

## **Transforming Primary Care: Key Collaborators to Enhance Patient and Provider Experience**

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The primary care transformers are a set of evidence-based interventions designed to improve health, patient and clinician experience, and decrease total medical expenditures. The 17 transformers included in the PC4You bill address the buckets of patient access, mental/behavioral health care, collaboration and team-based care, lifestyle modification and care for the medically vulnerable and elders. They are presented as a menu of options, allowing each practice to select those that are most applicable to them and their patient population. Each transformer has a point value associated with it based on the anticipated effort and expense to implement them. The points for each practice are calculated based on the implemented transformers, resulting in assignment to a tier (bronze/silver/gold) which has a dollar value. The payment schematic for the transformers results in the additional investment in primary care to directly enable and support evidence-based activities tailored to individual communities and practices that will decrease health inequities, improve health, decrease cost and improve the experience of both patients and clinicians.

## **ACCESS TO CARE**

Five of the transformers can be categorized into interventions that improve patient ease of access to care: walk-in/same day care, extended availability (weekends, mornings, late nights), telehealth, medical interpreters, and investments in social determinants of health.

### *Walk-in/same day care*

Exactly as it sounds, this transformer would increase access to care by offering patients same day access to care and opportunities to walk in and receive care without an appointment. When patients are able to access their doctor's office more immediately, they are able to receive attention in a lower cost setting, rather than seek care in an expensive, medically unnecessary emergency room (ER) environment. Additionally, there is comfort and security in knowing you will be seen the same day for symptoms that are concerning. One study showed that access to same day care for mental health concerns is associated with significantly increased patient satisfaction, decrease in distress level, improvement in the condition at follow-up, and improvement in coping skills (1). There is resounding evidence that patients are far more satisfied with their clinical experience when allowed access to same day care (1, 2, 3). Moreover, physicians have reported high satisfaction with these services, stating they felt their workload decreased after implementation (4). Finally, this type of service could help eliminate unnecessary ER visits. It is estimated that over 9 million visits to the ER in the US each year are non-urgent. One study in Providence, RI showed an estimated \$1.28 million in unnecessary ED visits was avoided by adding walk-in services to an existing free clinic (5). Multiple studies show a high

return on investment for these services (5, 6). This suggests there could be an economic benefit to implementing same day services in addition to improved outcomes and higher patient and physician satisfaction.

#### *Extended availability hours*

Similar to how same day visits improve patient satisfaction and decrease unnecessary ER visits, extended availability to patients on the weekends, mornings, and late nights is sure to have similar impacts. Access to a primary care provider during extended hours is highly likely to replace off-hours visits to the ER. This is important not only to overall healthcare spending, but to individual patient costs as well. One study demonstrated significantly higher charges to patients in the ER as compared to an after hours clinic for the same diagnoses. Median charges were \$457 for children treated in the ER as compared to \$140 for those with similar conditions treated in an after hours clinic (7). Another study demonstrated that patients who had access to a primary care office with extended office hours had total healthcare expenditures that were significantly lower than patients that did not have access to these services (8). ER visits are not only costly, they are also lengthy. After hours care would save patients valuable time that may otherwise be spent in an overburdened ER. In fact, one study reported a significant reduction in time spent addressing non-emergent health issues in an after hours setting when compared to the ER (9). Extended office hours saves time and money, is convenient for patients, and improves access to non-emergent and urgent care, thereby reducing unnecessary and costly visits to the ER.

#### *Telehealth*

Telehealth has proven to be an important tool to increase access to care, especially during the COVID-19 pandemic, where it proved to be a life-line for patients and physicians.

Implementation of telehealth has the capability of offering more than just convenience for patients—this transformer could prove helpful for monitoring the most vulnerable patients. In a study on elderly patients receiving home healthcare services, access to telehealth virtual visits reduced likelihood of discharge to a higher level of care (such as a hospital or nursing home) to 15% as compared to 42% for those without telehealth monitoring (10). Access to telehealth is also essential to management of chronic diseases such as diabetes or hypertension. A randomized trial showed patients with diabetes had better blood sugar control when they had access to telehealth services, and patients with hypertension experienced a significant decrease in systolic blood pressure as compared to those without telehealth services to assist with management of their disease (11). Telehealth is not only a convenience for patients and clinicians, it is likely to improve patient outcomes by improving access to care.

