

OVERCOMING BARRIERS IN MEDICATION ACCESS

A Pharmacist's Perspective

Samantha Liaw, BS, PharmD, CDCES
November 14, 2024



Northwell
Health®

VIVOHealth
Pharmacy

DISCLOSURES

I have no actual or potential conflict of interest in relation to this program/presentation.

OBJECTIVES

1. Identify the barriers in medication access and its effects on stroke patients
2. Discuss resources available to aid medication access
3. Summarize how transitions of care (TOC) programs can improve medication access and outcomes
4. Describe the integrated model of Northwell Health's Vivo Health Pharmacy and its pharmacist-led TOC program

BARRIERS TO MEDICATION ACCESS AND ITS EFFECTS ON STROKE PATIENTS

LEVINE ET AL (2007)

Design

- Observational

Purpose

- Assessed medication access and associated barriers to care across region and time in a national sample of US stroke survivors

Methods

- Used data from National Health Interview Survey (NHIS) years 1997 to 2004
- Identified stroke survivors as respondents who answered yes to question “Have you ever been told by a doctor or health professional that you had a stroke?”
- Outcome measure – report of an inability to afford medication with question “During the past 12 months, was there any time when you needed prescription medicines, but didn’t get [them] because you couldn’t afford [them]?”

Levine et al. *Stroke*. 2007;38:1557-1564.

LEVINE ET AL (2007) – RESULTS

Identified 5840 stroke survivors ≥ 45 years of age, representing ~4.1 million US stroke survivors

- 9% (~378,000 persons), reported an inability to afford medications

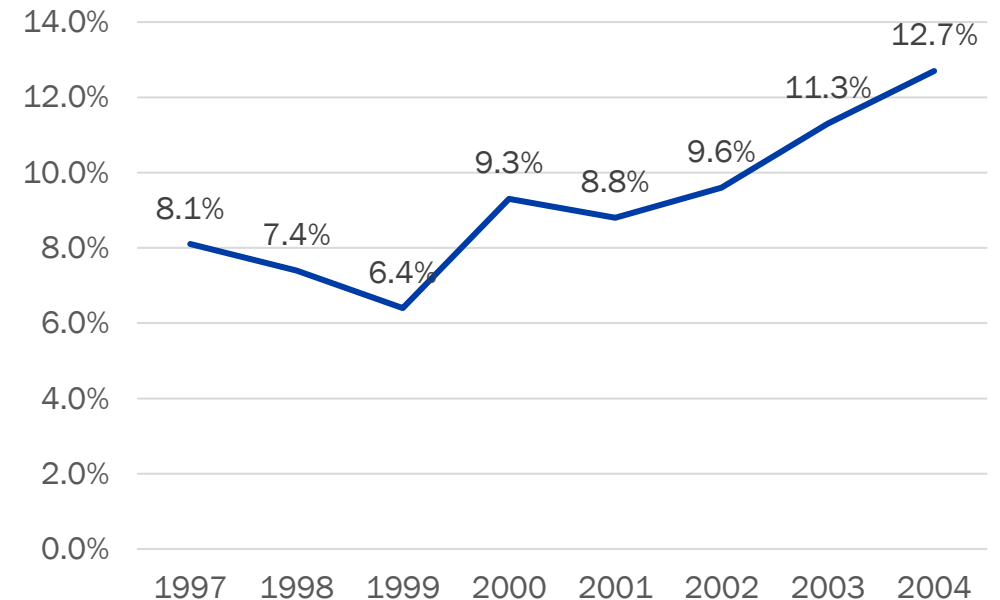
Vulnerable stroke population with reduced medication access

- 45-64 years old, black, female, high comorbidity, low health status, reside in the South, less than high school education

Inability to afford medications and associated barriers to care

- Lack of transportation (15% versus 3%; $P < 0.001$)
- No health insurance (16% versus 3%; $P < 0.001$)
- No usual place of care (6% versus 2% $P < 0.001$)
- Income $< \$20,000$ (66% versus 40%; $P < 0.001$)
- Out-of-pocket medical expenses $\geq \$2000$ (35% versus 25%; $P < 0.001$)

Percentage of Stroke Survivors Reporting Inability to Afford Medications by Survey Year



Levine et al. *Stroke*. 2007;38:1557-1564.

