval, and therefore not available in every state

Traditional Model	Pharmacist	+					+		
	Technician								
Primary responsibilities		Developing new collaborative prescriber relationships	Developing new clinical patient care service offerings	Delivering direct clinical patient care (e.g. counseling, CMR, TMR, POCT, vaccinations, DSM, services under CPA)	Data entry verification and DUR	Product verification*	Data entry	Telephone	Release to patient
									
Optimizing Care Model	Pharmacist	+	+	++	+				
	Technician						+	+	+

← Clinical/Professional Responsibilities
 → Technical Responsibilities

**Figure 1.** The Optimizing Care Model: technician product verification. \*New technician responsibility allowable after regulatory changes by study pharmacy state's board of pharmacy and not previously allowable in the traditional model. +: Task performed in model. ++: Task previously performed but now performed with increased frequency. Abbreviations used: CMR, comprehensive medication review; TMR, targeted medication review; POCT, point-of-care testing; DSM, disease state management; CPA, collaborative practice agreement.









1. Andreski M, Myers M, Gainer K, Pudlo A. The Iowa new practice model: Advancing technician roles to increase pharmacists' time to provide patient care services. *J Am Pharm Assoc.* 2018;58(3):268-74.
2. Hohmeier KC, Desselle SP. Exploring the implementation of a novel optimizing care model in the community pharmacy setting. *J Am Pharm Assoc.* 2019;59(3):310-8.
3. Hohmeier KC, Sain A, Garst A, Shell L, Desselle S, Gatwood J, Cost M. The Optimizing Care Model: Final findings of a novel community pharmacy practice model to enhance patient care delivery using technician product verification. *J Am Pharm Assoc.* 2022;62(1):112-9.



# Pharmacy Technician Task Shifting

## Technician Product Verification<sup>1-3</sup>

- After data entry verification by pharmacist, a technician verifies correct product selection
- Increased pharmacist time, decreased medication errors, increased clinical services delivered

Traditional Model	Pharmacist	+					+		
	Technician								
Primary responsibilities		Developing new collaborative prescriber relationships 	Developing new clinical patient care service offerings 	Delivering direct clinical patient care (e.g. counseling, CMR, TMR, POCT, vaccinations, DSM, services under CPA) 	Data entry verification and DUR 	Product verification* 	Data entry 	Telephone 	Release to patient 
	Optimizing Care Model	Pharmacist	+	+	++	+			
	Technician					+	+	+	+

← Clinical/Professional Responsibilities
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# Pharmacy Technician Task Shifting

## Technician Product Verification (TPV)<sup>1</sup>

- Theme 3: TPV positively affects roles and job satisfaction of pharmacy personnel

“I wanted more responsibilities and I feel like this tech-check-tech program has been able to give me that ... (Independent Pharmacy Technician 12)”

“For me personally, I like the challenge, I like something new. I’ve enjoyed [TPV] ... I feel more confident in my role [as a product verification technician]. (Independent Pharmacy Technician 13)”

1. Hohmeier KC, Desselle SP. Exploring the implementation of a novel optimizing care model in the community pharmacy setting. *J Am Pharm Assoc.* 2019;59(3):310-8.

# Pharmacy Technician Task Shifting

## Medication Therapy Management (MTM)

- Technicians are most involved in medication reconciliation, medication therapy review, and documentation<sup>1</sup>
- Technician involvement specifically found to increase quality measure ratings<sup>2</sup>
- Does NOT require regulatory permission, can do in any state

1. Gernant SA, Nguyen MO, Siddiqui S, Schneller M. Use of pharmacy technicians in elements of medication therapy management delivery: a systematic review. *Res Social Admin Pharm.* 2018;14(10):883-90.
2. Justis L, Crain J, Marchetti L, Hohmeier KC. The effect of community pharmacy technicians on industry standard adherence performance measures after cognitive pharmaceutical services training. *J Pharm Technol.* 2016;32(6):230-3.

