JOINT COMMISSION ON HEALTH CARE

TEAM-BASED CARE APPROACHES TO IMPROVE HEALTH OUTCOMES

REPORT TO THE GOVERNOR AND THE
GENERAL ASSEMBLY OF VIRGINIA

REPORT DOCUMENT #500

COMMONWEALTH OF VIRGINIA
RICHMOND
2023

Code of Virginia § 30-168.

The Joint Commission on Health Care (the Commission) is established in the legislative branch of state government. The purpose of the Commission is to study, report and make recommendations on all areas of health care provision, regulation, insurance, liability, licensing, and delivery of services. In so doing, the Commission shall endeavor to ensure that the Commonwealth as provider, financier, and regulator adopts the most cost-effective and efficacious means of delivery of health care services so that the greatest number of Virginians receive quality health care. Further, the Commission shall encourage the development of uniform policies and services to ensure the availability of quality, affordable and accessible health services and provide a forum for continuing the review and study of programs and services.

The Commission may make recommendations and coordinate the proposals and recommendations of all commissions and agencies as to legislation affecting the provision and delivery of health care. For the purposes of this chapter, "health care" shall include behavioral health care.

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POLICY OPTIONS IN BRIEF

There are 6 policy options in the report for consideration.

Option: Direct DMAS to establish a reimbursement rate and develop a Collaborative Care Model program.
(Option 1, page 7)

Option: Direct DMAS to establish a reimbursement rate for medication therapy management provided via telehealth.
(Option 2, page 9)

Option: Direct JLARC to evaluate state-funded health care workforce incentive programs.
(Option 3, page 13)

Option: Fund Virginia Task Force on Primary Care to expand pilot programs on core team-based care criteria for payers.
(Option 4, page 14)

Option: Fund staff AHECs to support primary care practices transitioning to team-based care.
(Option 5, page 16)

Option: Direct DMAS to develop a plan for participation in the Medicaid health home program.
(Option 6, page 18)

FINDINGS IN BRIEF

Team-based care is evidence-based but reimbursements for behavioral health and pharmacy services are limited

Practice teams have a positive impact on chronic conditions and have evolved to integrate behavioral health and pharmacy services. Health care professionals cited lack of insurance coverage for integrated behavioral health services and medication therapy management delivered via telehealth as significant barriers to providing these much-needed services to patients.

The impact of state-funded incentive programs to address primary care workforce shortages is unclear

Successful team-based care depends on a robust health workforce. Practices rated difficulty recruiting or retaining clinical staff as the top factor limiting optimal implementation. Virginia has invested state funds in multiple primary care work force incentive programs; however, the value and impact of these programs is unknown.

Practices need implementation support to transition from traditional to team-based primary care

Team-based care is cost-effective but requires up front investments in infrastructure, staffing, and training that may not be attainable for all practices. With additional resources, the existing structure of Virginia's regional Area Health Education Centers could be leveraged to provide implementation support to smaller or independently owned practices.

Current fee-for-service payment models are a barrier to team-based care sustainability

Stakeholders and survey respondents reported that the current fee-for-service payment models are a significant deterrent to sustaining team-based primary care. Virginia could support expansion of team-based care using value-based payment models with Medicaid beneficiaries.

Team-based Care Approaches to Improve Health Outcomes

Team-based care is the provision of services by at least two health care professionals who work collaboratively with patients and their caregivers to accomplish shared goals. While team-based care occurs in all health care settings, its impact on population health is most apparent in primary care practices. Effective primary care practice teams have a defined, bounded membership with shared goals and interdependent responsibilities for care delivery. Implementing team-based primary care to support patients with increasingly complex medical needs requires additional resources, which some primary care practices cannot access. The Joint Commission on Health Care (JCHC) directed staff to study ways in which Virginia can further incentivize or promote effective models of team-based care. Specifically, the study resolution (APPENDIX 1) directed staff to:

- Review evidence-based models of team-based care and their effectiveness in improving patient engagement and health outcomes;
- Identify which populations most benefit from team-based care;
- Evaluate the extent to which team-based care models are being used in Virginia;
- Understand any obstacles to the implementation of team-based care in Virginia; and
- Consider policy options through which the state may incentivize or promote effective models of team-based care.

Team-based primary care improves health outcomes for patients with chronic conditions

Primary care practice teams should look different depending on the health needs and demographics of the patients served (FIGURE 1). Regardless of any specific team-based care model implemented, patients and caregivers are always the central members of practice teams. This patient-centered approach is the means through which team-based care positively impacts patients' chronic conditions.

FIGURE 1. Primary care teams can include practice-based staff, other medical specialties, and community-based support

NOTE: PC = primary care.

SOURCE: National Academies of Science, Engineering, and Medicine. *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care,* 2021.

Team-based care positively impacts depression, diabetes, and hypertension

Team-based primary care demonstrates a consistent and significant positive effect on patients' physical and mental health outcomes compared to traditional primary care, where patients may only see a primary care clinician (see APPENDIX 2 for data sources and methods). Patients receiving care in team-based primary care practices are more likely to report improved symptoms and improved management of chronic conditions including depression, diabetes, and hypertension (TABLE 1).

TABLE 1: Studies note positive outcomes among patients receiving team-based care

Patient Outcomes Reported	Number of Studies Reviewed
Reduction in reported depression symptoms	11
Increase in reports of depression in remission	4
Reduction in blood sugar levels	9
Increase in well-controlled diabetes	9
Reduction in blood pressure	7
Increase in well-controlled hypertension	4

SOURCE: JCHC staff analysis of peer-reviewed scientific literature, 2023.

Team-based care is effective for patients living with chronic conditions and negatively impacted by the social determinants of health (SDOH). Patient concerns about transportation, access to healthy foods, and limited health literacy, among other SDOHs, can be addressed when primary care practice teams include community health workers. One health system interviewed for this study noted the value of embedding community health workers in their primary care practices with higher patient needs. Community health workers can address patients' barriers to SDOH by being a trusted source through which additional community or clinical services are encouraged.

Patients' self-management skills, defined as care taken by individuals towards their own health and wellbeing, increased in team-based primary care practices compared to traditional primary care. Effective strategies to improve self-management skills focus on patient engagement, such as providing culturally competent health education tailored to patients' circumstances. Health care professionals surveyed for this study indicate that there is a relationship between patient engagement and self-management behaviors in team-based care practices (FIGURE 2). Practices that reported higher patient engagement also endorsed more frequent self-management behaviors among their patients.