RESOURCES TO AID MEDICATION ACCESS

NAVIGATING BARRIERS TO MEDICATION ACCESS

Components of insurance

- Formulary/tiered system
- Prior authorization (PAs)
- Step therapies
- Quantity limits

Medication cost

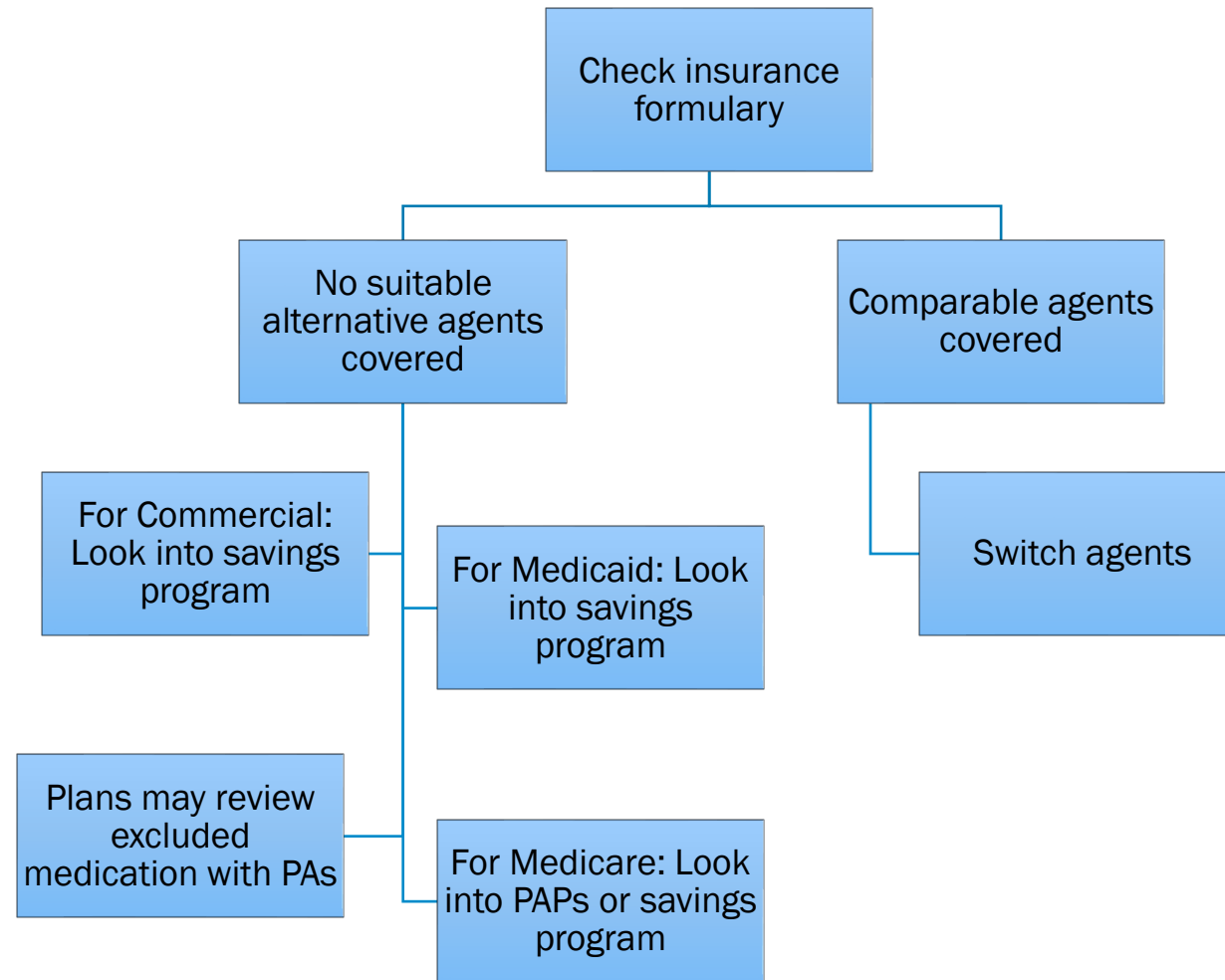
- Elderly pharmaceutical insurance coverage (EPIC) – New York State Program
 - Income-eligible seniors ≥ 65 years of age
 - Provides secondary coverage for Medicare Part D after Medicare Part D deductible is met
- Prescription assistance programs (PAPs)
- Coupons/copay cards/rebates
- Savings programs
- \$4 generic medication list
- Savings programs

