

# 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**.”
  - 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. <https://downloads.cms.gov/files/cmimi/mapcp-finalevalrpt.pdf>
- *Vermont Results First Inventory and Benefit-Cost Analysis: Department of Health / Division of Alcohol and Drug Abuse Program’s Medication Assisted Treatment for Opioid Use Disorder (Hub and Spoke) Final Report*
  - “Spokes are cost effective 70% of the time, with a benefit-cost ratio of \$1.18. This means that **for every \$1 spent, there’s a return of \$1.18**.”
  - Source:
    - Crime Research Group. Vermont Results First Inventory and Benefit-Cost Analysis: Department of Health / Division of Alcohol and Drug Abuse Program’s Medication Assisted Treatment for Opioid Use Disorder (Hub and Spoke); 2017. <https://blueprintforhealth.vermont.gov/sites/bfh/files/VT%20Results%20First%20Inventory%20and%20Benefit-Cost%20Analysis%20for%20the%20Hub%20and%20Spoke%20Model%202017.pdf>
- *St. Johnsbury Vermont Community Health Team: Evaluation Summary*
  - 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.”
  - Source:

- St. Johnsbury Vermont Community Health Team: Evaluation Summary. Centers for Disease Control and Prevention; 2014.  
[https://www.cdc.gov/dhdsp/docs/es\\_stjohnsbury\\_community.pdf](https://www.cdc.gov/dhdsp/docs/es_stjohnsbury_community.pdf)
- *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 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 supports 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 supports 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.  
<https://blueprintforhealth.vermont.gov/sites/bfh/files/Vermont%20Blueprint%20for%20Health%202011%20Annual%20Report%20Supporting%20Document%20-%20Qual%20Eval%20of%20Perceptions%20Related%20to%20Adoption%20of%20Blueprint%20in%202%20VT%20Communities.pdf>
- *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
  - Source:
    - State of Vermont Blueprint for Health. (2013-2017). *Vermont Blueprint for Health Annual Report*. State of Vermont Agency of Human Services. [Blueprint Annual Reports | Blueprint for Health \(vermont.gov\)](#)
- *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 [Vermont's Community-Oriented All-Payer Medical Home Model Reduces Expenditures and Utilization While Delivering High-Quality Care - PMC \(nih.gov\)](#)

## 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) waived 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. doi:10.1080/08897077.2021.1932698 <https://doi.org/10.1080/08897077.2021.1932698>

## 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. <https://doi.org/10.37765/ajmc.2022.88862>
- *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. <https://www.ctc-ri.org/community-health-team-overview-results>

- *State Innovation Model (SIM) Community Health Team Final Evaluation Report*
  - A University of Rhode Island program analysis including data from 7 CHTs at 4 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.  
<https://eohhs.ri.gov/sites/g/files/xkgbur226/files/Portals/0/Uploads/Documents/SIM/CommunityHealthTeamStateEvaluation-Final.pdf>

## 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)**
  - Report Source:
    - *A Plan to Transform the Empire State’s Medicaid Program: Multi-Year Action Plan*. New York State Department of Health; 2016.  
[https://www.health.ny.gov/health\\_care/medicaid/redesign/docs/mrtfinalreport.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/docs/mrtfinalreport.pdf)
  - Presentation Source:
    - New York State Department of Health. New York Medicaid Redesign Team II Public Meeting: Keeping the Medicaid Promise. February 2020.  
[https://www.health.ny.gov/health\\_care/medicaid/redesign/mrt2/docs/2020-02-11\\_presentation.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/mrt2/docs/2020-02-11_presentation.pdf)
- *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. [https://www.health.ny.gov/health\\_care/medicaid/redesign/dsrp/2021/docs/2021-08-24\\_final\\_summative\\_rpt.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/dsrp/2021/docs/2021-08-24_final_summative_rpt.pdf)

## 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 [Collaborative Care Management of Late-Life Depression in the Primary Care Setting: A Randomized Controlled Trial | Depressive Disorders | JAMA | JAMA Network](#)
- *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. [Long-term Cost Effects of Collaborative Care for Late-life Depression \(ajmc.com\)](#)
- *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**
  - Report Source:

- RTI International. *Washington Health Home MFFS Demonstration: Fifth Evaluation Report*.; 2022. <https://innovation.cms.gov/data-and-reports/2022/fai-wa-er5>
  - Pamphlet Source:
    - Financial Alignment Initiative (FAI) Washington Health Home Managed Fee-for-Service (MFFS) Demonstration. Centers for Medicare & Medicaid Services. Accessed December 16, 2022. <https://innovation.cms.gov/data-and-reports/2022/fai-wa-er5-aag>

## 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 [Evidence-Based Community Health Worker Program Addresses Unmet Social Needs And Generates Positive Return On Investment | Health Affairs](#)

## 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 levels**
  - At a 2021 meeting of the Behavioral Health Integration Collaborative hosted by the American Medical Association (AMA), initiatives within the Henry Ford Health System were highlighted as high-quality examples of the ways 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
  - Study 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. doi:10.1037/fsh0000182 <https://pubmed.ncbi.nlm.nih.gov/26963777/>
  - Meeting Source:
    - Berg S. How behavioral health integration helps beat physician burnout. American Medical Association. Published August 24, 2021. Accessed December 17, 2022. <https://www.ama->

## 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. <https://pediatricsnationwide.org/2022/09/22/integrating-behavioral-health-and-primary-care-increases-access-and-equity/>

## 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. <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2022.00705#:~:text=Based%20on%20a%20sample%20of,percent%20by%202016%20and%202018.>
- *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
<b>Total Excess Expenditures</b>	<b>\$114.1</b>	<b>\$84.9</b>	<b>\$12.4</b>	<b>\$1.6</b>	<b>\$5.5</b>	<b>\$9.7</b>