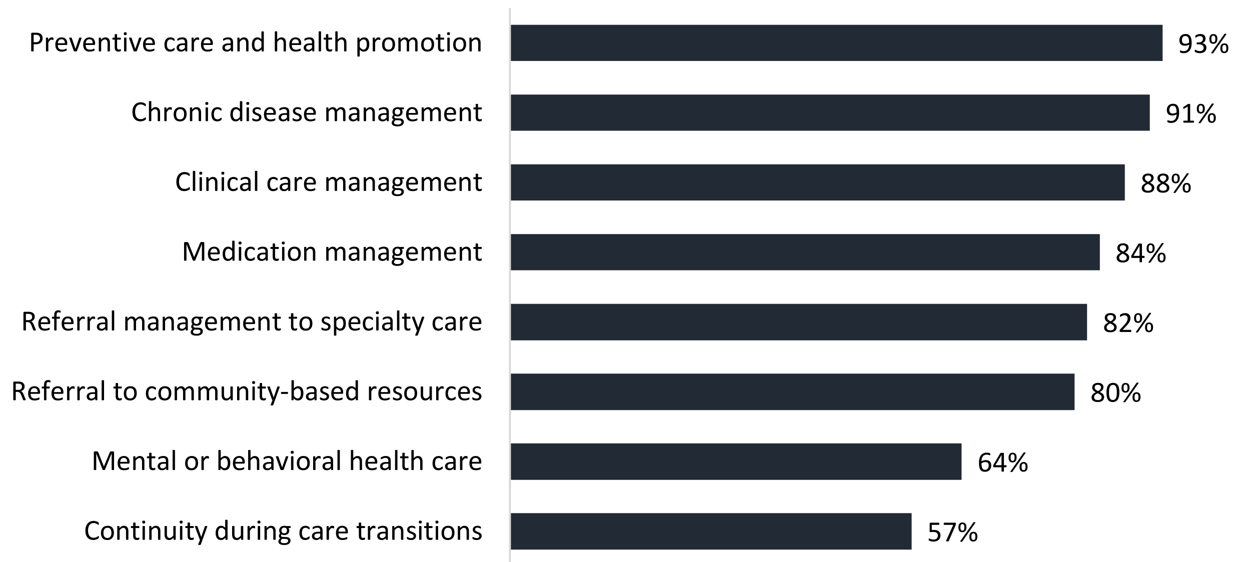
FIGURE 2: Practices with high patient engagement endorse higher rates of self-management

SOURCE: JCHC survey of primary health care professionals, 2023.

Virginia team-based primary care practices' need for integrated behavioral health services is growing

Team-based primary care practices in Virginia offer a range of services to their patients. More than 90 percent of health care professionals surveyed for this study indicated that their team-based care practice offers preventive care and health promotion services, and chronic disease management (FIGURE 3). Providing mental or behavioral health care as a core service of primary care practice teams was less common, with 64 percent of health care professionals reporting that they offer this service. However, data from the Virginia Ambulatory Care Outcomes Research Network indicates that integrating behavioral health services within primary care is increasing. Primary care practices have more than doubled the number of embedded mental health clinicians since 2018.

FIGURE 3: Most practice teams offer preventive care; fewer offer behavioral health



SOURCE: JCHC survey of primary health care professionals, 2023.

Team-based primary care practices lack resources to address patients' behavioral health needs

Team-based primary care practices are well-situated to offer behavioral health services, also called integrated primary care, given the relationship between chronic conditions and behavioral health factors that can affect patients' wellbeing. In integrated primary care practices, medical and behavioral health clinicians work together to address patients' concerns in the primary care setting unless patients need or request specialty care. Multiple models for integrated primary care exist but the Collaborative Care Model is most recognized (see sidebar). One-third of health care professionals surveyed for this study who reported having mental or behavioral health clinicians in their practice used the Collaborative Care Model.

> In the **Collaborative Care Model**, practices frequently screen patients for behavioral health concerns. Patients screening positive are seen by a care manager in addition to the primary care physician. Care managers monitor patient progress over time, meet frequently with the care team, and identify patients not meeting progress goals. Care managers consult with psychiatrists or other behavioral health professionals as needed and make recommendations to the primary care physician.

Despite the recognized need, primary health care professionals are struggling to meet patients' demand for behavioral health services. Behavioral health professionals integrated within primary care clinics are unlikely to be available full-time or available to all patients equitably. Interviews with key stakeholders for this study consistently indicated that

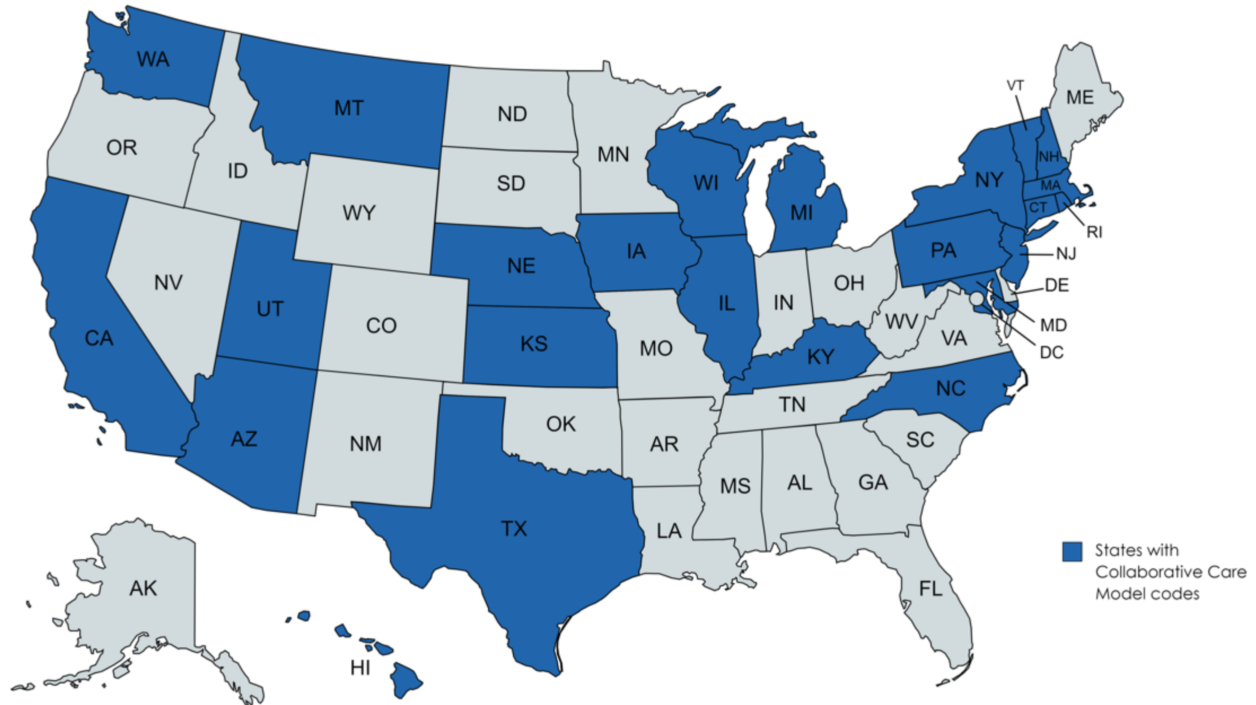
limited insurance coverage for integrated primary care was a significant barrier to increasing these services for patients. For example, all health systems interviewed for this study employ behavioral health clinicians in the primary care practices they own, but clinicians are either embedded in only one high-needs practice, work part-time and travel between practices, or are providing care solely through telehealth. In contrast, independently owned practices rarely have the capital to invest in integrated behavioral health services without additional external resources. Only one independently owned practice surveyed for this study employs behavioral health clinicians.

