Improving the Quality of Care for Serious Mental Illness

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Abstract   Serious Mental Illness (SMI) consists of persistent, disabling disorders such as schizophrenia, bipolar disorder, and recurrent major depression. Until recently, the goal of treatment for people with SMI was to maintain the status quo and minimize hospitalizations. Much more is now possible. Effective, recovery-oriented medication and psychosocial treatments are available that improve symptoms, functioning, and quality of life. These are documented in national treatment guidelines. However, the quality of prevailing treatment is low to moderate. Frequently, individuals with SMI do not have access to comprehensive, state-of-the-art care, or do not use effective treatments when available. Too often, clinicians lack key clinical competencies. The result is persistently high levels of disability and premature mortality. To improve outcomes, it is necessary to provide people with SMI with effective treatments that meet their preferences. This chapter reviews quality improvement strategies and methods that have improved treatment of people with SMI. Effective approaches have included the use of outcomes monitoring and feedback, implementation of evidence-based practices, increasing treatment fidelity, improving provider competencies, providing clinical decision support, using quality improvement teams, and implementing collaborative or chronic care models. To be efficient and effective, quality improvement increasingly requires health informatics systems that provide accurate, real-time data regarding patients' clinical status, treatments, and outcomes. Mental health organizations have made less progress than the rest of healthcare in the use of informatics systems. A case study is presented of mental health clinics that implemented health informatics systems, and used these to support quality improvement.

Serious Mental Illness (SMI) has been defined as a persistent psychiatric disorder that has resulted in a substantial impairment in functioning. Approximately 1 in 25 (14 million) adults in the United States are living with a serious mental illness (NAMI 2015). Schizophrenia, bipolar disorder and recurrent major depression are common disorders that often meet this definition. About 1% (2 million) and 3% (6 million) of the population have been diagnosed with schizophrenia and bipolar disorder, respectively (NAMI 2015). Of these, only 64% with schizophrenia and 56% with bipolar disorder are receiving treatment, often from locations such as community mental health centers, hospitals, or jails and prisons (Substance Abuse and Mental Health Services 2014). Recurrent major depression is a leading cause of disability and affects 7% of the population (15 million). Despite high treatment success rates for depressive disorders, nearly two out of three people with these disorders do not seek or receive treatment (Young et al. 2001; Young et al. 2008). The disease burden of SMI is amongst the largest of the medical disorders. Short-term adverse effects include impaired ability to carry out daily activities in productive roles (job, school, housework) and social roles (family, friends). Serious psychiatric disorders have an earlier age of onset than most chronic physical disorders, which contributes to the magnitude of their long-term adverse effects (Kessler et al. 2007). Early-onset mental disorders predict a persistent disabling course

and development of a wide range of physical disorders including obesity, diabetes, cancer, and cardiovascular diseases (Kessler et al. 2009).

Until recently, the goal of treatment for SMI was often to maintain the status quo and minimize hospitalizations. Much more is now possible. A range of effective, recovery-oriented medication and psychosocial treatments are available. These are documented in national treatment guidelines, and include assertive community treatment, guideline-concordant medication management, family and caregiver psychoeducation, supported employment, social skills training, psychoeducation, and cognitive behavioral psychotherapies (Buchanan et al. 2010; Dixon et al. 2010; Kreyenbuhl et al. 2010; American Psychiatric Association 2002). Unfortunately, these treatments are often not available or provided. The quality of prevailing treatment is low to moderate, and clinicians too often lack key clinical competencies. Frequently, individuals with SMI do not have access to comprehensive, state-of-the-art care. In high quality, comprehensive treatment, psychiatric relapse rates are close to zero, about half of interested patients engage in competitive employment, and quality of life is good. Under usual care, annual relapse rates approach 50%, only about 10% of people are employed, and people die 10-20 years prematurely, most commonly due to cardiovascular illness or cancer (Mittman 2012; Institute of Medicine 2006).

