Evidence to Support Increased Access to Mental Health and Substance Use Disorder Care Through Integration with Primary Care

VERMONT

- *Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration: Final Report*
  - "During 14 quarters of the MAPCP Demonstration and after accounting for the demonstration fees paid by Medicare, the MAPCP Demonstration resulted in **$64 million in Medicare savings relative to PCMH comparison practices**. Most of these savings were due to slower growth in expenditures for post-acute care and specialty physicians."
    - This resulted in a return-on-fees value of 4.49 over the demonstration period—**for every $1 spent on fees, there were savings of $4.49 in Medicare expenditures**.
      - $18 million dollars in Medicare fees + $82 million dollars in gross Medicare savings, resulting in the $64 million in Medicare savings
  - Community Health Teams (CHTs) "referred patients to community and family wellness programs, followed up and encouraged patients to schedule preventive care appointments, coordinated patient care between primary care practices and other providers or facilities, and followed up with patients after discharge from the hospital. Their care coordination efforts paid off **with improvements in care continuity and relative decreases in medical specialist visits among Medicare beneficiaries**."
    - The study found no evidence of savings among Medicaid Beneficiaries—"For child Medicaid beneficiaries, total Medicaid expenditures increased between $57 and $67 million, relative to the comparison groups (CGs). Total expenditures for adult Medicaid beneficiaries increased by $40 million, relative to PCMH comparison practices."There were inconsistencies in the statistical significance of evidence that the Blueprint for Health changed expenditures for adult Medicaid beneficiaries, so it is not possible to say if the increase was due to the demonstration or random variation.
    - Study authors note "when we look at quarterly trends of the running estimates for Medicaid expenditures, we found that the magnitude of some Medicaid expenditure growth categories is decreasing. Thus, it is possible that with a longer analysis period we would also see expenditures decrease for Medicaid Blueprint for Health beneficiaries."
  - Source:
    - RTI International, The Urban Institute at the National Academy for State Health Policy. Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration: Final Report; 2017.
- *St. Johnsbury Vermont Community Health Team Evaluation*
  - The CHT model in St. Johnsbury was associated with **increased efficiency within primary care, improved patient wellbeing, and increased patient adherence to treatment and attention to health**
    - "Health care providers who participated in the evaluation expressed that the CHT model has helped to streamline their practices. The model provides opportunities for providers to use the limited time available during patient encounters to provide more comprehensive care… Patients can get mental health services and other needs met often on the same day as their primary care visit."
    - Community health workers helped clients "with getting their basic needs met, such as

completing 'daunting' paperwork that resulted in supplemental nutrition assistance benefits, heating oil, supplemental income, support for hearing and sight aids, improved financial management, and housing assistance."

- "The St. Johnsbury CHT is an **innovative model of care** designed to **address health and psychosocial and economic needs of patients**"
  - It is an intervention intended to address social determinants of health which are crucial in "eliminating health disparities and improving overall health."
  - "Clients who participated in in-depth interviews reported that they were **more aware and attentive to their overall health** after receiving services."
  - "There were **statistically significant improvements** among CHW clients **in key aspects of well-being** targeted by the Community Connections CHWs, including: access to health insurance and prescription drugs, secure housing, and the need for health education counseling."
- Sources:
  - St. Johnsbury Vermont Community Health Team: Evaluation Summary. Centers for Disease Control and Prevention; 2014.
  - St. Johnsbury Vermont Community Health Team: Implementation Guide for Public Health Practitioners; 2015.

- *Qualitative Evaluation of Provider and Practice Staff and Blueprint-Related Team Members and Patient Perceptions Related to Adoption of the Blueprint for Health in Two Vermont Health Communities*
  - In Mt. Ascutney, where Blueprint was first adopted in 2006, providers identified the CHT as a key strength of Blueprint participation, stating that **"patient needs and issues that otherwise would not be, [are] now being addressed"** and **"when we work together, we can make a lot more headway than if it's just the doctor and nurse."**
    - Integration of mental health support within the primary care setting was noted to be particularly beneficial, with one staff member reporting: **"There are times when people just want to talk to someone…the doctors are on a tight schedule and they can say, there's somebody here that you can talk to, are you interested?...There are people that would not necessarily say, I need counseling, but yet they definitely want to talk over some things with someone."**
    - Patients also described many benefits of CHT engagement, including regular check-in calls from a Care Coordinator, improved access to diabetic testing equipment, added support for chronic disease self-management, assistance connecting with insurance programs, and improved access to transportation.
  - In St. Albans, where Blueprint adoption began in 2010, the CHT was not yet operational at the time of this study; however, the opportunity to integrate mental health support in the primary care setting was seen as a positive step by several interview participants.
    - One staff member stated, **"It also helps with the stigma, frankly. That's our biggest challenge no matter where we are. We know what is nice about this model [Blueprint] is we are identifying people who wouldn't seek behavioral health assistance until things really got bad...it has a prevention feel to it."**
  - Source:
    - Krulewitz J, Tolmie EC, Shaw J. *Qualitative Evaluation of Provider and Practice Staff & Blueprint Related Team Members and Patient Perceptions Related to Adoption of the Blueprint for Health In Two Vermont Communities*. Vermont Child Health Improvement Program; 2011.