Virginia has not implemented Medicaid coverage of the Collaborative Care Model

Medicaid recipients have disproportionate rates of serious mental illness, are more likely to be negatively impacted by social determinants of health, and yet have inconsistent access to behavioral health professionals. Team-based care practices that accept Medicaid patients are significantly less likely to report implementing the Collaborative Care Model (24 percent) than practices that do not accept Medicaid patients (40 percent). Primary care practices surveyed by the Virginia Ambulatory Care Outcomes Research Network also indicate that limited access to behavioral health professionals is the primary factor that prevents them from seeing more patients with Medicaid. Effectively, Medicaid beneficiaries in Virginia would benefit from increased access to behavioral health professionals and services in an integrated care environment, where both medical and mental health clinicians are co-located.

Beginning in 2018, the Centers for Medicare and Medicaid Services (CMS) permitted reimbursements to practices using the Collaborative Care Model to encourage the integration of behavioral health services within primary care. Since then, 24 states, including Maryland, Pennsylvania, and North Carolina, have elected to amend their state plans to designate the Collaborative Care Model as a covered Medicaid benefit or have begun a pilot (FIGURE 4). The 2023 Special Session I Amendments to the 2023 Appropriation Act gives the Department of Medical Assistance Services (DMAS) the authority to amend the Medicaid state plan to reimburse services billed for the Collaborative Care Model. Additional resources are needed to set rates and establish program guidelines for these services.

FIGURE 4: Twenty-four states cover the Collaborative Care Model as a Medicaid benefit



SOURCE: Meadows Mental Health Policy Institute, 2023.

➔ **OPTION 1:** The Joint Commission on Health Care could introduce a budget amendment directing DMAS to develop a establish a reimbursement rate and Collaborative Care Model program guidelines for behavioral health services delivered in primary care practices.

Telehealth increases practices' ability to utilize pharmacists in team-based care

The use of telehealth increased during the COVID-19 pandemic and remains a popular method for patients to receive health care services. Key stakeholders interviewed for this study consistently indicated that recent advances in telehealth technology provide a unique opportunity to add medication therapy management services to their practice team through virtual appointments with pharmacists (see sidebar).

Medication therapy management encompasses the assessment and evaluation of the patient's complete medication therapy regimen and is generally provided by pharmacists either in a community setting or as part of an integrated health system.

Integrating pharmacists improves patient outcomes and clinician prescribing practices

When a pharmacist is included as a member of the practice team, the pharmacist meets with the patient separately then makes recommendations for medication adjustments to the primary care clinician. Team-based care that includes pharmacist-provided medication therapy management improves the likelihood that patients take their medications as prescribed and receive more timely adjustments to their medications compared to traditional primary care. Among Medicaid recipients, access to medication therapy management resulted in annual health care costs savings of nearly $800 per beneficiary in Minnesota and nearly $1,600 per beneficiary in Connecticut.

JCHC staff found that health systems support the use of pharmacists in their team-based care models, reporting that pharmacists' integration into primary care improved medication reconciliation and medication adherence. One health care professional cited the value of leveraging the expertise of their integrated pharmacist on evolving clinical practice guidelines, particularly for the management of chronic diseases such as diabetes and hypertension, which they could then apply throughout the entire practice.

The use of telehealth for medication therapy management allows practices to integrate pharmacists more easily into the clinical workflow of team-based care in remote or underserved areas when co-location is not possible. However, like behavioral health services, pharmacists' availability in practices may not be distributed equitably. Only 34 percent of team-based care practices surveyed reported having a pharmacist integrated as a team member. Half of those practices have a formal collaborative practice agreement with a pharmacist.

Lack of reimbursement for medication therapy management delivered through telehealth limits availability of services

Health care professionals interviewed for this study cited lack of insurance coverage for medication therapy management delivered via telehealth as the largest hurdle in their attempts to integrate pharmacists into their practice teams. Without billing for these

services, health systems who own primary care practices report bearing the full costs of integrating medication therapy management and cannot expand access without additional resources. Similarly, only 21 percent of smaller primary care practices surveyed for this study reported having an integrated pharmacist compared to 72 percent of larger practices. Following the 2023 Virginia General Assembly Session, DMAS is now required to provide reimbursement for certain services provided by a pharmacist, but Virginia's Medicaid program still lacks coverage medication therapy management services through telehealth.

➔ **OPTION 2:** The Joint Commission on Health Care could introduce a budget amendment providing funds to DMAS to develop a reimbursement rate for pharmacist-provided medication therapy management via telehealth in team-based primary care practices.