Physical Access

- 90-day supply for chronic diseases
- Synchronize medications so most medications can be obtained in one trip
- Home delivery through mail-order or local pharmacies

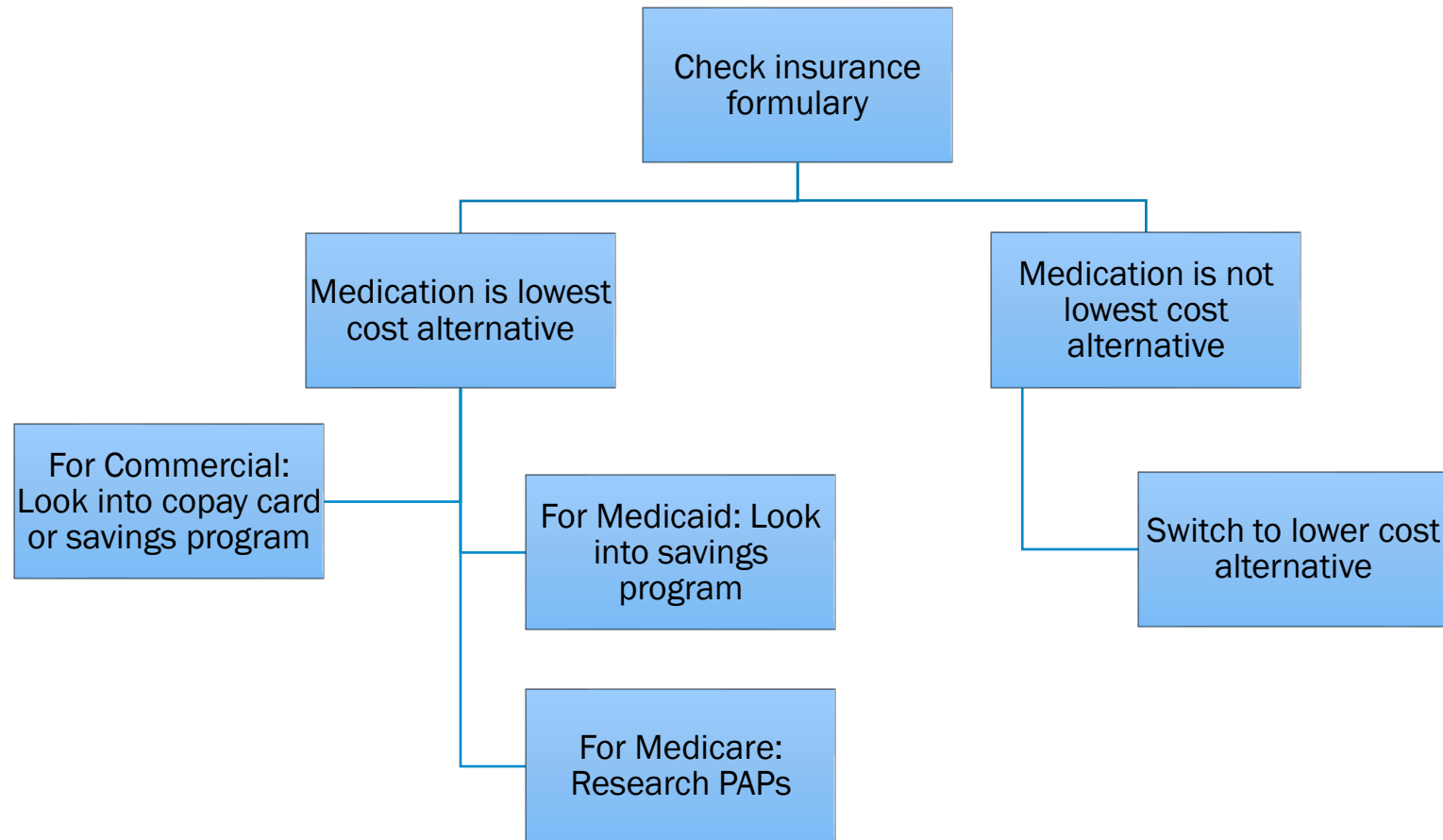
Meinzer et al. 2004. <https://www.cardi-oh.org/files/resources/card-oh-navigating-barriers-to-medication-access.pdf>.

DECISION-MAKING TREE: MEDICATIONS ARE NOT COVERED



Meinzer et al. 2004. <https://www.cardi-oh.org/files/resources/cardi-oh-navigating-barriers-to-medication-access.pdf>.