- *Blueprint Annual Reports*
  - 2013 Annual Report
    - There were statistically significant decreases in total annual healthcare expenditures among all studied groups of commercially insured participants
      - **$386 (19%) lower for each commercially insured participant in the 1-17 age group**
      - **$586 (11%) lower for each commercially insured participant in the 18-64 age group**
    - When Special Medicaid Services (SMS) are excluded, total annual expenditures for Medicaid beneficiaries had statistically significant drops as well.
      - **$200 (11%) lower for each full Medicaid participant in the 1-17 age group**
      - **$447 (7%) lower for each full Medicaid participant in the 18-64 age group**
  - 2016 Annual Report
    - "The total expenditures per patient per year (excluding services covered only by Medicaid) was **$247 less for PCMH patients** relative to patients in the comparison group (P-value: <0.001) by Post-Year 4."
  - 2017 Annual Report
    - "One of the most consistent findings of the Blueprint's Patient-Centered Medical Home evaluations has been **lower average risk-adjusted expenditures for patients of Blueprint Patient-Centered Medical Homes relative to the comparison group."**
    - "In post-year 5, individuals attributed to a Blueprint Patient-Centered Medical Home had mean risk-adjusted total expenditures of $7,086, which was **$494 lower than the mean for individuals in the comparison group**…the rate of growth in risk-adjusted total expenditures across the eight-year window was **$322 lower for a typical patient attributed to a Blueprint Patient Centered Medical Home**" versus the comparison
    - When SMS are excluded, "the **typical Blueprint Patient-Centered Medical Home attributed patient had total risk-adjusted expenditures that were $532 lower than the typical patient in the comparison group**…PCMH-attributed patients **save an average of $404** in averted, risk-adjusted total expenditures excluding Special Medicaid Services by post-year five."
    - "In calendar year 2016, the work of the Patient-Centered Medical Homes and Community Health Teams was **able to avert between $50.8 million and $102.1 million** in total risk-adjusted medical expenditures," with an estimated return on investment for all payers of
      - **$3.00 saved** for every dollar spent, including SMS
      - **$3.80 saved** for every dollar spent, excluding SMS
  - 2018 Annual Report
    - "Vermont residents **receiving primary care in Blueprint PCMHs show significantly lower growth in inpatient expenditures** and about **half the growth in pharmacy costs** of Vermont residents receiving primary care in other settings"
    - Despite Blueprint PCMH patients having the highest of COPD, Diabetes, and Hypertension, they had the **lowest annual growth rates of these conditions**
    - Blueprint PCMH group had the **highest annual growth (4.5%) in Special Medicaid Services**, these include residential care, transportation, dental care, case management, school-based services. This demonstrates "increased connections between individuals and community and team-based care to address social, economic, and behavioral risk factors."

- 2019 Annual Report
  - "The Blueprint PCMH group had **lower Total Resource Use** in 2018 and **lower growth overtime** than the Other Primary Care group (16.6% growth versus 21.6% growth), despite the Blueprint PCMH group having higher disease burden"
  - In 2018 56% of Blueprint PCMH patients age 12-21 had an annual well visit vs. 46% of patients at other primary care offices
- 2020 Annual Report
  - 134 PCMHs serving 302,548 insurer-attributed patients in 2020 received an estimated $11,233,915 in PCMH payments
  - Of note, 2020 was the beginning of COVID-19 Pandemic and unprecedented challenges
- 2023 Annual Report
  - Claims data from the Vermont all-payer claims database (VHCURES) was analyzed in 2023 with patients attributed to Blueprint affiliated Patient-Centered Medical Homes, non-Blueprint affiliated primary care practices, or no primary care practice.
  - Analysis of this claims data from fiscal year ending June of 2022 indicates the **per member per year medical and pharmacy allowed claims for Blueprint attributed patients was $2,670 less than the per member per year medical and pharmacy allowed claims for non-Blueprint attributed patients**. The lower allowed amounts indicate that there is a cost difference between Blueprint attributed patients and non-Blueprint attributed patients, but this study was not a return on investment study and does not make statements about savings.
    The proportion of Blueprint attributed patients with mental health and/or substance use conditions with emergency department claims was less than the proportion non-Blueprint attributed patients with mental health and/or substance use conditions with emergency department claims. This difference was statistically significant at the p=0.01 level.
- Source:
  - State of Vermont Blueprint for Health. (2013-2023). *Vermont Blueprint for Health Annual Report*. State of Vermont Agency of Human Services.