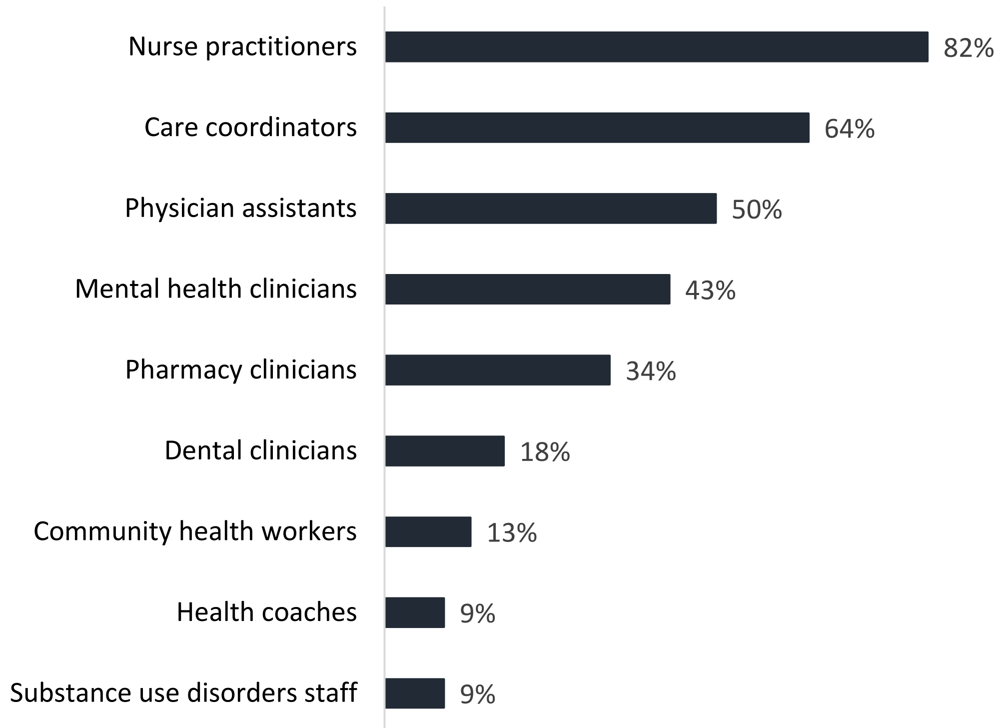
Successful team-based care depends on a robust primary care workforce adversely impacted by staffing shortages

Providing comprehensive team-based care to patients often means recruiting new team members or re-training existing team members for new roles. The primary care workforce in Virginia is understaffed, an issue exacerbated by the COVID-19 pandemic. In the post-pandemic environment, recruiting new staff and retaining existing staff are significant barriers to successful team-based care.

Nurse practitioners, physician assistants, and care coordinators are frequent members of primary care practice teams in Virginia

Advanced practice providers, such as nurse practitioners and physician assistants, play a key role in distributing clinical workload and increasing access to primary care because of their ability to provide a wide range of preventive and acute health care services to patients. JCHC staff found more than 80 percent of team-based care practices reported having a nurse practitioner on staff (FIGURE 5). Nurse practitioners were the most frequently employed members of Virginia primary care practice teams after primary care physicians (91 percent of practices) and clinical support staff (84 percent of practices). Half of the team-based care practices surveyed also reported a physician assistant.

FIGURE 5: Most team-based care practices in Virginia employ a nurse practitioner, care coordinator, or physician assistant



SOURCE: JCHC survey of primary health care professionals, 2023.

Sixty-four percent of team-based primary care practices surveyed for this study indicated that a care coordinator is either employed or integrated into the workflow of their practice. When care coordinators are present in primary care practices, clinical workflow and health care professional workload improve, leading to better continuity of care for the patient. Care coordinators can also improve patients' access to services, reduce unnecessary care costs, and decrease the risk of hospitalization. Practices implement coordination services differently depending on available resources. For health systems that own primary care practices in Virginia, registered nurses serve as care coordinators. The registered nurses are either embedded at practices with high-needs patients and available to other patients remotely or rotated through multiple practices on a part-time basis.

The primary care workforce is experiencing unprecedented shortages

Concerns about the primary care workforce emerged as a significant barrier to fully implementing team-based care in Virginia. Team-based primary care practices surveyed for this study ranked workforce-related factors as the top four barriers to optimal team-based care implementation (TABLE 2). Practices rated difficulty recruiting and retaining clinical staff as the primary limiting factor, while difficulty recruiting and retaining non-clinical staff

was the fourth ranked limiting factor. Primary care practices in Virginia reported losing an average of 2.8 health care professionals during the COVID-19 pandemic, and workforce shortages are projected over the next 10 years for multiple primary health care occupations, including primary care physicians, nurse practitioners, physician assistants, and registered nurses.

TABLE 2: Practices report workforce concerns limit team-based care implementation

Rank	Factors Limiting Team-based Care Implementation
1	Difficulty recruiting or retaining clinical staff
2	Staff burnout
3	Competing practice demands
4	Difficulty recruiting or retaining non-clinical staff
5	Payment systems that do not incentivize team-based care

SOURCE: JCHC survey of primary health care professionals, 2023.

The value of state-funded scholarship and loan repayment programs on recruitment into the primary care workforce is unknown

The Virginia Department of Health (VDH) administers incentive programs for eligible primary health care professionals. These programs offer loan repayment and scholarship options in exchange for service in specific areas of Virginia that are experiencing workforce shortages. Six of these programs are funded by the state, totaling $4.6 million in available funds for distribution to eligible recipients, plus an additional $88,000 for administration and staffing. Virginia also has four incentive programs that are currently inactive and unfunded (TABLE 3).

Evaluations of similar programs in other states suggest that these types of incentives can be effective in recruiting health care professionals into areas of high need and retaining them over time. However, minimal data exists to support the effectiveness of these programs as currently administered in Virginia. Interviews with key stakeholders suggest there is a lack of awareness and low engagement by eligible participants due to limited marketing and low financial incentives compared to private sector incentive programs. Program staff at VDH comply with reporting requirements for the one program that requires it but lack staff capacity to collect additional metrics or perform consistent evaluation activities on other incentive programs.