DECISION-MAKING TREE: COVERED MEDICATIONS THAT ARE TOO EXPENSIVE



Meinzer et al. 2004. <https://www.cardi-oh.org/files/resources/cardioh-navigating-barriers-to-medication-access.pdf>.

HOW TRANSITIONS OF CARE (TOC) PROGRAMS HELP WITH MEDICATION ACCESS AND OUTCOMES

TOC PROGRAMS: PHARMACIST'S ROLE IN MEDICATION ACCESS AND OUTCOMES



Pharmacist's role

- Medication reconciliation¹
- Medication counseling (indication, adherence, side effects, administration, etc.)²
- Medication adjustment, discontinuation, monitoring^{2,3}



Outcomes

- Reduced hospital readmissions^{2,4}
- Increased adherence as seen with antithrombotic drugs and statin therapy³
- Improves health-related quality of life⁵

1. Hedegaard U. *Cerebrovasc Dis Extra*. 2014 Dec 11;4(3):221-34. 2. Nathans et al. *J Stroke Cerebrovasc Dis*. 2020 Apr;29(4):104648. 3. Hohmann C et al. *Stroke*. 2013 Feb;44(2):522-4. 4. Andres J. *J Pharm Pract*. 2019 Oct;32(5):503-508. 5. Hohmann C et al. *Pharm World Sci*. 2009 Oct;31(5):550-558.

NATHANS ET AL (2020)

Retrospective matched-cohort study

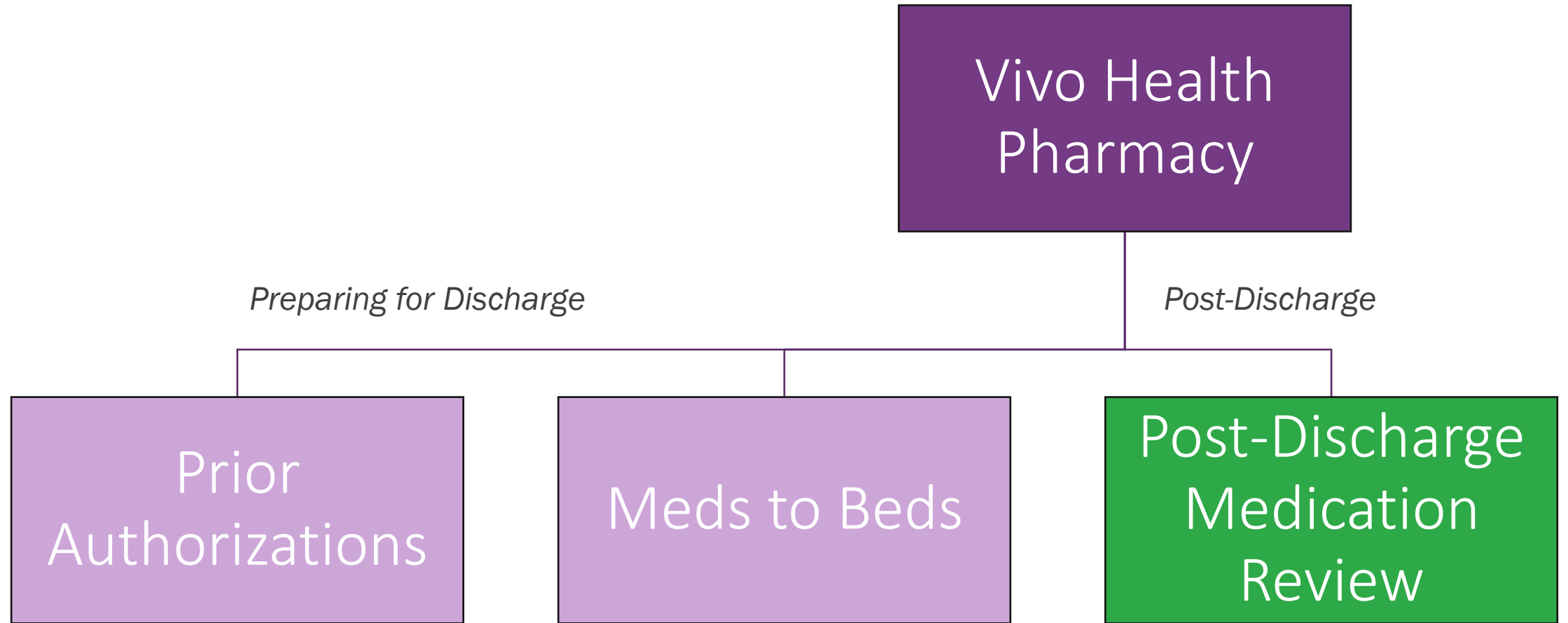
Impact of a pharmacist-driven poststroke transitions of care clinic on 30 and 90-day hospital readmission rates