- *Vermont's Community-Oriented All-Payer Medical Home Model Reduces Expenditures and Utilization While Delivering High-Quality Care*
  - A study published by the Blueprint Office revealed significant cost-savings associated with program participation between 2008 and 2013
    - "Participant group's **expenditures were reduced by $482** relative to the comparison."
    - This was largely driven by reductions in inpatient and outpatient hospital utilization and expenditures:
      - **Inpatient discharges were reduced by 8.8 per 1000 members** relative to the comparison group
      - **Inpatient days were reduced by 49.6 per 1000 members** relative to the comparison group
      - "Coinciding with lower expenditures and utilization, the participant group maintained **higher rates on 9 of 11 effective and preventive care measures** through Post-Year 2."
      - Including higher rates of adolescent well-care visits, breast cancer screening, and cervical cancer screening
    - "When applied to the 216,505 persons attributed to Post-Year 2 practices, the **total annual reduction in expenditures is $104.4 million**. Based on an annualized cost-gain

ratio, **medical expenditures decreased by approximately $5.8 million for every $1 million spent on the Blueprint initiative**."

- Source:
  - Jones C, Finison K, McGraves-Lloyd K, et al. Vermont's community-oriented all-payer medical home model reduces expenditures and utilization while delivering high-quality care. Popul Health Manag. 2016;19(3):196-205. doi:10.1089/pop.2015.0055

NEW HAMPSHIRE

- *Dartmouth-Hitchcock Health Community Health Workers January 2020 – June 2021 Program Report*
  - In an internal program assessment performed in March 2020:
    - 91.7% of surveyed primary care clinicians identified community health workers (CHW) and resource specialists (RS) to be **useful additions to the care team**
    - 83% of survey respondents reported that their team found the CHW/RS role to be helpful in **addressing the health-related social needs of their patients**
    - 83% of survey respondents reported that having a CHW or RS available in **clinic "lessened the amount of time clinical staff had to spend assisting patients."**
  - Source:
    - Kraft SA, L'Heureux BA. *Dartmouth-Hitchcock Health Community Health Workers January 2020- June 2021 Program Report*. Dartmouth-Hitchcock Population Health; 2021.
  - Multidisciplinary *Treatment of Opioid Use Disorder in Primary Care Using the Collaborative Care Model*
    - A 2-year pilot of a collaborative care model (CCM) for treatment of opioid use disorder (OUD) in five primary care clinics at Dartmouth-Hitchcock Health was associated with:
      - An increase in the number of primary care clinicians (PCPs) waivered to prescribe buprenorphine from 11 to 35, with 18 providers prescribing for 5 or more patients (increased from 2 prior to the intervention)
      - An increase in the mean number of patients newly initiated on buprenorphine from 4 to 18 per month
      - Report of generally positive experiences by participating PCPs who felt that "sharing care with the [behavioral health clinician] was effective and enjoyable"
    - **"In our** experience**, treatment of OUD in primary care utilizing the CCM effectively addresses OUD and commonly comorbid anxiety and depression and leads to an expansion of treatment."**
  - Source:
    - Brackett CD, Duncan M, Wagner JF, Fineberg L, Kraft S. Multidisciplinary treatment of opioid use disorder in primary care using the collaborative care model. *Subst Abus*. 2022; 43(1):240-244.

MASSACHUSETTS

- *Achieving the Triple Aim: Success with Community Health Workers*
  - A report published in 2015 by Mass Gov DPH demonstrating evidence from several CHW implementations across the country, including one based out of Massachusetts:
    - Boston Children's Hospital Pediatric Asthma Community-Based Case Management Program: RN supervised CHW home visits for low-income patients (primarily African

American and Latino children on Medicaid)
    - "The program cost of $254,871 was offset by an estimated $349,790 in savings from decreased ED visits and admissions. The **adj. ROI, calculated** by subtracting comparison from intervention group costs, **was 1.33**."
    - "Results: Two hundred and eighty-three children were served in the initial study. After twelve months there was a **significant decrease in asthma ED visits (68%) and hospitalizations (84.8%), and significant decreases in activity limitations, missed school days, and parental missed work time**"
  - Source:
    - Massachusetts Department of Public Health. Achieving the Triple Aim: Success with Community Health Workers. May 2015.

RHODE ISLAND

- *Impacts of Community-Based Care Program on Health Care Utilization and Cost*
  - The CHT program at Thundermist Health Center in West Warwick, Rhode Island led to significant reductions in hospitalizations and inpatient costs
    - "This translates into a **reduction of 7 hospitalizations per 1000 people per month** and a **reduction of inpatient cost amounting to $289 per person per month**."
  - Source:
    - Thapa BB, Li X, Galaragga O. Impacts of Community-Based Care Program on Health Care Utilization and Cost. *Am J Manag Care.* 2022;28(4):187-191.
- *Community Health Team Overview & Results – Care Transformation Collaborative Rhode Island*
  - A Brown University study from 2020 found that engagement with the South County CHT was associated with significant cost-savings over the 4-year study period, specifically identifying:
    - **An annual ROI of $2.85 for every $1.00 spent**
    - **"A difference of $1563 in total cost of care for each quarter after CHT enrollment"**
  - Source:
    - Community Health Team Overview & Results. Care Transformation Collaborative Rhode Island. Published May 20, 2020. Accessed December 16, 2022.
- *State Innovation Model (SIM) Community Health Team Final Evaluation Report*
  - A University of Rhode Island program analysis including data from 7 CHTs at four clinical sites across the state found that CHT participation was associated with:
    - Statistically **significant reductions in health risk scores, "unhealthy days," social determinants of health, depression, anxiety, and substance use**
    - Statistically significant improvements in health knowledge, treatment adherence, and well-being
    - High degrees of patient satisfaction
  - Source:
    - *SIM Community Health Team Final Evaluation Report*. University of Rhode Island, Rhode Island State Evaluation Team; 2019.