#### *Medical Interpreters*

Medical interpreters are critical to increasing access to high quality care for patients with limited English proficiency (LEP). The use of interpreters in patients with LEP increases the number of prescriptions filled, recommended preventive services completed, and reduces health disparities (12, 13). Professional, medically trained interpreters are essential to delivering this type of care, as ad-hoc interpretation is associated with increased interpretation errors (14). One study showed

that 1 of every 40 malpractice claims were related to lack of adequate interpreter services (15). As a transformer, we hope this legislation will allow all primary care offices to access well-trained interpreter services so that patients may seek care in the language they understand best. It is a human right to have access to medical care in one's own language, as understanding your physician is key to patient autonomy.

### *Social Determinants of Health Investments*

It is commonly understood that the social determinants of health (SDOH) (e.g. race, income, housing, access to healthy food, and much more) play a large role in overall morbidity and mortality. This transformer puts an emphasis on investing in services that help patients overcome these health-related social needs. The COVID-19 pandemic exposed health disparities that had already existed and shed light on the ways one's social circumstance dramatically affect outcomes. Though support for addressing SDOH is generally high, many practices feel ill-equipped to adequately support patients in these areas. Only 41% of clinician respondents to a survey gathering information on SDOH screening said they felt confident they could address social needs, and only 23% routinely screen for SDOH. They cited the greatest barrier to SDOH screening as being time and resources—with 50% saying they did not have the resources to adequately address SDOH (16). Physicians who felt their clinic was able to address patients' health-related social needs were less likely to report burnout. A study found that states that had a higher ratio of social to health spending (calculated as total social service spending divided by total medicare and medicaid spending) had better outcomes in multiple major disease measures, such as asthma, type 2 diabetes, and mortality rates for lung cancer (17). The investment in SDOH is expected to have a high return on investment, as studies also support the economic benefits of preventive social interventions to prevent ER visits. When unhoused patients were given access to basic social services such as transportation, laundry, and a food pantry at a Veterans Health Affairs clinic, there was a 19% reduction in ER visits, and a 34.7% reduction in hospitalizations (18). Investment in resources that could increase patient's ability to access care regardless of their social situation would save money, improve patient outcomes, and reduce physician burnout.

## TEAM BASED CARE

Interprofessional collaboration is sure to improve clinical practice, patient experience, and reduce primary care clinician workload. Five of the transformers fall under this category of team-based care: medical scribes, collaboration with pharmacists, community health workers, care managers and social workers, and patient advisory groups.

### *Medical scribes*

Medical scribes are an important transformer that have the potential to increase quality of physician-patient interactions, reduce physician burnout, and increase productivity. A medical scribe is someone who sits in on a doctor's visit, either in person or remotely via phone call, and assists with documentation as the encounter is unfolding. Multiple studies show that the presence of a scribe greatly increases physician satisfaction without any detriment to the patient

experience—many patients even report increased attentiveness from their physician when a scribe is being utilized (19, 20, 21). One study estimates time spent facing the patient increased by 57% and time spent facing the computer decreased by 27% (22). Physicians who have scribes report increased face time with patients, better chart quality and accuracy, and reduced time spent working on documentation (20). Studies show that the use of scribes can decrease time spent charting by as much as 50%, and the use of a scribe was shown to increase the likelihood that the chart would be closed within 48 hours (19, 20). Moreover, scribes are associated with increased physician capacity. One study in an emergency department showed a 15.9% gain in patients seen per hour, a 25.6% gain in consultations, and a reduced length of stay for the patient by 19 minutes (23). In primary care, there were similar findings in increased patients seen per hour (22). Finally, scribes are often aspiring health professionals—many with intentions to apply to medical or nursing school. The scribe model is mutually beneficial, as the role offers a teaching opportunity and experience in the clinical setting for the scribe, and offers demonstrated productivity, efficiency, and patient care benefits for the clinician and practice as a whole.

#### *Collaboration with pharmacists*

Pharmacists play an important role in assisting physicians with dosing and drug administration, but can also be major players in patient education. Many primary care clinicians do not feel they have time to counsel their patients in detail on their medications the way they would like to, and feel their pharmacy colleagues add value in this regard. In one study, 90% of survey respondents agreed or strongly agreed that having the pharmacist in the office makes management of the patient's medication more efficient, and 75% agreed or strongly agreed that having a pharmacist as part of the primary care team has made their job easier (24, 25). Beyond assisting clinicians in providing patient education, collaboration with pharmacy has been shown to improve patient outcomes. In practices where patients received pharmacist-led education on statins and cholesterol therapy, there was significantly higher likelihood that patients had cholesterol in target ranges (26). Studies have also shown better diabetes control, decrease in total cholesterol, and increase in pneumococcal vaccinations when pharmacists collaborate with primary care clinicians (27). There is potential for a large return on investment with this approach as well, with some studies demonstrating pharmacist-led patient education led to fewer emergency department visits and hospitalizations (27).