Population	Adult age ≥ 18 years with confirmed primary diagnosis of stroke or TIA, discharged to home, and attended a PSTCC visit within 2 weeks of discharge
Intervention	One-time visit with clinical pharmacist in an ambulatory care clinic to provide patient education, medication management, risk factor modification, serve as link into primary care service if needed
Control	Did not receive any pharmacist intervention (NPI)
Outcome	<ul style="list-style-type: none"> 94 patients met inclusion criteria for the PSTCC group (mean age 55 ± 10 years, 25% female, 78% African American, 22% Caucasian, and 51% NIHSS score between 1 and 4 on admission) <p><u>Primary outcome:</u> 30-day readmission: 3 (3.2%) compared to 8 (8.5%) for NPI (P = 0.12)</p> <p><u>Secondary outcomes:</u></p> <ul style="list-style-type: none"> 90-day readmission 5.3% compared to 21.3% for NPI (P = 0.001) 30-day ED visit 13.8% compared to 14.9% for NPI (P = 0.84) 90-day ED visit 27.7% compared to 25% for NPI (P = 0.87) 90-day recurrent stroke 4.3% compared to 5.3% for NPI (P = 1)

NIHSS score: National Institutes of Health Stroke Scale; NPI: no pharmacist intervention; PSTCC: poststroke transitions of care clinic; TIA: transient ischemic attack

Nathans et al. *J Stroke Cerebrovasc Dis.* 2020 Apr;29(4):104648.

TRANSITIONS OF CARE PROGRAM AT NORTHWELL



TOC PROGRAM GOALS



Ensure medications in hand

- Meds to beds delivery



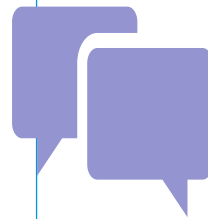
Promote first-fill compliance and persistence

- Meds to beds delivery
- Pharmacist post-discharge medication review



Ensure medications are covered and affordable before patients are discharged

- Prior authorization support, comprehensive pharmacy benefits review



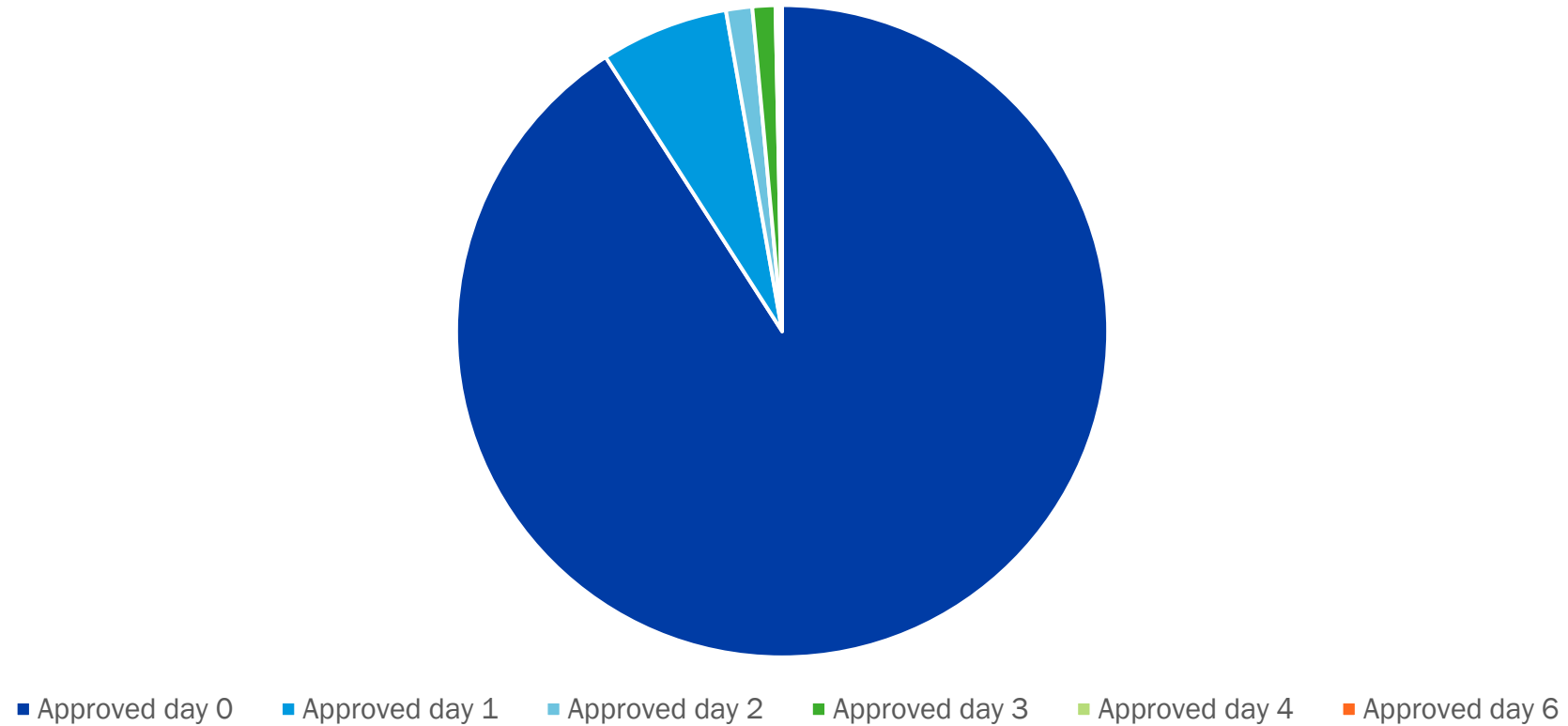
Streamline communication to address issues before and after discharge