ARKANSAS

- *Arkansas Community Connector Program*
  - Implemented in 2005-2008 by Tri-County Rural Health Network with funding from Arkansas Medicaid and Robert Wood Johnson Foundation

        - Compared high-risk Medicaid patients enrolled in CHW-based Community Connector Program with similar Medicaid recipients not enrolled in the program
        - Measured spending related to inpatient and outpatient medical services, nursing home services, home and community services
            - "Overall, the Community Connector Program produced **total estimated savings of $3.515 million in Medicaid expenditures** for 919 program participants during the three-year demonstration period. During this same period, the program incurred $896,000 in operational expenses, resulting in a net savings of $2.619 million for the Medicaid program, or a **return on investment of $2.92 per dollar invested** in the program."
    - Source:
        - Felix HC, Mays GP, Stewart MK, Cottoms N, Olson M. The Care Span: Medicaid savings resulted when community health workers matched those with needs to home and community care. *Health Aff (Millwood)*. 2011; 30(7):1366-1374. doi:10.1377/hlthaff.2011.0150.

KENTUCKY

- *Kentucky Homeplace: Community Health Initiative for Rural Appalachia area*
    - "From July 2001 to June 2024, Kentucky Homeplace served 196,801 clients and provided 5,344,547 services with a combined medication and service value of $416,537,169. The **return on investment (ROI) is $11.33 saved for every $1 invested**."
    - 2016-2018 Pilot Program as a part of Kentucky Homeplace provided 6-week health workshops for participants for chronic diseases (including asthma, diabetes, hypertension, obesity) focused on nutrition, medication, physical activity, and mental health
        - "The pilot program reached almost 2,000 rural Kentuckians in 30 counties. A year after the pilot, Kentucky Homeplace reported that participants had a **10% reduction in emergency room (ER) visits, a nearly 13% reduction in non-emergency ER visits**, and a **23% decrease in inpatient admissions**. Hospital inpatient days dropped by more than 27%, and **WellCare estimates that the cost of healthcare for participants dropped by 13.5%, or almost $2,300 per year**."
    - Source:
        - Kentucky Homeplace. Rural Health Info. Accessed January 8, 2025.

MICHIGAN

- *Positive Physician Perceptions of Integrated Primary Care*
    - A study at Henry Ford Health System in Detroit found that physicians were highly satisfied with the presence of an integrated behavioral health clinician in the primary care setting
        - **93.8% reported that** integrated **care directly improves patient care**
        - **90.3%** reported that **integrated care is a necessary service**
        - **90.1%** reported that **integrated care reduces their personal stress level**s
    - Source:
        - Miller-Matero LR, Dykuis KE, Albujoq K, et al. Benefits of integrated behavioral health services: The physician perspective. *Fam Syst Health*. 2016;34(1):51-55.
    - Positive *Impact of Mental Health/Substance Use Disorder Integration*
    - At a 2021 meeting of the Behavioral Health Integration Collaborative hosted by the American Medical Association, initiatives within the Henry Ford Health System were highlighted as high-

quality examples of the way integrated primary care has the potential to reduce physician burnout
        - "**Behavioral integration is one of those initiatives that can really address the fourth aim, which is improving the work-life balance for health care professionals**." —Dr. Doree Ann Espiritu, Medical Director of the Behavioral Health Services Adult Outpatient Division of Henry Ford West Bloomfield Hospital
    - Source:
        - Berg S. How behavioral health integration helps beat physician burnout. American Medical Association. Published August 24, 2021. Accessed December 17, 2022.

NEVADA

- *Community Health Worker Return on Investment Report 2017*
    - A study based in Las Vegas examined the impact of 30-60 days of CHW support on patients with high utilization of the ER
        - Intervention was associated with a decrease in acute hospital admissions by 18%, a decrease in acute readmissions by 20%, a decrease in ER visits by 14%, and a decrease in urgent care visits by 6%
        - Overall medical costs (including pharmacy) decreased by $503,384 (-8% difference) 90 days after CHW intervention compared with the 90 days prior to CHW involvement
            - "The Return on Investment (value of the benefits divided by the costs of the program) was calculated by dividing the $503,384 savings from the CHW intervention period by the $278,331 cost of the CHW program for the 14-month intervention period, yielding a benefit cost ratio of 1.81:1. In other words, **for every $1 HPN invested in the CHW program, HPN saved $1.81 in medical and pharmacy costs**."
    - Source:
        - Christiansen E, Morning K. Community Health Worker Return on Investment Study Final Report. May 31, 2017.