#### *Community Health Workers (CHW)*

This transformer is usually a volunteer or paid community member who serves as a frontline public health worker—connecting patients with resources, assisting with access to health services, and providing education to patients. These CHWs reside in the communities they serve and share similar backgrounds and life experiences to the patients who collaborate with them. This goes a long way in building trust between the healthcare system and communities who have been historically marginalized and underserved. CHWs have been shown to lead to better clinical outcomes for patients and have been demonstrated to be cost effective (28, 29, 30, 31). Another

study showed strong community buy in, revealing that 97% of patients were satisfied with the support offered by the CHWs (32). This transformer has the potential to offer a community connection to patients who may feel underrepresented and misunderstood by clinicians who may not share their identity, race, or other life experience.

### *Care Managers and Social Work*

Another collaborative approach to improving patient outcomes includes the use of care managers and social workers to assist with complex social needs. Many primary care clinicians cite lack of time as a major barrier to addressing patient's health-related social needs that may interfere with their ability to follow up on recommendations made. A care manager or social worker can help clinicians manage these situations by providing dedicated time and expertise to work with patients. Studies have shown that there are health benefits to involving social workers in the care of patients—citing improved diabetes control, better behavioral healthcare, and improved self-management of health conditions (33, 34, 35). Patients report better communication and healthcare transitions as well when social workers are involved (36). Social workers are able to achieve these ends by assisting patients in overcoming social determinants of health such as lack of insurance and transportation. Interprofessional collaboration will not only reduce the workload of the primary care provider, but will improve the patient experience and promote better health outcomes.

### *Patient Advisory Groups*

A patient advisory group (otherwise known as patient advisory board or council) is a committee of patients and families who regularly meet with clinical staff to improve the patient experience, influence clinic policy, and contribute to practice transformation. Primary care offices that have implemented this type of working group have found great success. Some examples of projects taken on by patient advisory groups include improving call center scripts, designing welcome packets, and even implementing quality improvement projects (37). In the past, patient advisory groups have been shown to influence and inspire better research by providing perspective that impacted treatment decision making and led to novel techniques for analyzing confounding variables (38, 39). Many primary care practices pride themselves on taking a patient centered approach. The only true way to do this, however, is to have a framework of leadership that promotes active participation from patients and families (40). Engaging patients is a proven means of ensuring that healthcare is patient-centered.

## MEDICALLY VULNERABLE AND ELDER CARE

Medically vulnerable patients, including the elderly, disabled, and terminally ill, require a level of medical care that is difficult to obtain. Primary care physicians are often responsible for the requisition of such care, if not providing it themselves. These patients deserve the dignity of the

highest standard of care as they overcome significant challenges to improving quality of life. Advanced care planning, palliative care, and home care have been shown to improve patient care outcomes at the end of life. As such, PC4You prioritizes advanced care planning and home care/remote monitoring services to fulfill our ethical and economical imperative of optimizing the care we provide to this population.

#### *Advanced Care Planning/Palliative Care*

Advanced care planning and palliative care have been shown to improve patient care outcomes at the end of life (41). Palliative care is often delayed as it requires that a provider understand a patient's cultural and personal experience of illness and end of life. The ideal introduction of advanced care planning is in the primary care setting, as patients will be able to have open and honest conversations with trusted providers and avoid the challenges of addressing/traversing these complex conversations in the setting of acute illness.

Unfortunately, primary care providers face significant barriers to providing this extremely important care including burnout and limited availability of care (42, 43). Despite upwards of 95% of family physicians being comfortable with these conversations, less than 45% report actually having them for one reason or another (44). This leaves patients addressing these intense conversations in settings like the emergency department and intensive care setting or not at all, as patients are often not alert enough to be active participants in their care. The responsibility must then be absorbed by family, friends, and caregivers, fostering stress and confusion (45). Repairing delivery of advanced care planning and palliative care is imperative in providing the standard of care that medically vulnerable patients need and deserve. Several studies have found that physician's personal and professional experience with advanced care planning influences their ability to address these concerns with the appropriate patients (44). Although experience with time is certainly a necessary tool, targeted education can improve a physician's knowledge on filling this care gap. Studies of specific education interventions have proven not only an increase in delivery of this care to patients, but also positive secondary outcomes such as reduction in stress in family members/caregivers of these patients (42). Prevention of physician burnout ensures that there is enough workforce to continue the breadth of work that is done in primary care, including advanced care planning (43).