TABLE 3: Virginia funds six primary care workforce incentive programs; four are unfunded

Program Name	Eligible Health Professions	Terms	State Funding Levels
Virginia Mary Marshall Nursing Scholarships*	Registered Nurses, Licensed Practical Nurses, Certified Nursing Assistants	Scholarship funds in exchange for clinical service in Virginia	Up to $399,000
Virginia Nurse Educator Scholarship Program	Nursing	Scholarship funds in exchange for clinical service in Virginia	Up to $300,000
Virginia Nurse Practitioner/Nurse Midwife Scholarship Program	Nurse Practitioners, Nurse Midwives	Scholarship funds in exchange for clinical service in Virginia	Up to $300,000
Virginia Nurse Preceptor Incentive Program	Physicians, Physician Assistants, and Advanced Practice Registered Nurses	Scholarship funds in exchange for service as a preceptor in Virginia	Up to $500,000
Virginia State Loan Repayment Program	Licensed clinicians	Loan repayment in exchange for clinical service in Virginia	$1,500,000 *(plus matched federal funds)*
Behavioral Health Loan Repayment Program	Behavioral health professionals	Loan repayment in exchange for clinical service in Virginia	$1,600,000
Virginia Physician Loan Repayment Program	Physicians	Loan repayment in exchange for clinical service in Virginia	Unfunded
Physician Assistant Scholarship Program	Physician Assistants	Scholarship award in exchange for clinical service in Virginia	Unfunded
Dental Scholarship and Dental Loan Repayment Program	Dentists	Loan repayment in exchange for clinical service in Virginia	Unfunded
Virginia Medical Scholarship Program	Medical Students	Scholarship award in exchange for clinical service in Virginia	Unfunded

NOTE: *This is administered as four separate programs, and includes long-term care Registered Nurses, Licensed Practical Nurses, and Certified Nursing Assistants.
SOURCE: Virginia Department of Health, 2023.

➔ **OPTION 3:** The Joint Commission on Health Care could direct the Joint Legislative Audit and Review Commission (JLARC) to evaluate the value and impact of state-funded health care workforce scholarship and loan repayment programs. The evaluation should include perspectives from health care professionals eligible for such incentives and longitudinal analysis of retention outcomes among program recipients.

Practices prefer flexible implementation of team-based care to align resources with patients' needs

Ninety-three percent of health care professionals surveyed for this study reported that clinicians and staff within their team-based care practice share the same mission, values, and objectives. Most health care professionals surveyed also agreed that their practice team regularly involves and supports patients in decision making and care planning. While these tenets are consistently present, practices can implement team-based care in a variety of ways. Health care professionals perceive this flexibility in implementation as a benefit so that they may structure services, clinic workflow, and administrative requirements in ways that best support their patients.

Misaligned incentives for team-based care can create significant administrative burden

Key stakeholders interviewed for this study believed transformation of primary care practices to an evidence-based team model, known as the Patient Centered Medical Home (PCMH), increases the quality of patient care while also reducing costs (see sidebar). However, the process to accredit practices as PCMH can be time consuming and expensive. Several health systems interviewed indicated that while having their primary care practices initially recognized as a PCMH was valuable, continuing to support the administrative requirements to maintain accreditation was onerous. Less than a quarter of team-based primary care practices surveyed were accredited as PCMH.

The **Patient Centered Medical Home** (PCMH) is an evidence-based practice team model shown to improve patient outcomes compared to traditional primary care. The evidence for PCMH set the stage for many health systems and health plans to embrace this model and encourage adoption through financial incentives. These incentives are often tied to formal recognition of the practice by an accrediting body, most commonly the National Committee for Quality Assurance.

More recently, health plans are focusing on incentivizing the anticipated improvements in care quality that team-based care can provide instead of any specific model. While this gives practices more flexibility in implementation, there is a lack of alignment across payers in defined metrics and quality benchmarks. This creates differing sets of targets for practices trying to reach benchmarks for multiple payers. Additionally, the associated administrative burden of reporting discourages participation in incentive programs. The matrix of incentive program requirements is particularly difficult to navigate for smaller or independently owned practices, which limits uptake of team-based care in underserved areas. One health care professional interviewed for this study described attempting to meet

the moving targets of team-based care incentive programs as feeling like "a greyhound chasing a rabbit."

Since 2021, the Virginia Center for Health Innovation's (VCHI) Virginia Task Force on Primary Care has worked to improve consensus on the markers of high value primary care and meaningful performance metrics (see sidebar). Exact alignment among health plans is not the goal; instead, the Task Force hopes to achieve directional alignment through a consensus building process that identifies the core criteria of a team-based approach for payment purposes. This would allow practices to know upfront whether they meet the criteria for enhanced payment, and for health plans to remain competitive. The Task Force is also implementing a pilot of two measures, including an instrument that measures patient perspectives on the integration and coordination of their care in select primary care practices in Virginia. The pilot assesses the feasibility of replacing multiple performance measures to improve alignment and reduce reporting burdens. With additional resources, the lessons learned from these pilots could be leveraged to support the adoption of these core integration criteria and measures in practices statewide.

The **Virginia Center for Health Innovation** launched the Virginia Task Force on Primary Care in August of 2020 to address the sustainability challenges facing primary care in Virginia. The Task Force has representation from medical professionals, health insurers, employers, beneficiary representatives, and state officials. The work of the Virginia Task Force on Primary Care is funded by the state through a contract with the Virginia Department of Health.

➔ **OPTION 4:** The Joint Commission on Health Care could introduce a budget amendment to fund the VCHI Virginia Task Force on Primary Care to expand their pilot programs developing multi-payer directional alignment of high-quality team-based care criteria and performance metrics.

Team-based care provides value for patients but requires additional resources to implement and sustain

Team-based care is cost-effective for the treatment of depression, co-morbid depression and diabetes, and hypertension. However, implementing team-based care often requires initial financial investments before generating long term cost-savings. After one year of implementation, most team-based care practices see decreased health care costs compared to traditional primary care. Health systems and health plans JCHC staff spoke with agree that team-based care is worth their investment given improvements in care quality and cost-effectiveness.

Team-based care reduces total costs of care by increasing practice efficiency and reducing acute care utilization

Health care professionals interviewed for this study noted increased practice efficiency as a benefit of team-based care. Team-based care practices can tailor appropriate clinical

resources based on patient acuity, thereby better distributing clinical workload. Health plans surveyed for this study also noted increased efficiency when using population health metrics to align team-based care resources with "hot spots" in practices' patient populations.