NEW MEXICO

- *Integrated Primary and Community Support (I-PaCS) model*
    - A pilot program implemented by Molina Healthcare of New Mexico (MHNM), a Medicaid MCO, in 2005. MHNM partnered with three clinic sites: University of New Mexico clinics in Albuquerque and Las Cruces and Hidalgo Medical Services, an FQHC, in Silver City
        - Community Health Workers (CHWs) provided intensive support to patients with complex health and social needs
        - "Financial support for the CHWs and the services they provided came from an additional per-member-per-month (PMPM) payment that MHNM paid to the clinics for each MHNM patient with complex health and social needs that received CHW services. For each of these individuals, MHNM paid the clinics an additional $256 PMPM in 2005, which was increased to $306 in 2007 and later to $321 in 2009."
        - "**After six months of receiving this intensive support from CHWs, patients across the three different sites had fewer visits to the ED, fewer inpatient admissions, and used fewer prescriptions.** As a result, **the program saved $4 for every $1 invested in it**. Responses from patients who received services from this pilot also indicated its success, as **patients were glad to have help in completing important preventive screenings**,

including for blood glucose and cholesterol levels, and for breast and cervical cancer."
    - "Building on the success of the model described above, UNM, Hidalgo Medical Services, and MHNM came together to test an expansion of the pilot program to help lower-risk patients and improve community health and prevention with CHWs. To support this expanded model, MHNM paid a smaller PMPM (between $6 and $11) for each non-complex MHNM patient receiving services from the clinics to support two additional components of I-PaCS: Comprehensive Patient Support (ComPS) and Community Health Improvement Strategy (CHIS)...Though evaluation of the ComPS and CHIS is still in its preliminary stages, **early results are promising and indicate patients are better connected to care and have greater uptake of preventive services. There is also improved satisfaction among providers who are working with CHWs**."
  - Source:
    - Albritton E, Hernández-Cancio S. Blueprint for Health Care Advocacy: How Community Health Workers Are Driving Health Equity and Value in New Mexico. A Case Study. FamiliesUSA The Voice for Health Care Consumers. Published November 11, 2017.

NEW YORK

- *New York Medicaid Redesign Team (MRT) and the Delivery System Reform Incentive Payment (DSRIP) Program*
  - A multiphase initiative for state-wide Medicaid reform emphasizing "care management for all," establishment of patient-centered medical homes (PCMHs), and integration of behavioral health services within primary care
    - PCMHs focused on providing intensive case management for high-risk patients and demonstrated **improved quality outcomes, exceeding statewide results on 20 out of 24 key performance indicators including all 6 behavioral health hospital follow-up measures**
    - Members receiving care at PCMHs demonstrated **consistently lower risk-adjusted healthcare when compared to peers who did not receive care at a PCMH (e.g., $6,012 vs $6,291 gross cost per member per year April 2018 – March 2019)**
  - Source:
    - *A Plan to Transform the Empire State's Medicaid Program: Multi-Year Action Plan*. New York State Department of Health; 2016.
    - New York State Department of Health. New York Medicaid Redesign Team II Public Meeting: Keeping the Medicaid Promise. February 2020.
      - *Final Summative Report by* the *Independent Evaluator of the New York State Delivery System Reform Incentive Payment (DSRIP) Program*
  - Independent assessment of Medicaid reform in New York between 2014 and 2019 revealed:
    - Improvements **in preventable hospital admissions by 26.1%**
    - Improvements **in preventable hospital readmissions by 18.1%**
    - An increase in PCMH achievement by 29.6%
  - Cost **analysis was significant for decreased per member per month expenditures** within the following categories over a 5-year period:
    - Primary care = 4.6%
    - Behavioral health = 3.7%
    - Inpatient medicine = 11.9%
    - Emergency medicine = 8.4%

- Partner surveys highlighted high degrees of satisfaction with system transformation projects, citing "**stronger and more effective care collaboration"** and **"integration of primary care and behavioral health"** among other key themes
- Source:
  - Weller W, Martin E, Boyd D, et al. *Final Summative Report by the Independent Evaluator for the New York State Delivery System Reform Incentive Payment (DSRIP) Program*. State University of New York, University at Albany; 2021.

- *The DSRIP Program ended March 2020, however, the New York State Department of Health continues to work with CMS on Value Based Payment and Alternative Payment Models*
  - To ensure continuation of best practices and alignment with the state's overall goals, the Value Based Payment (VBP) Roadmap (an integral part of the DSRIP) has continued to be updated as part of ongoing contracting with Managed Care Organizations
    - "Payment should be concurrently tied to both the outcomes of care delivery and efficiency"
    - Quality measures review Total Care for the General Population Arrangements, Total Care for Special Needs Population Arrangements (includes following subpopulations: Children, Behavioral Health/Health and Recovery Plans, People Living with HIV/AIDs, Managed Long-Term Care) and Episodic Care Arrangements (Maternity Care)
    - Annual data collection on Integrated Primary Care was discontinued after 2021 ("NYSDOH found that standard IPC definitions were not being used. As a result, NYSDOH is reevaluating its data and analytic capabilities to support chronic care and primary care bundles. While this reevaluation takes place, data and analytic support for the chronic care and primary bundles will be suspended")
  - Source:
    - *Value Based Payment Update: New York State Roadmap for Medicaid Payment Reform*. New York State Department of Health Medicaid Redesign Team; 2022.