# Pharmacy Technician Task Shifting

## Medication Therapy Management (MTM)

- Hohmeier et al., used journals, observations, semi-structured interviews to investigate technician roles at high-performing chain pharmacy sites<sup>1</sup>

**Table 1**

Pharmacy technician strategic core roles surrounding clinical service implementation

Clinical support responsibilities	Nonclinical support responsibilities	Future responsibilities
<ul style="list-style-type: none"><li>• Scheduling patients</li></ul>	<ul style="list-style-type: none"><li>• Telephone triage</li></ul>	<ul style="list-style-type: none"><li>• Patient interviewing and obtaining medical and medication histories</li></ul>
<ul style="list-style-type: none"><li>• Preparing patient chart before appointment</li></ul>	<ul style="list-style-type: none"><li>• Administrative responsibilities</li></ul>	
<ul style="list-style-type: none"><li>• Enrolling patients</li></ul>	<ul style="list-style-type: none"><li>• Team leadership functions</li></ul>	
<ul style="list-style-type: none"><li>• Documentating patient communication</li></ul>		
<ul style="list-style-type: none"><li>• Claim adjudication and billing</li></ul>		
<ul style="list-style-type: none"><li>• Contacting physicians and patients</li></ul>		

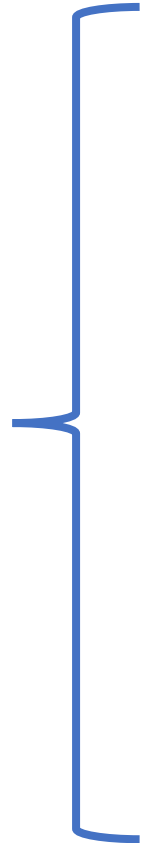
1. Hohmeier KC, McDonough SL, Rein LJ, Brookhart AL, Gibson ML, Powers MF. Exploring the expanded role of the pharmacy technician in medication therapy management service implementation in the community pharmacy. *J Am Pharm Assoc.* 2019;59(2):187-94.

# 3 Pillars of Community Pharmacy-based Practice Change

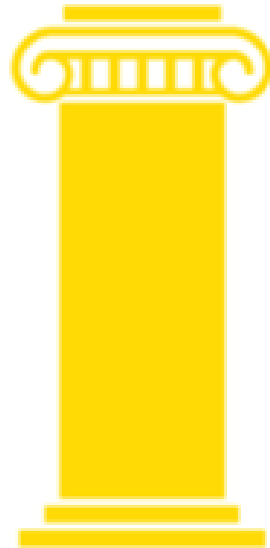


## Collaborative Practice Agreement

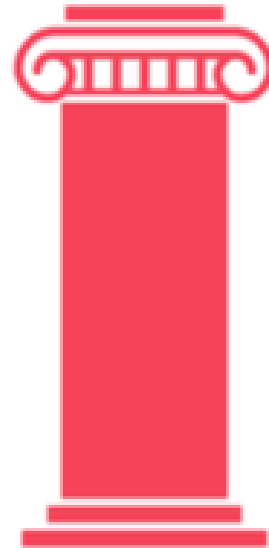
- Legal agreement
- Prescription authority
- Order laboratory tests
- Process for communication
- Available in most states



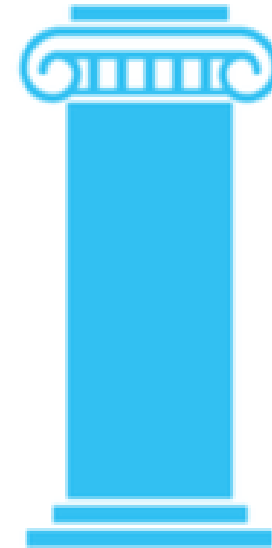
Behavior  
Change  
Techniques



Integration of  
Technology



Pharmacy  
Technician Task  
Shifting



# Emerging Payment Models that Support Community Pharmacy Practice Change

- **Value-based payment**
  - Shared savings
  - Quality measures
- **Membership pharmacy models**
  - Financial savings for the employer group across both fee charges and prescription medication costs
  - Net savings provided to the employer was \$67,843, a 35% reduction in topline pharmacy spend
  - Revenue for the pharmacy was realized exclusively through membership fees

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## Exploring the Membership Pharmacy Model: Initial Impact and Feasibility

Kenneth C. Hohmeier, PharmD • Phil Baker, PharmD • Cortney Storey • Nick Martin • Justin D. Gatwood, PhD, MPH

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### Abstract

#### Background

There is a need to shift pharmacy payment models given the expanding role of the community pharmacist in improving patient outcomes, misaligned incentives of the existing reimbursement model, and deleterious effects of a lack of transparency on prescription costs.

#### Objectives

The primary objective of this paper was to develop a payment strategy for a Membership Pharmacy Model within an independent community pharmacy setting. A secondary

# What pharmacies need to change practice:

- Improve pharmacist behavior change skillset
- Technology to improve communication, reduce time waste, increase patient data access
- Advanced pharmacy technician roles to free up time
- Payment models to incentivize patient care



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