- Pharmacist interventions close gaps to care via established escalation matrix

PRIOR AUTHORIZATION

– February 1, 2024 – August 31, 2024

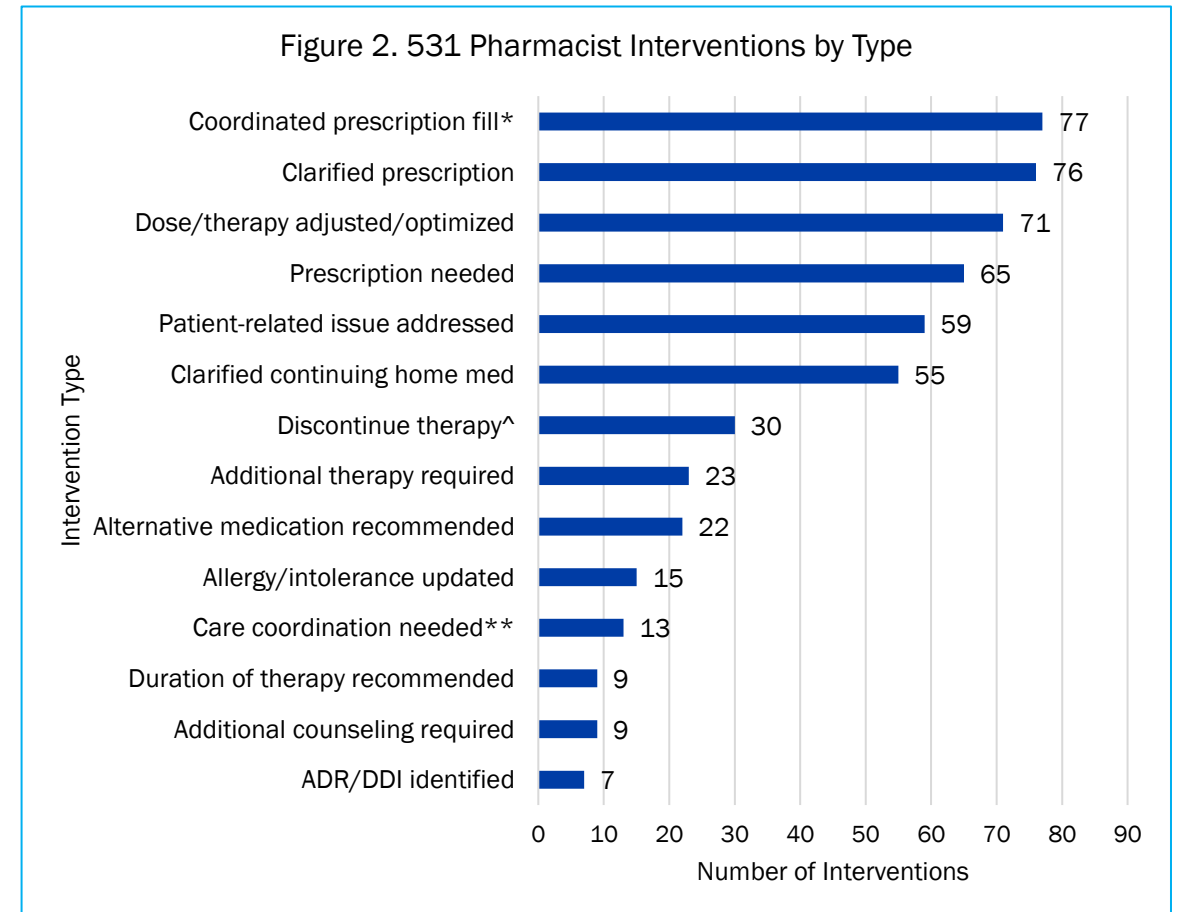
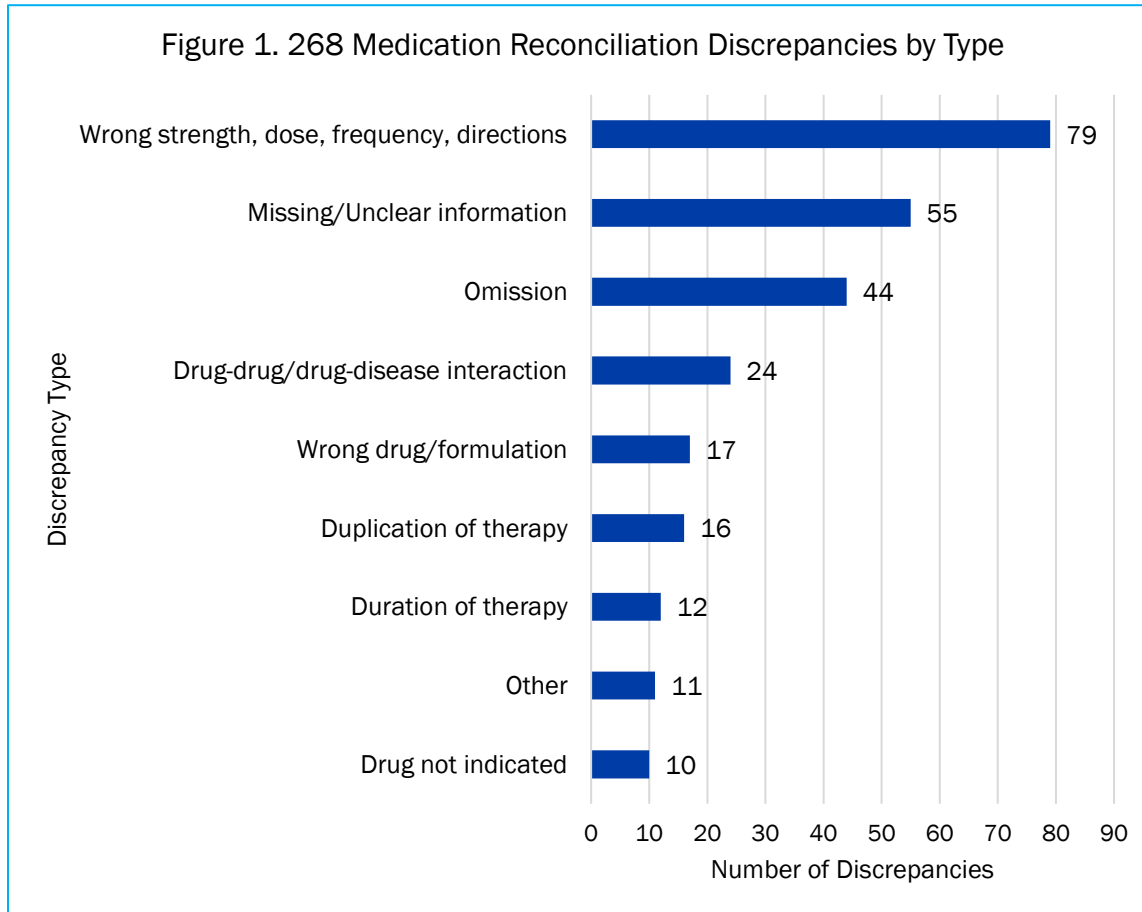
- 677 Prior authorizations initiated, resulting in 615 approvals and 62 denials