OHIO

- *Benefits of Integrated Primary Care in the Pediatric Setting*
  - At Nationwide Children's Hospital, integrated behavioral health clinicians collaborate with primary care providers to address a wide range of mental health, behavioral, and social needs for children and families, **allowing patients to access same day supports in their pediatrician's office, while allowing providers to see more patients and manage their clinic sessions more efficiently**
  - "If there is something complex or needing extra attention, the psychologist can go into the room and address that with the patient and the family while the pediatrician goes and sees other patients and comes back." —Alex Kemper, MD, MPH, MS, Division Chief of Primary Care Pediatrics
  - "A big part of our job is to take some of the stress off our pediatricians and other providers, while giving families some immediate strategies and a plan for the next step." —Whitney Raglin Bignall, PhD, Psychologist at Nationwide Children's Hospital
  - **"Integration seems to be a more palatable, tolerable, accessible, less stigmatizing approach to treatment for a lot of people**...By engaging in mental health treatment in collaboration with a primary care physician who knows the family and has their trust, and by doing it in a medical setting, more people are willing to engage in treatment." —Cody Hostutler, PhD, Psychologist at Nationwide Children's Hospital

- Source:
  - Bates M. Integrating behavioral health and primary care increases access and equity. Pediatrics Nationwide. Published September 22, 2022. Accessed December 17, 2022.

- *Community Health Access Program (CHAP) for At-Risk, Low-income Pregnant Women*
  - Matched case-control design comparing 115 CHAP clients to 115 pregnant women with similar risk factors; evaluated efficacy of program on reducing poor birth outcomes, particularly low birth weight
    - CHWs conducted home visits, identified risk factors, provided needed social support
    - **One-year cost** savings **was $3.36, long-term savings were $5.59**
    - Cost estimates of outcomes derived from Medicaid estimates
  - Source:
    - Redding S, Conrey E, Porter K, Paulson J, Hughes K, Redding M. Pathways community care coordination in low-birth-weight prevention. *Matern Child Health J*. 2015;19(3):643-650. doi:10.1007/s10995-014-1554-4.

PENNSYLVANIA

- *Evidence-Based Community Health Worker Program Addresses Unmet Social Needs and Generates Positive Return On Investment*
  - Cost-effectiveness analysis of a 6-month intervention in which community health workers provided "tailored social support for high-risk patients" in Philadelphia
  - "**Overall, a team of community health workers saved Medicaid $1,401,307.99.** This savings divided by program expenses ($567,950.82) **yielded a return of $2.47 for every dollar invested, realized within a single fiscal year**. In a sensitivity analysis that varied the number of admissions and outpatient visits attributable to the intervention, we found that the return ranged from $1.84 to $3.09"
    - Net savings to Medicaid within a single fiscal year were $833,357.17
  - Source:
    - Kangovi S, Mitra N, Grande D, Long JA, Asch DA. Evidence-based community health worker program addresses unmet social needs and generates positive return on investment: A return on investment analysis of a randomized controlled trial of a standardized community health worker program that addresses unmet social needs for disadvantaged individuals. *Health Aff (Millwood)*. 2020;39(2):207-213. doi:10.1377/hlthaff.2019.00981.
- *Randomized Control Trial on Post Hospitalization Results with Community Health Worker Involvement*
  - In a RCT in Pennsylvania,, the use of Community Health Workers demonstrated a **significant increase in post-hospital PCP visits, higher quality verbal discharge communication, and improved mental health**.
  - There was also a **modest reduction in readmission rates** with Community Health Worker involvement.
  - Source:
    - Kangovi S, Mitra N, Grande D, et al. Patient-Centered Community Health Worker Intervention to Improve Posthospital Outcomes: A Randomized Clinical Trial. JAMA Intern Med. 2014;174(4):535–543. doi:10.1001/jamainternmed.2013.14327.