Patients in team-based care practices experienced a significant decrease in both emergency department utilization and hospital admissions compared to traditional primary care. When patients were admitted to the hospital, those receiving primary care from team-based practices prior to admission had decreased total number of days in the hospital, decreased average length of stay, and decreased likelihood of 30-day readmission compared to patients in traditional primary care practices.

Practices need additional support to transition to team-based care

Practices surveyed for this study that had not yet implemented team-based care ranked supportive payment systems, workforce concerns, and lack of initial implementation funding as the most significant factors preventing their transition to team-based care (TABLE 4). Transitioning to team-based care is a transformative process for primary care practices that often requires additional time and resources and can feel overwhelming to health care professionals given competing practice demands.

TABLE 4: Traditional primary care practices cite funding and workforce issues as barriers to team-based care implementation

Rank	Factors Limiting Implementation of Team-based Care
1	Payment systems that do not incentivize team-based care
2	Difficulty recruiting or retaining clinical staff
3	Lack of funding that supports initial costs of implementation
4	Lack of support from health system or medical group
5	Difficulty recruiting or retaining non-clinical staff

SOURCE: JCHC survey of primary health care professionals, 2023.

Median costs of team-based care above traditional primary care range from $84 to $299 per person in published studies. These additional costs often reflect necessary investments in practice infrastructure, including increases in staffing at team-based primary care practices, enhanced health information technology to support collaboration, and ongoing professional development and technical assistance to establish team roles and clinical workflow.

Implementation support from health systems and health plans are not available to all primary care practices

Two health plans and three health systems interviewed for this study provided business consultants to primary care practices during initial implementation of team-based care. Business consultants provide onsite technical assistance to increase buy-in for team-based care, deliver guidance on adjustments to clinical workflow to achieve practice efficiency, and leverage population health metrics to allocate practice team resources appropriately and demonstrate improved patient outcomes. One health system assigned business consultants to practices that experienced the most difficulty implementing team-based care. Following this intervention, the health system observed improved practice efficiency and patient outcomes, resulting in higher incentive payments and enhanced reimbursements for that practice.

Independently owned primary care practices or those that do not meet the criteria for health plan incentive programs have limited access to business consultants. For these practices, several states have leveraged staff at Area Health Education Center (AHECs) to support practice transformation in their regions (see sidebar). For example, Maryland leveraged the AHEC model to hire and train two practice coaches who each supported fifteen practices. While Virginia AHECs have established a foundation for primary care practice transformation within their regions, less than five percent of their total budget is currently dedicated to such efforts. Additional resources are needed to provide on-site, tailored support to practices transitioning to team-based care.

Area Health Education Centers (AHECs) address the specific health care needs of their communities by managing health career recruitment programs, addressing health workforce distribution issues, and identifying career opportunities for students. Virginia's eight regional AHECs are managed by the Virginia Health Workforce Development Authority.

➔ **OPTION 5:** The Joint Commission on Health Care could introduce a budget amendment for the Virginia Health Workforce Development Authority to hire and train additional staff within each of their eight regional AHECs to support primary care practices meeting certain needs-based criteria that wish to transition to team-based care.

Fee-for-service payment models hamper team-based care sustainability

Key stakeholders indicated that the fee-for-service payment models that currently dominate health care reimbursement markets are a significant deterrent to sustaining team-based primary care. Indeed, 73 percent of practices surveyed for this study indicated that payment systems that do not incentivize team-based care activities are a significant limiting factor implementing optimal team-based care. In contrast, value-based payment models can promote infrastructure development and better use of practice team members who can deliver care more efficiently and effectively (see sidebar, next page).

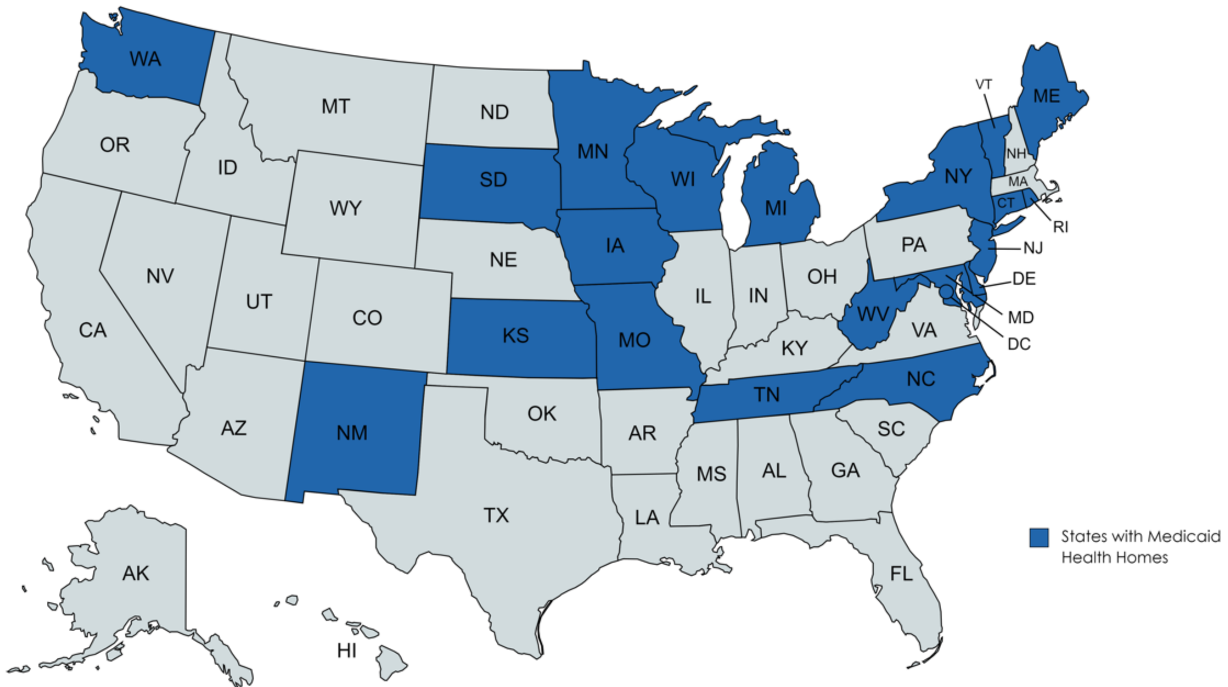
While adoption of these payment models has been slow, key stakeholders interviewed for this study expressed optimism for the future of team-based care supported by value-based payment models.