There are obstacles to delivering quality care at the patient, provider, system, and societal levels. At the patient level, there are behavioral manifestations of mental illness that lead to poor involvement in care include isolation, and non-conformative, bizarre, inappropriate, self-defeating, self-injurious, threating and, rarely, violent behavior. Cognitive deficits commonly associated with SMI include a poor ability to plan and advocate for treatments. Insight into the disorder and need for treatment vary substantially. This population can also be hampered by limited literacy. At the provider level, clinicians often lack key clinical competencies (Hoge et al. 2005; Young et al. 2000a), impairing their ability to know the array of recommended treatments and deliver or refer patients to those treatments. Additionally, clinicians find themselves hampered by limited time in the clinical encounter. There is often too little time to fully assess treatment needs, assess patient preferences, and provide referrals beyond medication treatment. At the system level, cost is a concern which can limit treatment availability and time in the clinical encounter. Lastly, at the societal level, mental illnesses are stigmatized, and many people do not appreciate the value of available treatments.

Policies and practices have led to unequal coverage for mental health care, low public treatment funding, and limited funding for clinical and services research. Unequal funding persists despite the federal Mental Health Parity and Addiction Equity Act, which mandated parity of insurance coverage for many people. Current financing is insufficient to provide evidence-based psychosocial treatments to many people with SMI, undermining opportunities for people to seek help, and limiting efforts to provide high quality care. The Affordable Care Act (ACA; also known as ObamaCare) reduced financial barriers that prevent individuals with SMI from receiving quality treatment, though these barriers remain large. The ACA also has had some effect on fragmentation between primary care and specialty mental health care through establishment of integrated care models such as Patient-Centered Medical Homes and Accountable Care Organizations. These have the potential to support improvement in the quality of care for SMI (Barry and Huskamp 2011).

Measuring the Quality of Care

To engage in quality improvement, it is first necessary that quality be measured. When evaluating the quality of care, we start with Donabedian, who proposed that individuals' outcomes are affected by processes of treatment received, which in turn are affected by the provider organizations' structure. Each of these three domains can be measured. The most

useful measures of structure will have a strong effect on treatment processes, and the most useful process measures will have a strong effect on outcomes. While there are few such measures for SMI that can be analyzed using routinely collected data, there has been progress (Patel et al. 2015). With regard to the structure of care, provider competencies have been defined (Caspi et al. 2005; Young et al. 2000a), for example, and instruments exist to measure these competencies (Chinman et al. 2003). Outcome measures are very well developed in SMI, and many accurate measures are available. While some are not feasible within the context of treatment workflow, or do not change substantially with existing treatments, there are numerous relevant, useful measures that are feasible for routine measurement (Barlow et al. 2000; National Committee for Quality Assurance 2015).

Quality problems in the of care of SMI can be understood as a mismatch between patients' preferences and needs, and treatments received (Cohen et al. 2013b). In contrast to evidence-based practices, the primary treatment modalities at many mental health provider organizations are "medication checks" by psychiatrists and "case management" by other providers. Typical case management is poorly defined, including activities ranging from psychotherapy to referral for services, and is of questionable efficacy. Clinics are often chaotic, with modest oversight of the process of care. Medical records do not reliably contain information on clinical status and psychosocial treatment utilization, making it difficult to gauge appropriate treatment use. Patient registries are rarely present, making assertive care management challenging. Often, patient follow-up is not monitored. The result is that care looks similar across patients, regardless of individual needs.

One substantial push towards broad quality improvement has been from the federal government and private payers who are tying healthcare payment to measures of quality and value. So far, there has been relatively little impact on mental health (National Committee for Quality Assurance 2014). One exception has been implementation of the Hospital-Based Inpatient Psychiatric Services (HBIPS) quality measures. These are intended to support quality improvement, and allow comparison of quality and safety among hospitals (National Association of Psychiatric Health Systems 2012). The Joint Commission, as part of its publicly reported ORYX hospital quality initiative, requires that freestanding psychiatric hospitals report HBIPS measures. While HBIPS is changing, current measures include documentation of admission screening, hours of physical restraint and seclusion, prescription of multiple antipsychotic medications at discharge, and documentation of a post-discharge continuing care plan with transmission of this plan to the next provider. There have been quality improvement efforts that have reduced or eliminated use of restraint and seclusion, high priority issues for patients. And, failure to communicate with follow-up providers has been a pervasive, severe quality problem in SMI. Beyond these, current measures would be expected to mostly improve documentation, and focus on a treatment process that does substantially affect patient outcomes. However, HBIPS creates a platform for future quality improvement.