WASHINGTON

- *Collaborative Care Management of Late-Life Depression in the Primary Care Setting: A Randomized Controlled Trial*
    - The intervention, referred to as the Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) program, consisted of a "primary-care based collaborative care model for late-life depression"
    - "**At 12 months, 45% of intervention patients had a 50% or greater reduction in depressive symptoms from baseline compared with 19% of** usual **care participants"**
    - Source:
        - Unützer J, Katon W, Callahan CM, et al. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. *JAMA*. 2002;288(22):2836-2845. doi:10.1001/jama.288.22.2836.
- *Long-term Cost Effects of Collaborative Care for Late-Life Depression*
    - Long-term cost analysis of the IMPACT intervention above demonstrated that individuals who participated in collaborative care had significantly lower healthcare costs than those who received care as usual
    - "Intervention patients had 4-year mean total healthcare costs of $29,422…and usual care patients had mean total healthcare costs of $32,785…**representing a cost savings among intervention patients of $3,363…per patient on average during 4 years."**
    - Source:
        - Unützer J, Katon WJ, Fan MY, et al. Long-term cost effects of collaborative care for late-life depression. *Am J Manag Care*. 2008;14(2):95-100.
- *Financial Alignment Initiative (FAI) Washington Health Home Managed Fee-for-Service (MFFS) Demonstration: Fifth Evaluation Report*
    - This demonstration, which took place between July 2013 and December 2019:
        - Adds care coordination as a Medicaid-covered benefit
        - Targets high-cost, high-risk beneficiaries
        - Leverages health homes for care coordination
    - "Our analysis found **statistically significant Medicare Parts A and B savings** as a result of the demonstration. Savings for inpatient services, outpatient services, physician services, and SNF services contributed to overall Medicare Parts A and B savings"
        - 2013 – 2016 = average savings of $155.02 per member per month
        - 2017 – 2019 = average savings of $237.90 per member per month
        - A pamphlet summarizing this report notes that **the Washington demonstration has resulted in approximately $297 million dollars in net savings to Medicare between July 2013 and December 2019**
        - **This** report **did not find any evidence of savings for Medicaid beneficiaries. The report presents descriptive statistics, noting that Total Medicaid spending per user month amongst the eligible population increased from $2,465.06 to $2,684.15 from 2017 to 2019.**

          The report was unable to do a more in-depth analysis to determine if this increase was a result of the demonstration. "Due to incompleteness in the Medicaid data in 2016 and prior years, we are only able to examine the Medicaid spending for the most recent years of the FAI demonstration. This data incompleteness in Washington, where a large proportion of the claims for personal care services in Washington are missing from the Medicaid data in 2016 and earlier, prevents us from estimating a DinD [Difference-in-

Differences] impact analysis for this report."

- Source:
  - RTI International. *Washington Health Home MFFS Demonstration: Fifth Evaluation Report*; 2022.
  - Financial Alignment Initiative (FAI) Washington Health Home Managed Fee-for-Service (MFFS) Demonstration. Centers for Medicare and Medicaid Services. Accessed December 16, 2022.

NATIONAL DATA

• *Adult Primary Care Physician Visits Increasingly Address Mental Health Concerns*

- Recent analysis of nationally representative serial cross-sectional data from 2006-2018 National Ambulatory Medical Care Surveys identified a significant increase in the proportion of visits to primary care clinicians by patients eighteen and older that addressed a mental health concern
  - "**The prevalence of mental health concerns being addressed during primary care visits increased by almost 50 percent during the study period**, representing 15.9 percent of all visits by 2016 and 2018…This increase was larger than what would be expected on the basis of national estimates, which show that the prevalence of any mental illness among US adults increased from 17.7 percent in 2008 to 21.0 percent in 2020, or an 18.6 percent increase."
  - **"These findings emphasize the need for payment and billing approaches (that is, value-based care models and billing codes for integrated behavioral health) as well as organizational designs and supports (that is, colocated therapy or psychiatry providers, availability of e-consultation, and longer visits) that enable primary care physicians to adequately address mental health needs."**
- Source:
  - Rotenstein LS, Edwards ST, Landon BE. Adult primary care physician visits increasingly address mental health concerns. *Health Aff (Millwood)*. 2023;42(2):163-171. doi:10.1377/hlthaff.2022.00705.

- *The State of Integrated Primary Care and Behavioral Health in the United States*
  - National data compiled by the Robert Graham Center prior to the COVID-19 pandemic revealed an estimated **$114.1 billion in excess healthcare expenditures attributable to underlying mental illness or psychological distress**

Figure 11. Estimated Excess Expenditures due to Psychological Distress and Mental Illness (Dollars ($) in Billions)

	Overall	White	Black	Asian	Other/ Multi-race	Hispanic
Excess Expenditures attributable to Diagnosis of Mental Illness	65.7	50.7	6.7	0.5	3.7	4.1
Excess Expenditures attributable to Serious Psychological Distress	22.2	15.7	2.3	0.8	0.7	2.7
Excess Expenditures from Serious Psychological Distress and Diagnosis of Mental Illness	26.1	18.5	3.3	0.3	1.1	2.9
Total Excess Expenditures	**$114.1**	**$84.9**	**$12.4**	**$1.6**	**$5.5**	**$9.7**

- "Having a mental health clinician (in my case, a social worker) in our community health center when I was practicing family medicine was crucially important. The fact that I could 'walk someone down' to her office to get help for acute distress was useful to me and beneficial to the patient. But there was also an educational aspect to it: I would get feedback from her that improved my care of future patients. Because we shared parts of the same medical records, I could also see her comments about other patients of mine that she had seen, improving my sensitivity to mental health issues in those patients. Similarly, she would occasionally bring me patients whom she had seen to get their medical problems taken care of. It was collaboration in the best sense." – Douglas B. Kamerow, MD, MPH, Senior Scholar at the Robert Graham Center and Professor of Family Medicine at Georgetown University
- Source:
  - Westfall JM, Jabbarpour Y, Jetty, A, Kuwahara R, Olaisen H, Byun H, Kamerow D, Guerriero M, McGehee T, Carrozza M, Topmiller M, Grandmont J. Rankin J. *The State of Integrated Primary Care and Behavioral Health in the United States*. Robert Graham Center, HealthLandscape; 2022.