- “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. <https://www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/state-of-integrated-pc-and-bh.pdf>

## 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 <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006525.pub2/full>

## REFERENCES

---

- 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. Accessed October 30, 2022. [Evaluation of the Multi-Payer Advanced Primary Care Practice \(MAPCP\) Demonstration: Final Report | Urban Institute](#)
- Crime Research Group. Vermont Results First Inventory and Benefit-Cost Analysis: Department of Health / Division of Alcohol and Drug Abuse Program's Medication Assisted Treatment for Opioid Use Disorder (Hub and Spoke); 2017. [Reports - Crime Research Group \(crgvt.org\)](#)
- St. Johnsbury Vermont Community Health Team: Evaluation Summary. Centers for Disease Control and Prevention; 2014. Accessed October 30, 2022. [https://www.cdc.gov/dhdsp/docs/es\\_stjohnsbury\\_community.pdf](https://www.cdc.gov/dhdsp/docs/es_stjohnsbury_community.pdf)
- 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. <https://blueprintforhealth.vermont.gov/sites/bfh/files/Vermont%20Blueprint%20for%20Health%202011%20Annual%20Report%20Supporting%20Document%20-%20Qual%20Eval%20of%20Perceptions%20Related%20to%20Adoption%20of%20Blueprint%20in%20%20VT%20Communities.pdf>
- Blueprint for Health Central Office. Annual Reports; 2013-2017. [Blueprint Annual Reports | Blueprint for Health \(vermont.gov\)](#)
- 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. [Vermont's Community-Oriented All-Payer Medical Home Model Reduces Expenditures and Utilization While Delivering High-Quality Care - PMC \(nih.gov\)](#)
- Kraft SA, L'Heureux BA. *Dartmouth-Hitchcock Health Community Health Workers January 2020-June 2021 Program Report*. Dartmouth-Hitchcock Population Health; 2021.
- 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. doi:10.1080/08897077.2021.1932698 <https://doi.org/10.1080/08897077.2021.1932698>
- 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. <https://doi.org/10.37765/ajmc.2022.88862>
- Community Health Team Overview & Results. Care Transformation Collaborative Rhode Island. Published May 20, 2020. Accessed December 16, 2022. <https://www.ctc-ri.org/community-health-team-overview-results>
- *SIM Community Health Team Final Evaluation Report*. University of Rhode Island, Rhode Island State Evaluation Team; 2019. <https://eohhs.ri.gov/sites/g/files/xkgbur226/files/Portals/0/Uploads/Documents/SIM/CommunityHealthTeamStateEvaluation-Final.pdf>
- *A Plan to Transform the Empire State's Medicaid Program: Multi-Year Action Plan*. New York State Department of Health; 2016. [https://www.health.ny.gov/health\\_care/medicaid/redesign/docs/mrtfinalreport.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/docs/mrtfinalreport.pdf)
- New York State Department of Health. New York Medicaid Redesign Team II Public Meeting: Keeping the Medicaid Promise. February 2020. [https://www.health.ny.gov/health\\_care/medicaid/redesign/mrt2/docs/2020-02-11\\_presentation.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/mrt2/docs/2020-02-11_presentation.pdf)
- 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. [https://www.health.ny.gov/health\\_care/medicaid/redesign/dsrp/2021/docs/2021-08-24\\_final\\_summative\\_rpt.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/dsrp/2021/docs/2021-08-24_final_summative_rpt.pdf)
- 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

[Collaborative Care Management of Late-Life Depression in the Primary Care Setting: A Randomized Controlled Trial | Depressive Disorders | JAMA | JAMA Network](#)

- 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. Accessed December 16, 2022. <https://www.ajmc.com/view/feb08-2835p095-100>
- RTI International. *Washington Health Home MFFS Demonstration: Fifth Evaluation Report.*; 2022. [Data & Reports | CMS Innovation Center](#)
- Financial Alignment Initiative (FAI) Washington Health Home Managed Fee-for-Service (MFFS) Demonstration. Centers for Medicare & Medicaid Services. Accessed December 16, 2022. <https://innovation.cms.gov/data-and-reports/2022/fai-wa-er5-aag>
- Financial Alignment Initiative (FAI) Washington Health Home Managed Fee-for-Service (MFFS) Demonstration. Centers for Medicare & Medicaid Services. Accessed December 16, 2022. <https://innovation.cms.gov/data-and-reports/2022/fai-wa-er5-aag>
- 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 00981 [Evidence-Based Community Health Worker Program Addresses Unmet Social Needs And Generates Positive Return On Investment | Health Affairs](#)
- 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. doi:10.1037/fsh0000182 <https://pubmed.ncbi.nlm.nih.gov/26963777/>
- Berg S. How behavioral health integration helps beat physician burnout. American Medical Association. Published August 24, 2021. Accessed December 17, 2022. <https://www.ama-assn.org/practice-management/physician-health/how-behavioral-health-integration-helps-beat-physician-burnout>
- Bates M. Integrating behavioral health and primary care increases access and equity. Pediatrics Nationwide. Published September 22, 2022. Accessed December 17, 2022. <https://pediatricsnationwide.org/2022/09/22/integrating-behavioral-health-and-primary-care-increases-access-and-equity/>
- 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. <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2022.00705#:~:text=Based%20on%20a%20sample%20of,p ercent%20by%202016%20and%202018>.
- 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. [Behavioral Health Integration | Robert Graham Center \(graham-center.org\)](#)
- 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 <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006525.pub2/full>