Successful Quality Improvement

Although systemic quality improvement (QI) remains relatively uncommon in the care of SMI, there have been numerous examples of successful quality improvement projects. These have used a diverse set of strategies and methods, drawing on core principles of quality improvement: systematic reduction in variation of treatment delivery; data-driven assessment and feedback; and engagement of key stakeholders in the change process. We review

successful methods, including outcomes monitoring and feedback, implementation of evidence-based practices, increasing treatment fidelity and provider competencies, providing clinical decision support, and implementing collaborative or chronic care models.

Models and frameworks exist for studying and describing QI efforts (Ogrinc et al. 2008), however, many published studies do not use these, and do not include effectiveness outcomes. In a review of QI strategies for evidence-based psychosocial interventions for SMI, Meaner and Briand (2014) found 55 articles between 1990 and 2012 examining quality improvement initiatives that took place in North America and internationally. They concluded that quality improvement implementation strategies were only occasionally described, often included only simple evaluations, and only one-third included data on fidelity or patient outcomes. Similarly, Franx and colleagues (2008) systematically reviewed literature published between 2000 and 2007 on organizational changes in SMI quality improvement and found 21 relevant studies. They concluded that multidisciplinary teams and integrated care teams had a positive impact on patient outcomes, however most studies did not describe the change process, nor the impact on the organization and clinician (Franx et al. 2008). There has also been relatively little policy supporting evidence-based quality improvement in SMI. A review by Williamson and colleagues (2015) found a small number of projects to increase the use of evidence in mental health policy, none of which were focused on improving care for adults with SMI.

Quality Improvement Teams. Many projects have used QI teams. These teams include multidisciplinary professionals, with expertise in quality improvement models, techniques, and measurement. In an evaluation of factors related to effective QI, Versteeg and colleagues (2012) evaluated 26 QI teams at 19 mental health organizations in the Netherlands. Teams implemented multiple practice guidelines for anxiety, dual diagnoses, and schizophrenia. Quality improvement implementation strategies included site visits, education, and consultation via internet forum. Patient screening, care monitoring, and patient outcomes were measured to guide implementation. Implementation process assessment included QI team composition, team functioning, educational conferences, and organizational factors (time, workforce, sponsoring, skills, management support, and type of leadership). Across disorders, results were mixed and did not differ between theoretical and practice-derived methods. Successful strategies included support from organizational management, active QI leaders, and QI team diversity (education levels, years of employment). In QI for schizophrenia, greater outcomes monitoring was associated with improved patient outcomes (Versteeg et al. 2012).

Quality Improvement for Evidence-Based Practices.   QI projects often focus on improving the quality of specific clinical practices. In the care of SMI, a number of national practice guidelines specify effective treatments. QI for these practices can focus on one of a number of steps between getting the population with clinical need into appropriate treatment, through to the achieving the best outcomes. The first step is to increase the rate at which appropriate patients have access to, and to the greatest extent possible, make use of evidence-based treatments. In the care of SMI, criteria for use of specific treatments often include both functional or symptomatic needs, and also patient preference. Each must be assessed. The second step is to increase the extent to which treatments maintain fidelity to effective care models. This is particularly important for psychosocial treatments and psychotherapies. In the absence of QI, these treatments vary markedly in their delivery, from harmful, to non-effective, to effective. The third step is increasing the rate at which patients sustain ongoing

treatment. Most psychosocial treatments are not effective when delivered a small number of times, and need ongoing delivery, according to guidelines and continuing assessment of patients' needs. Medications generally require ongoing adherence, with effectiveness decreasing linearly as patients take lower proportions of prescribed medications (Valenstein et al. 2002). Objective measures of adherence in schizophrenia indicate that 50%-60% of antipsychotic medications are taken, on average. However, it is also possible to conduct important QI focused on stopping the use of psychosocial or medication treatments that are no longer effective or needed, and therefore only have the potential for harm.