Restructuring care to expand to any outpatient setting with the coordination of other advanced care providers and support the value of this work with its monetary equivalent will rapidly expand access (45, 46). This monetary support can come from the cost savings that providing this kind of care affords the medical system. Use of palliative care saves the health system \$1,696 in direct costs per admission and \$279 in direct costs per day per patient (47). Time to intervention also impacts the amount of savings, as proved in one study that found cost savings of palliative care increases by preventing delay and incorporating this care within 2 days (\$2,568 in cost savings per admission) instead of 6 days (\$1,312 cost savings per admission) or not at all

(48). A review of 18 studies of the economic impact of advanced care planning showed that cost savings ranged from \$11,500 to \$64,827 per patient in the last 6 months of life (49).

Advanced Care Planning and Palliative Care both prevents physician burnout and generates significant cost savings (48-51).

### *Home Care and Remote Monitoring*

As the need for primary care continues to increase at a rate that outpaces the growth of primary care clinician workforce, it is crucial to diversify the methods of delivery. Patients who are medically vulnerable face physical barriers to care in addition to requiring closer follow-up than their more able-bodied counterparts. Home care and remote monitoring has been broadly studied and is proven to improve patient centered outcomes including patient satisfaction with care (52, 53), reduced hospital and societal costs (54), reduced hospital visits without sacrifice of quality of care (55, 56) and improved follow-up and linkages to specialities or other services (57, 58).

## MENTAL/BEHAVIORAL HEALTH

The importance of behavioral health care and addiction treatment is becoming increasingly appreciated alongside the traditional understanding of physical health. 57.8 million Americans, or 1 in 5 adults, experience mental illness in the US each year. Care for these conditions should be as prevalent as they are. The integration of these services into primary care makes them more accessible and effective, improving access, equity, patient satisfaction and physician burnout.

### *Integrated Behavioral Health*

Integration of behavioral health care with primary care has been found to reduce depression severity and enhance patients' experience of care in community practices (59). This means that not only is behavioral health more adequately addressed, but it also improves the patient experience with health care overall. Gains from integrated primary care visits have been shown to be maintained for 2 years (60). In the care of children and adolescents, integration showed a significant advantage: the probability was 66% that a randomly selected youth would have a better outcome after receiving integrated medical-behavioral treatment than a randomly selected youth after receiving usual care (61).

Physician burnout is an increasingly dominant problem that integrated care may be a strategy for mitigating. Higher levels of integrated care were associated with higher personal accomplishment and lower depersonalization in routine practices (62, 63). Improved provider satisfaction not only enhances day-to-day provider-patient interactions, but also is essential for combating anticipated provider shortages and keeping physicians in primary care positions.

In terms of cost savings, embedding behavioral health alongside primary care has been shown to result in cost savings of \$860 per member per year, or 10.8% savings, for insurers (64).

## *Addiction Treatment*

The opioid crisis is pervasive in the US with over three million citizens experiencing opioid misuse (65). Tragically, only 10% of people with substance use disorder receive treatment, partially due to inadequate access and limited management within primary care (66). Integration of SUD treatment into primary care allows for a relationship to be formed between the patient and provider. In situations of SUD, this relationship can often be the most stable and rewarding one. This foundational relationship is often thought to be the cornerstone of successful SUD treatment (67). Studies have found that SUD patients found it most rewarding when providers were able to understand their practical and psychosocial challenges, including their health concerns, which allowed them to be cared for as more full people (68). This is not only achieved by integration with primary care but federal law mandates that therapy is available and provided to people receiving MAT (67). This is often cited as a barrier to PCPs offering MAT, but a thorough integration of primary care, MAT, and behavioral health overcomes that barrier. It allows for more comprehensive care offerings as patients on MAT were found to have reduced general health care expenditures and utilization, providing support for expanding MAT services rather than relying exclusively on psychosocial, abstinence or detoxification interventions (69).

Integration of MAT with primary care is important for equity. The opioid epidemic has disproportionately affected rural areas, where a limited number of healthcare providers offer MAT. However, PCP utilization among rural medicaid enrollees with OUD is high, indicating a potential intervention point to treat OUD, especially if the individual's PCP is closer than the nearest MAT provider (70). As mentioned above, MAT and behavioral health offerings are crucial to patient health and satisfaction and integration will enable them to be accessible to a wider array of patients.

Similar to integration of behavioral health with primary care, MAT has the potential for cost savings: while MAT does necessitate increased pharmacy utilization, it subsequently leads to lower outpatient, inpatient, ER and total healthcare charges (~[\\$29,000 vs \\$49,000](#)) compared to members not on MAT (71).

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