



# CHWs Help Patients with Resources Needed and Saves the Health System Money

## Brookings Health System sees the cost savings benefits of CHW Program.

Brookings Health System’s CHW Program focuses on providing CHW services to frequent utilizers of the Emergency Room as well as patients with repeat hospital stays. The goals of the program are to decrease hospital readmissions, decrease unnecessary ER visits, and increase visits to primary care services.

## PATIENT BACKGROUND

A 40-year-old patient visited the Brookings Health System Emergency Department ten times between April 2022 and June 2023. One visit resulted in a 2-day hospitalization stay for observation. The patient did not have health insurance, nor did he qualify for SD Medicaid, and so he was not able to pay his medical bills. As a result, Brookings Health System had \$44,593 uncollected over 14 months.

## SERVICES PROVIDED

The Emergency Department referred the patient to the CHW in July 2022. The CHW contacted the patient and began working with the patient in mid-July 2022. The patient identified several social determinants of health (SDoH) issues. Over the next few months, the CHW continued to build trust and educate the patient on the importance of establishing care with a primary care provider (PCP) to receive appropriate levels of care. In addition to visiting a PCP, the patient was receiving mental health counseling. The CHW and mental health professionals addressed the SDoH issues with the patient.



**THE DECREASED COST OF THE EMERGENCY DEPARTMENT VISITS ACCOUNTING FOR THE COST OF THE CHW SALARY AND BENEFITS IS \$25, 291...THE RETURN ON INVESTMENT IS \$74 FOR EVERY \$1 SPENT ON CHW EXPENSES IN THIS CASE.**



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## PATIENT SUCCESSES

On November 8, 2022, the patient sought care at the clinic with their PCP for something he typically would have gone to the Emergency Department. The patient has sought care outside of the Emergency Department several times since November 8th and has only had one Emergency Department visit since then.

April 29, 2022*	\$3,389.00
July 12, 2022*	\$5,508.88
July 17, 2022**	\$12,595.23
August 25, 2022*	\$633.00
September 4, 2022*	\$2,379.00
September 9, 2022*	\$4,457.74
September 25, 2022*	\$456.00
October 6, 2022*	\$4,942.60
October 9, 2022*	\$881.00
June 3, 2023*	\$9,350.73
<b>TOTAL:</b>	<b>\$44,593.18</b>

CHW contacts patient

The CHW influences the patient to establish care with a primary care provider

\*Emergency Department

\*\*Emergency Department and Hospitalization

The CHW assisted the patient in enrolling in Medicaid due to newly available coverage due to Medicaid Expansion in South Dakota, and effective July 1, 2023, he now has coverage for future medical expenses.

## ADDITIONAL INFORMATION

### MEDICAID PERSPECTIVE

From Medicaid's perspective, it is less likely that the patient will utilize the Emergency Department as they have established primary care and mental health providers. One year (July 2022 – June 2023) of Emergency Department services was \$41,204. Organizations can invoice a maximum of 52 hours per year of CHW services to South Dakota Medicaid or \$3,373 (52 hours per year \* \$64.87 per hour). Therefore, the return on investment, assuming no further cost absorption, is \$12 for every \$1 spent on CHW expenses in this specific case ( $\$41,204 / \$3,373 = \$12.22$ ).

### BROOKINGS HEALTH CARE PERSPECTIVE

**Pre-Medicaid Coverage** - Brookings Health System had \$35,242 uncollected over eight months (March 2022 – October 2022) for nine Emergency Department visits.

After the CHW established a trusting relationship with the patient and persuaded them to establish care with a primary care provider in November 2022, Brookings Health System incurred \$9,951 due to one emergency room. The 20 hours of CHW services cost \$600 (\$30 per hour salary and benefits \* 20 hours). Therefore, the decreased cost of Emergency Department visits accounting for the cost of the CHW salary and benefits is \$25,291.

Mar – Oct 2022 (8 months)	Before CHW, PCP, and MH Intervention	\$35,242
Nov 2022 – June 2023 (8 months)	After CHW, PCP, and MH Intervention	- \$9,951
	Cost Savings	\$25,291

PCP = primary care provider  
MH = mental health provider

**Post-Medicaid Coverage** - Due to the efforts of the CHW, the patient is now covered by Medicaid. The medical and CHW services are eligible for Medicaid reimbursement. For example, if the patient had been covered by Medicaid prior to the CHW intervention, Brookings Health System could have invoiced Medicaid for 20 hours resulting in a payment of \$1,297 (\$64.87 per hour \* 20 hours). Therefore, Brookings Health System would secure \$697 above the CHW wage and benefit costs which will recoup overhead and other expenses. In addition, the Health System would invoice Medicaid for all medical services including but not limited to Emergency Department visits, laboratory services, radiology images, and ambulatory visits that were written off in the past. In this case, the return on investment is \$74 for every \$1 spent on CHW expenses in this case ( $\$44,593 / \$600 = \$74.32$ ).

### ORGANIZATION BACKGROUND

Brookings Health System serves the needs of Brookings and the surrounding communities. The health system includes the 49-bed Brookings Hospital, a 79-bed skilled nursing home, The Neighborhoods at Brookview, congregate living apartments for seniors, Brookhaven Estates, Arlington Medical Center, White Medical Clinic, Volga Medical Clinic, and Yorkshire Eye Clinic.

Brookings Health System is a non-profit, city-owned health system that offers the community a full range of inpatient, outpatient, surgery, home health, and extended care services.

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