One evidence-based practice that substantially improves patient outcomes, but is rarely provided or utilized, is family and caregiver interventions (Glynn et al. 2006; Cohen et al. 2008 et al., 2008). With careful attention to implementation, these interventions can be provided in usual care settings (Cohen et al. 2010 ; Dixon et al. 2014) (Young et al. 2011). Ruffalo and colleagues (2012) examined QI focused on family group psychoeducation at 30 community mental health centers in 11 regions. QI efforts included supporting clinical decision making (toolkits, training, monthly consultation), and treatment fidelity. Implementation and fidelity were successful across regions, although challenges included low rates of family participation, little clinician time for outreach, negative clinician attitudes, and strain on the system. Positive patient outcomes included fewer hospitalization, and better medication adherence and recovery perspectives. Sites that identified a clinical champion had greater success.

A second rarely used, highly effective psychosocial practice is Supported Employment. This consists of assistance obtaining and maintaining competitive employment. Clinical activities include job development, job search, ongoing supports, and integration of vocational and mental health services (Dixon et al. 2010). Roughly half of patients with SMI are appropriate for supported employment (Hamilton et al. 2013). When fully provided, supported employment increases rates of competitive employment from about 10% to half of individuals with SMI. There have been numerous efforts to engage in QI focused on Supported Employment. Some have been highly effective, while others have been frustrated, mostly by organizational or financial constraints (Hamilton et al. 2013; Frey et al. 2008; Frey et al. 2011; McHugo et al. 2007)(Drake et al 2013).

One of the most important psychosocial interventions for SMI, Assertive Community Treatment (ACT) also has some of the best evidence regarding QI. ACT is a, "hospital without walls." Specifically, ACT includes intensive management of a shared caseload of severely ill patients by a multi-disciplinary team and a medication prescriber, direct care from the team, community outreach, high frequency contact, and low patient-to-staff ratios (Dixon et al. 2010). ACT has be consistently shown to reduce rates of hospitalization and homelessness, and sometimes been improved functioning. ACT is challenging to deliver at a high level of fidelity, and fidelity to the ACT model is correlated with its effectiveness (Mancini et al. 2009). Maintaining fidelity and effectiveness of ACT requires ongoing QI. Instruments are available to reliably measure ACT fidelity, in specific domains that are amenable to QI. A review of 57 articles published between 2000 and 2011 on ACT program fidelity reported mixed findings of implementation process, with a few studies reporting patient outcomes (Monroe-DeVita et al. 2012). Successful implementation strategies included technical assistance centers (Salyers et al. 2007), a multifaceted approach including multi-stakeholder engagement, and clinical decision support (monthly consultation, toolkits, ongoing fidelity assessments)(McHugo et al. 2007).

Cognitive behavioral psychotherapies are also critical, effective treatments for SMI (Dixon et al. 2010). These consist of empirically validated cognitive and behavioral methods for coping with collaboratively identified problems and symptoms. There has been a particular interest in making this available to individuals who are not yet ill, but at high risk, or to patients who have a recent onset of illness. Despite evidence, guidelines, and calls for evaluations (Nordentoft and Austin 2014), there have been few reports of QI in this area.

Medication represents a core component of treatment for most people with SMI. Treatment guidelines recommend changing medications in response to significant side-effects, but this often does not occur (Young et al. 2010). Also, certain medications, such as clozapine or long-acting medications offer greater effectiveness, but require specific provider competencies and capacity, and are infrequently provided. While there have been numerous efforts to improve the quality of prescribing for SMI, few have produced substantial change (Owen et al. 2008). One prominent project was the Texas Medication Algorithm Project (TMAP) which provided physicians with feedback through an electronic medical records system at community mental health centers (Milner et al. 2009). When applied to schizophrenia, similar to other results, little improvement was seen in prescribing. Innovative methods are needed for improving prescribing of medications to people with SMI.

Multifaceted QI Strategies. QI often focuses on simultaneous provision of multiple interventions (McHugh and Barlow 2010). For example, to improve the quality of care for bipolar disorder, Miklowitz and colleagues offered systematic implementation of three psychosocial interventions (Miklowitz et al. 2007). QI strategies focused on improving clinical decisions through training, resources, consultation support, and toolkits. This was successful in achieving high fidelity rates and improved patient functioning and recovery outcomes.