In **value-based payment models**, payments to primary care practices are based on quality and cost-effectiveness rather than counts of services rendered, and can include partial or full capitation. This type of payment model results in more predictable revenue streams and encourages health care professionals to engage in whole person care, both of which are conducive to optimal implementation of team-based care.

Virginia has an opportunity to expand team-based care supported by value-based payment models to high-need, high-cost Medicaid populations. The Patient Protection and Affordable Care Act of 2010, created an optional Medicaid state plan benefit for states to establish health homes. Health homes structure person-centered, team-based care specifically for Medicaid beneficiaries with chronic conditions, including serious mental illness. Through an enhanced federal match for health home services, the program affords states the flexibility to target specific qualifying conditions (e.g., serious mental illness) or populations, and to develop practice teams with health care professionals appropriate for the needs of the targeted population. Health homes integrate physical and behavioral health services to improve health care quality and reduce costs. Mandated core services for health homes are consistent with team-based care, including comprehensive care management, care coordination, health promotion, comprehensive transitional care/follow-up, patient and family support, and referral to community and social support services.

Medicaid health homes are currently offered in 21 states (FIGURE 6), with some states having more than one health home program. Funding methodologies for health homes differ by state but most often include an additional per member per month rate that is tiered based upon the severity of the individual's chronic conditions, the capabilities of the team of health care professionals, and the intensity of service provided. This tiered payment model allows states to begin developing the infrastructure necessary for a value-based payment program without having to completely overhaul the existing fee-for-service market.

FIGURE 6. Twenty-one states have implemented Medicaid health homes



SOURCE: Centers for Medicare and Medicaid Services, 2023.

Lessons learned from implementing Medicaid health homes in other states suggest that investing in primary care practice infrastructure prior to implementation allows practices to take full advantage of the limited two years of enhanced federal match that the Medicaid health home program offers. The VCHI Virginia Task Force on Primary Care is developing a value-based payment pilot program in primary care practices to support children and adolescents with behavioral health needs through better integration of behavioral health and primary care. As conceptualized, this pilot will build infrastructure within primary care practices for health home services and integrate a tiered payment model based on the extent of behavioral health services available in primary care practices. If successful, the pilot could be leveraged to further expand team-based care through value-based payment models in Virginia by pursuing an enhanced match through Medicaid's federal health home program.

➔ **OPTION 6:** The Joint Commission on Health Care could direct DMAS to develop a plan to participate in the Medicaid health home program, in consultation with the VCHI Virginia Task Force on Primary Care.

Appendix 1: Study Resolution

Team-based Care Approaches to Improve Health Outcomes

Authorized by the Joint Commission on Healthcare on December 7, 2022

WHEREAS, team-based care is a health care delivery model in which two or more providers work collaboratively with one another and with patients and their caregivers to coordinate care across several settings; and

WHEREAS, there are many different models of team-based care, some of which have been associated with improved health outcomes; and

WHEREAS, components of some team-based care models incorporate the patient into the decision-making process, which can empower and engage patients in managing their health, navigating the health care system, and decreasing health care expenditures; and

WHEREAS, there are populations that could benefit from team-based care models and improved patient engagement to assist with better management of health conditions; and

WHEREAS, providers may face challenges in implementing team-based care approaches, including reimbursement models, training limitations, and licensing restrictions, now, therefore be it

RESOLVED, by the Joint Commission on Health Care, that staff be directed to study team-based care approaches to improving health outcomes in Virginia.

In conducting its study, staff shall (i) review evidence-based models of team-based care and their effectiveness in improving patient engagement and health outcomes; (ii) identify which populations most benefit from team-based care; (iii) evaluate the extent to which team-based care models are being used in Virginia; (iv) understand any obstacles to the implementation of team-based care in Virginia; and (v) consider policy options through which the state may incentivize or promote effective models of team-based care.

The Joint Commission on Health Care shall make recommendations as necessary and review other related issues as warranted.

In accordance with § 30-169.1 of the Code of Virginia, all agencies of the Commonwealth, including the Virginia Bureau of Insurance, the Virginia Department of Health Professions, and the Virginia Department of Medical Assistance Services shall provide assistance, information, and data to the Joint Commission on Health Care for this study upon request.

Appendix 2: Sources and Methods

JCHC staff used multiple data sources and methods for this study, including performing a comprehensive literature review, surveying health care professionals, and interviewing stakeholders.

Literature review

JCHC staff conducted a literature review to address four study questions: (1) which models of team-based care were more likely to impact health outcomes; (2) the most and least successful conditions for team-based care; (3) effective methods for patient engagement within team-based care; and (4) the impact of team-based care by patient characteristics. Staff identified common words and phrases associated with team-based care based on existing literature. Using these key terms, a Boolean search phrase was created:

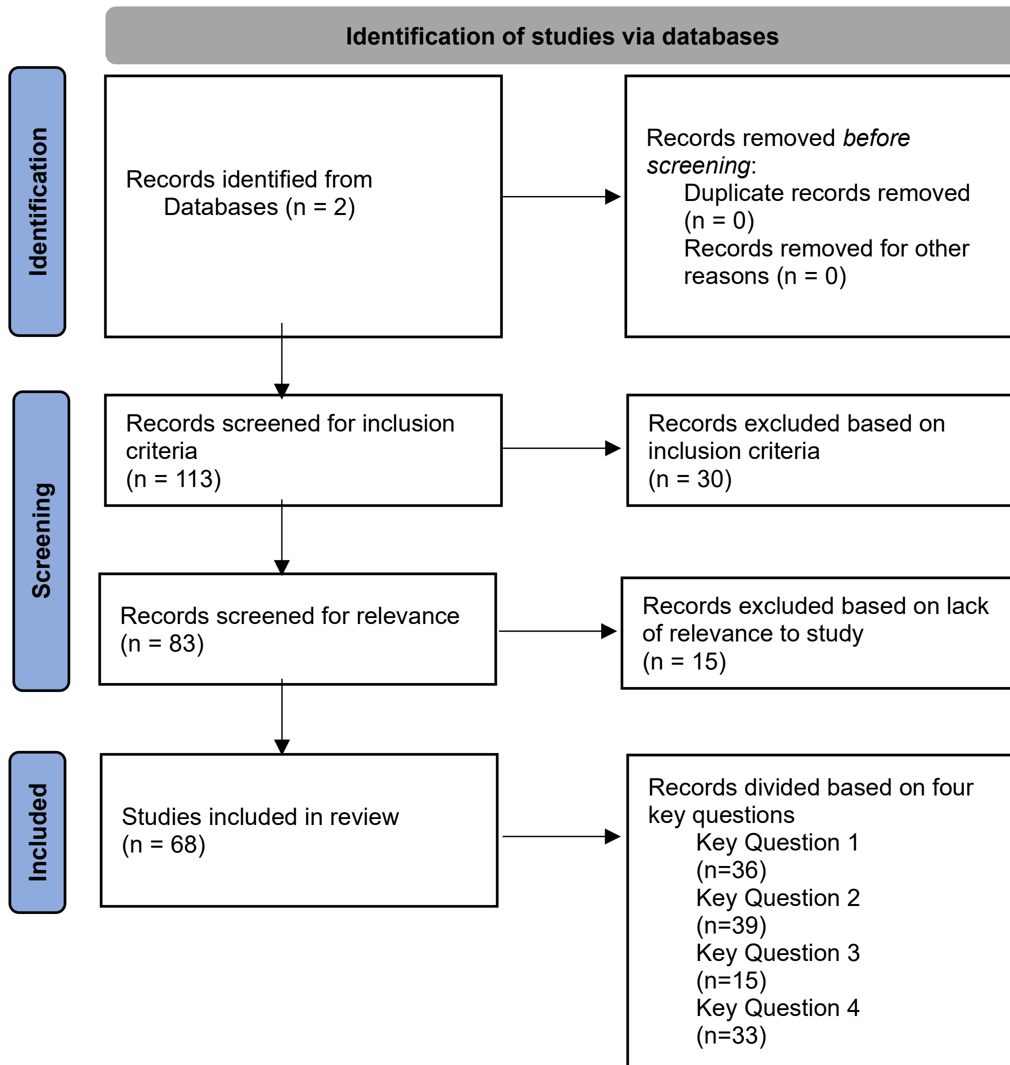
> *((team-based care) OR (collaborative care) OR (multidisciplinary care) OR (care team model) OR (teamlets)) AND ((primary care) OR (primary health care) OR (integrated primary care) OR (family medicine)) AND ((outcomes) OR (effects) OR (impact)) AND ((chronic conditions) OR (obesity) OR (diabetes) OR (hypertension) OR (blood pressure))*.

JCHC staff used this phrase to conduct an advanced literature search, identifying articles in which these terms were used in either the title or the abstract. This search was conducted in one database, PubMed, and staff identified 113 articles which fit the search criteria.

JCHC staff independently reviewed articles for relevancy to the inclusion criteria. The inclusion criteria required that studies be: (1) written in English, (2) published between 2013 and 2023, (3) explicitly or implicitly focused on team-based care in primary care settings, and (4) published in a credible peer-reviewed journal. Staff then discussed any reviewer discrepancies until consensus was reached on the final set of articles for the study. Thirty articles that did not meet inclusion criteria were removed from the analysis, leaving 83 articles for further analysis.

Staff then reviewed articles for applicability to the four study questions of interest. Articles could be relevant to more than one category, which resulted in some article overlap between study questions (see FIGURE 7). Fifteen articles were removed for lack of relevance, leaving 68 articles for content analysis. JCHC staff reviewed the remaining articles in detail, using content analysis techniques to identify significant themes across studies addressing each study question.

FIGURE 7. Flow diagram of literature review on team-based care



Survey development and analysis

JCHC staff administered a brief, web-based survey to physicians, physician assistants, and nurse practitioners in Virginia primary care settings about their experiences with team-based care. The purpose of the survey was to inform study questions about what models of team-based care are being implemented in Virginia, what strategies are used to engage patients in team-based care, the perceived value of team-based care among health care professionals, and what factors facilitate or limit implementation of team-based care.

Staff developed the 16-item survey by identifying validated items that addressed the study questions from other surveys of team-based care published in the literature. A list of 39 survey items were reviewed and prioritized for inclusion. JCHC staff then asked

stakeholders within each of the following organizations to review the survey prior to administration:

- District IV of the American College of Obstetricians and Gynecologists
- Medical Society of Virginia
- Virginia Academy of Physician Assistants
- Virginia Academy of Family Physicians
- Virginia Chapter of the American Academy of Pediatrics
- Virginia Chapter of the American College of Physicians
- Virginia Council of Nurse Practitioners
- Virginia Nurses Association

Staff also requested each of these associations to distribute the survey link to appropriate membership beginning in April 2023. Staff closed the survey after about four weeks of data collection, with 92 valid responses received. Responses were analyzed for themes using IBM Statistical Package for the Social Sciences.

Interviews

JCHC staff held informational meetings with various stakeholders, including the Medical Society of Virginia, Virginia Academy of Family Physicians, Virginia Chapter of the American Academy of Pediatrics, Virginia Chapter of the American College of Physicians, Virginia Department of Health Professions, and the Virginia Department of Medical Assistance Services. These interviews helped inform study design and identify potential data sources for the study.

JCHC staff interviewed select health systems with primary care practices (Sentara, Ballad Health, Bon Secours Virginia, Riverside Health, and Virginia Commonwealth University) and select health plans operating in Virginia (Anthem, CareFirst) to provide context to survey results. Interview question related to: (1) the availability and structure of programs or policies that encourage or incentivize primary care practice teams; (2) the perceived value of team-based care; and (3) challenges and future directions for team-based care.

JCHC staff also interviewed seven members of a practice team at a community-based primary care clinic in Hampton Roads. These interviews were concise, 15–30-minute interviews in which staff members were asked questions related to: (1) the model of team-based care being implemented at their practice; (2) the implementation process at their practice; (3) the perceived impact and value of team-based care; and (4) key take-aways and advice they have related to team-based care.

JCHC staff transcribed interview notes and performed qualitative analysis to look for overarching categories and themes. Any categories and themes that emerged were used to

derive a deeper understanding of how implementation of team-based care is being supported or challenged in Virginia.

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