

Evaluation of a Social Determinants of Health Screening and Intervention Framework within an Integrated Health System Specialty Pharmacy Care Model

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DISCLOSURES
The authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation

BACKGROUND

Social determinants of health (SDOH) are non-medical factors that impact patients' medication use and health outcomes.¹

Integrated health system specialty pharmacies (HSSPs) and clinical pharmacists are uniquely positioned to identify and address barriers to SDOH, however there is a lack of published evidence supporting the impact of these programs. A SDOH screening and intervention framework was previously developed for a HSSP model.^{2,3}

METHODS



Process development: A standardized workflow for the SDOH framework was developed. Pharmacists completed interventions for patients with identified barriers.



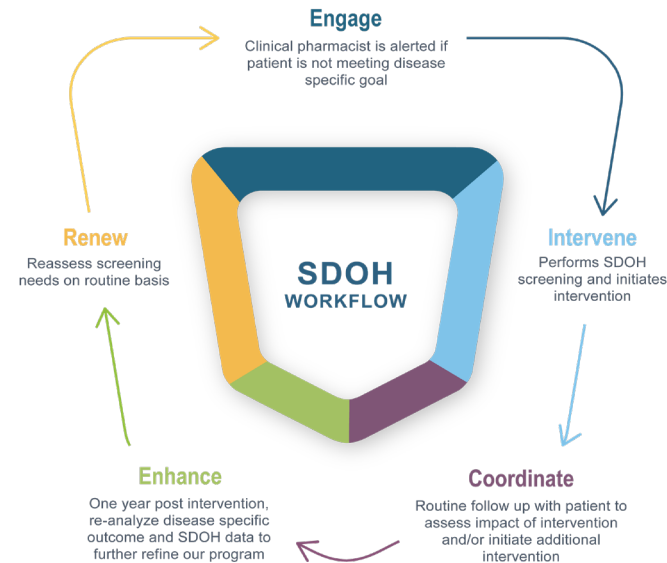
Inclusion Criteria:

- Patients actively filling medications for:
 - HIV with viral load > 200 copies/ml
 - Rheumatoid arthritis (RA) with RAPID3 score indicating high disease activity
 - Hyperlipidemia with LDL >100 mg/dL



Data Collection: The following metrics were collected for the enrolled population from September through December 2023: screening categories and acceptance rate, intervention acceptance, and pharmacist intervention time.

Figure 1: SDOH Workflow



RESULTS

The SDOH framework was piloted at four health systems with 50 patients not meeting outcomes in HIV (n=6; mean viral load: 218,810 copies/mL), RA (n=27; mean RAPID3 Score: 17.3), and hyperlipidemia (n=17; mean LDL: 114.4 mg/dL). Patient demographics and clinical characteristics are summarized in **Table 1**. Of the 50 patients enrolled, 28 (56%) completed screening, 14 (28%) declined, and 8 (16%) were unable to be reached. Of the 28 patients screened, 79% accepted and 21% declined the pharmacist recommendations. The most frequent screening categories included food security, physical activity, housing, utilities, social support, transportation, and preventive care screening documented using Z-codes. Mean pharmacist intervention time was 60 minutes per patient (range: 15-180 minutes; **Figure 3**).

Figure 2: Screening Outcomes

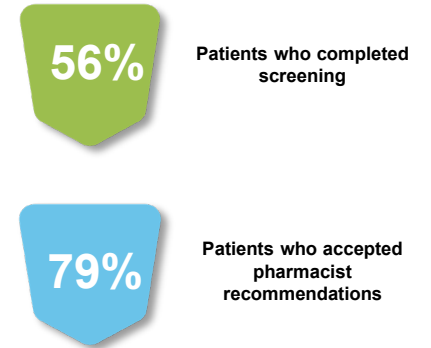


Table 1: Demographics and Clinical Characteristics

Measure		N=50
Age (years)¹		56
Sex (n, %)	M	14 (28)
	F	36 (72)
Race/Ethnicity (n, %)	American Indian or Alaska Native, non-Hispanic	1 (2)
	Black/African American alone, non-Hispanic	6 (12)
	White/Caucasian alone, non-Hispanic	35 (70)
	Hispanic/Latinx	7 (14)
	Unknown, non-Hispanic	1 (2)
Geographic Location (n,%)	MA	24 (48)
	MI	26 (52)
Insurance Type (n,%)	Commercial	10 (20)
	Medicare	20 (40)
	Medicaid	14 (28)
	Others	6 (12)
Comorbidities (n,%)	Hypertension	19 (38)
	Hyperlipidemia	14 (28)
	Heart Disease	9 (18)
	Diabetes	6 (12)
BMI (kg/m²) (n,%)	≥ 30	21 (42)
	25–29.9	15 (30)
	18.5–24.9	11 (22)
	< 18.5	2 (4)
	Unknown	1 (2)
Interventions per patient¹		2.1

¹ Mean

Figure 3: Top Intervention Categories



CONCLUSIONS

This SDOH framework highlights the critical role of HSSPs in addressing social determinants of health barriers through tailored interventions, as most patients accepted pharmacists' recommendations. In our study, we observed that the population was comprised mainly of white, non-Hispanic women (mean age: 56 years) with comorbidities, Medicare insurance, and an average of 2.1 interventions before screening. Future directions include measuring the impact of clinical pharmacist interventions on referral utility, disease-specific clinical outcomes, patient satisfaction, medication adherence, and absenteeism, while further investigating the specific characteristics and experiences of the population examined in this study.

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