From 2006 to 2010, a combination of psychosocial services were implemented for disabled patients with SMI at 23 community mental health clinics across 19 states (Frey et al. 2008). QI strategies included implementation of care coordinators to facilitate improvement, service integration and provider communication. Challenges included organizational policies, site leadership, difficulties integrating with mental health services, and high staff turnover (Frey et al. 2011).

Falloon led a project to improve delivery of pharmacological and psychosocial interventions, with a focus on patient education, family interventions, stress management and training, ACT, skills training, and CBT (Falloon 1999; Falloon 2014). Strategies included clinical decision support, multidisciplinary clinical teams, and fidelity audits several times a year. Outcomes included good to excellent treatment fidelity, and improved clinical and social functioning in patients.

Case Study: Improving the Quality of Care for Schizophrenia

A program of quality improvement research has been conducted in the U.S. Veterans Health Administration (VHA) over the past decade that demonstrates a process for improving treatment and outcomes at mental health clinics for patients with SMI. This body of work is remarkable for aligning policy with quality improvement, implementating health informatics systems at usual care clinics, using data to inform change, continuous audit and feedback, and integration of quality improvement into the ongoing management. This work began with research studying the quality of care for schizophrenia, and determinants of this care (Young et al. 1998 ; Young et al. 1999). This identified barriers to quality improvement at the patient,

provider, and system levels. These included providers who often lacked key clinical competencies (Young et al. 2000a; Caspi et al. 2005), low rates of assessment and documentation of clinical problems (Cradock et al. 2001), and shortcomings with administrative data that were available to drive quality improvement (Young et al. 2000b). One key finding was a desperate need for routine data regarding patients' clinical needs, treatment preferences, and psychosocial treatment utilization (Young et al. 2011). These data are necessary to drive assessment and monitoring of care quality. Although data-driven care is now routine in other disorders (e.g., diabetes), this has been largely absent in specialty mental health.

In describing this series of studies, we illustrate the value of study development and refinement across phased, improvement-focused projects (Brown et al. 2008). The initial project, "Enhancing QUality-of-care In Psychosis" (EQUIP), was a pilot, provider-level controlled trial at two VA healthcare centers which applied a chronic illness care model in an attempt to improve care for those with schizophrenia. Care targets were aligned with local and national mental health priorities following discussion with key stakeholders. Care targets were weight management and family involvement in care. At each site, half of the providers were randomized to a 15-month QI intervention and half to care as usual. The care model included a nurse care manager who collected "psychiatric vital signs" from patients at every visit using an online template based and gold-standard instruments. These vital signs included psychiatric symptoms, medication side effects, and measures of quality of life. These routine data, alongside the data collected at the previous visit, were made available to clinicians via a "pop-up window" that appeared each time the patient's electronic medical record was accessed. Areas of concern (e.g., symptom exacerbations, body mass index in the overweight range) were automatically highlighted in the pop-up window based on automated scoring of the standard instruments. The pop-up window also allowed clinicians to securely message one another within the clinic and assign tasks (e.g., please refer to weight service) and link to treatment guidelines (Young et al. 2004). Data were also rolled up and used by local opinion leaders to identify quality leaders and those providers in need of more support to meet targets. Administrators used the clinical panel data to identify service need priorities. The quality improvement strategies included efforts to improve clinician competencies by training care managers to routinize referrals to needed services and clinicians to deliver family services. Clozapine and wellness services were established in the clinic. Mixed methods with both patients and providers were used to evaluate the intervention and its implementation. The summative evaluation showed improvement in several areas of care quality including symptom and side-effect management and medication adherence, but no improvement in use of family services (Cohen et al. 2010; Niv et al. 2014). The process evaluation indicated the informatics were feasible, acceptable, and well utilized (Young et al. 2004) (Chinman et al. 2004).