POST-DISCHARGE MEDICATION REVIEW

LIJ Pilot Results: 2/6/23 – 12/31/23

- 268 medication reconciliation discrepancies and 531 interventions resulted from 351 patient visits completed by TOC pharmacists (of 911 attempted; 38.5%)



READMISSION OUTCOMES

LIJ Pilot Results: 2/6/23 – 12/31/23

Category	30-day Readmission Rate (Control group)	30-day Readmission Rate (Intervention group)
All Patients*	14% (3466/24420)	13% (39/305)
SOI 3	18% (1376/7480)	13% (17/130)
SOI 4	21% (608/2836)	15% (7/47)

*Excludes obstetrics patients; SOI (severity of illness): severity adjustment to indicate how sick the patient is (i.e., "the extent of physiologic decompensation or organ system loss of function")



Methods

- Completed visits tracked by TOC Team
- All-cause, all-payer 30-day readmission data provided by KQMI
- Additional information (e.g., diagnosis, severity of illness) retrieved from Power BI

SUMMARY



Stroke patients face numerous barriers to accessing medications, including cost, insurance complexities



Barriers can lead to medication non-adherence, increasing the risk of hospital readmissions, poorer health outcomes, and reduced quality of life



Resources such as EPIC, copay cards, savings programs, \$4 generic medications, and PAPs may alleviate the burden of medication cost



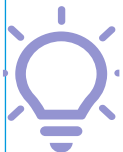
Prescribing 90-day supply of medications, medication synchronization, and home delivery services may improve medication access



In TOC programs, pharmacists play a vital role via medication reconciliation, medication education (adherence/side effects), dose adjustments



Pharmacists can improve patient outcomes including decreasing readmission rates, increasing medication adherence, and improving quality of life



Northwell's Vivo Health Pharmacy and its integrated pharmacist-led TOC program provides a unique solution to aid medication access and improve outcomes

LOOKING AHEAD...

Expansion

Longitudinal
patient
follow-up

Focused
disease
states

REFERENCES

1. Levine DA, Kiefe CI, Howard G, Howard VJ, Williams OD, Allison JJ. *Stroke*. Reduced medication access: a marker for vulnerability in US stroke survivors. 2007 May;38(5):1557-64. doi: 10.1161/STROKEAHA.106.478545
2. Nathans AM, Bhole R, Finch CK, George CM, Alexandrov AV, March KL. Impact of a pharmacist-driven poststroke transitions of care clinic on 30 and 90-day hospital readmission rates. *J Stroke Cerebrovasc Dis*. 2020 Apr;29(4):104648. doi: 10.1016/j.jstrokecerebrovasdis.2020.104648
3. Meinzer B, Healy A, Arnold A. Navigating barriers to medication access. Cardi-OH website. September 2024. Accessed October 28, 2024. <https://www.cardi-oh.org/files/resources/cardio-oh-navigating-barriers-to-medication-access.pdf>.
4. Hedegaard U, Kjeldsen LJ, Pottegård A, Bak S, Hallas J. *Cerebrovasc Dis Extra*. 2014 Dec 11;4(3):221-34. doi: 10.1159/000369380
5. Elderly Pharmaceutical Insurance Coverage (EPIC) Program. New York State Department of Health website. August 2024. Accessed October 18, 2024. https://www.health.ny.gov/health_care/epic/
6. Andres J, Stanton-Ameisen O, Walton S, Ruchalski C. Pharmacists' impact on secondary stroke prevention. *J Pharm Pract*. 2019 Oct;32(5):503-508. doi: 10.1177/0897190018766944
7. Hohmann C, Klotz JM, Radziwill R, Jacobs AH, Kissel T. Pharmaceutical care for patients with ischemic stroke: improving the patients quality of life. *Pharm World Sci*. 2009 Oct;31(5):550-558. doi: 10.1007/s11096-009-9315-y
8. Hohmann C, Neumann-Haefelin T, Klotz JM, Freidank A, Radziwill R. Adherence to hospital discharge medication in patients with ischemic stroke: a prospective, interventional 2-phase study. *Stroke*. 2013 Feb;44(2):522-4. doi: 10.1161/STROKEAHA.112.678847

THANK YOU



Northwell
Health®

VIVOHealth
Pharmacy