- *Community Preventive Services Task Force*
  - Established by the U.S. Department of Health and Human Services in 1996 to develop guidance on community-based health promotion and disease prevention
  - Works to improve the health of communities by "issuing evidence-based recommendations and findings on public health interventions designed to improve health and safety"
    - 2023 Annual Report to Congress included four key recommendations for priorities/research:
      - Family-based interventions for substance use prevention in youth
      - Emphasis on physical activity - economic benefits exceed the cost for park, trail, and greenway infrastructure
      - Support for cancer screening - **utilizing patient navigation services to increase breast cancer screening is cost-effective**
      - Further research on multi-tiered trauma-informed school programs - currently insufficient evidence whether they reduce PTSD or improve mental health

- Source:
    - Community Preventive Services Task Force. *2023 Annual Report to Congress*. The Community Guide; 2023.
- *Systematic Review on the Effects of Community-Based Health Worker Interventions for Management of Chronic Diseases in Vulnerable Populations*
    - Community-based health workers provided a wide array of interventions including education, counseling, case management, social services/social support, and navigation assistance
    - **70% of studies** found **improvements in** cancer **screening behaviors with CBHW**
        - Majority demonstrated increased mammograms (6% to 33% increases) and Pap smears (7% to 29% increases)
        - One study found a significant increase in colorectal cancer screening, but two others showed no significant difference
    - **16** studies **found a significant effect on CVD risk reduction**
        - 56% of studies demonstrated significantly improved lipid profile
        - 50% of studies demonstrated significantly improved BP control
        - 75% of studies demonstrated significant improvements in diabetes control
    - Source:
        - Kim K, Choi JS, Choi E, et al. Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations: A Systematic Review. Am J Public Health. 2016;106(4):e3-e28. doi:10.2105/AJPH.2015.302987.
- *Healthcare Innovation Awards and Meta-Analysis*
    - A meta-analysis of more than one hundred innovative care delivery models aimed at improving outcomes for Medicare, Medicaid, and CHIP beneficiaries
        - "Of six types of innovation components that we evaluated (i.e., used health IT, used community health workers, medical home intervention, focus on behavioral health, used telemedicine, workflow/process redesign intervention), **only innovations using community health workers (CHWs) were found to lower total costs (by $138 per beneficiary per quarter)."**
    - Source:
        - Centers for Medicare & Medicaid Services. Health Care Innovation Awards Meta-Analysis and Evaluators Collaborative Annual Report. February 2018.
- *Social Return on Investment: Community Health Workers in Cancer Outreach*
    - **"The** net **benefits per person served by CHWs reach $6,990 or $481,920 per CHW. We estimate that for every dollar invested in cancer outreach using CHWs, the society receives 2.3 dollars in return."**
        - This analysis is based on cancer incidence and mortality rates from the US Census Bureau, U.S. National Center for Health Statistics, and National Vital Statistics Reports
        - Fiscal benefits are attributed to a combination of years of life saved by cancer screenings (allowing for increased productivity, income, and taxation) as well as reductions in urgent care utilization following CHW outreach and education
    - Source:
        - Diaz J. Social return on investment: Community Health Workers in cancer outreach. Wilder Research. Published online June 2012.
- *MHP Salud: A Program to Support Underserved Latino Communities Across the U.S. with Community Health Workers*
    - This program has reached more than 350,000 individuals since 2018

        - Scope of the CHW role includes outreach, health education, case management, application assistance, and prevention and management of chronic conditions
        - CHWs also address maternal and child health, sexual health, and intimate partner violence
        - Close collaboration with community-based organizations is prioritized
    - Cancer prevention program (*Cada Paso del Camino*) was implemented in Texas 2015-2018: "program was extremely cost-effective, with a **return of $3.16 for every $1 spent on the program**"
    - Diabetes management program (*Salud y Vida*) implemented in Texas 2014-2018 "demonstrated **positive ROI with a return of $1.09 for every $1 invested in the program**"
    - Source:
        - Community Health Workers and Return on Investment (ROI). MHP Salud. Accessed December 19, 2024.

INTERNATIONAL DATA

- *Collaborative Care for Depression and Anxiety Problems: A Cochrane Review*
    - Systematic review and meta-analysis of 79 randomized controlled trials including 24,308 patients demonstrated **significantly greater improvements in depression and anxiety outcomes among individuals receiving collaborative as opposed to usual care**
    - Collaborative care was also found to be associated with improvements in mental health quality of life and higher rates of patient satisfaction than usual care
    - Source:
        - Archer J, Bower P, Gilbody S, et al. Collaborative care for depression and anxiety problems. *Cochrane Database Syst Rev*. Oct 17 2012;10:CD006525. doi:10.1002/14651858.CD006525.pub2