Following EQUIP, there was an impetus to build a health informatics system that could routinely collect psychiatric vital signs and similar data from patients in order to drive quality improvement for patients with SMI. This led to a series of studies developing, refining, and testing a patient-facing kiosk, the "Patient Assessment System" (PAS), which routinely collects care data directly from the patient at low cost without burdening clinicians. The typical PAS set-up includes a touchscreen monitor, computer, headphones, and a color printer all located in a clinic waiting room. Questions and response choices delivered via the PAS are presented both visually and orally, and are designed for people with cognitive deficits or

limited literacy. A series of studies with the PAS found the data to be valid, feasible in usual care clinics, and acceptable to individuals with SMI (Chinman et al. 2004; Niv et al. 2007; Chinman et al. 2007). This work was accompanied by the development of dashboards to collect and manipulate PAS data for use by clinicians and administrators to monitor care quality.

A second EQUIP project sought to close gaps in care in VHA mental health more broadly across the nation. In comparison to the prior EQUIP pilot, this was larger in scope and more sophisticated in its evaluation. It was a clinic-level controlled trial involving 8 VHA medical centers, across 4 regions of the country. Within pairs of sites in each region, one medical center was assigned to the intervention and one to usual care for 15 months. Quality for schizophrenia care was targeted and specific areas of improvement were again aligned with local and national leadership priorities. To facilitate this, leadership in each region was provided a "menu" of areas that could be targeted for improvement, and asked to choose two of five possible care targets. All regions, separately, chose the same two targets: Supported Employment and weight services, most likely due to the influence of national VHA priorities. At baseline, readiness for change was assessed at each site through quantitative and qualitative data collection from key stakeholders. The data were used to guide the training needed at each site and to tailor QI (Hamilton et al. 2010). Implementation made use of data from patient-facing kiosks, continuous data feedback, clinical champions, and education, with evidence-based QI teams at each site. At intervention sites, the PAS was located in the waiting room of the clinic and used for patient self-reporting of clinical status. Patients responded to questions delivered via the PAS at each clinic visit prior to seeing their clinicians. A scale was located next to the PAS. PAS questions focused on interest in work, utilization of Supported Employment, utilization of weight services, symptoms, side-effects, and health status. Following the last question, the kiosk printed a Summary Report, which patients were instructed to take to their clinician and use to track their progress. Kiosk data were continuously reported to clinicians via reports, to a nurse quality manager, and to clinic leadership via a dashboard. The nurse quality manager made needed service referrals, encouraged service attendance, and monitored quality improvement and care. Leadership identified service needs and promoted warm handoffs in the referral process. QI teams at sites were taught how to engage in Plan-Do-Study-Act cycles on issues identified by site staff, and to use established QI tools. For some sites this was their first experience tackling quality problems. Local QI teams promoted a sense of teamwork, creativity, and data driven change. Mixed methods were used to evaluate implementation and care model effectiveness. Patients and clinicians were surveyed and interviewed at baseline and 15 months later. Intervention clinicians were also interviewed mid-study. The quantitative evaluation showed improvement in several areas of care quality including increased appropriate use of both Supported Employment and weight services. Both types of services are critical for the mental health recovery of individuals with schizophrenia but, until EQUIP, were inadequately utilized by the target population. Qualitative data indicated that provider encouragement of patients to engage in services was critical to increased utilization. Improvement in the distal outcome of competitive employment was limited to one site that had a high level of treatment fidelity. Weight outcomes were significantly improved at all sites by study end (Cohen et al. 2013a; Hamilton et al. 2013). Process evaluations indicated that the PAS was useful and feasible in usual care settings (Cohen et al. 2013a).

A cost evaluation of EQUIP QI indicated that the average treatment costs of EQUIP were modest by comparison to individuals' total expenses for outpatient health care services. EQUIP also was associated with a reduction in use of expensive services, such as intensive psychosocial rehabilitation centers and assertive community treatment. EQUIP demonstrated that routine assessment, care coordination, and an investment in marketing and training of staff enables better outcomes for patients with schizophrenia at a cost that is reasonable. The cost impact of EQUIP is on the low end of the range of costs of implementing evidence-based services for mental disorders (Cohen et al, under review).

This line of research has moved QI into specialty mental health clinics, an area previously thought to be recalcitrant to change and largely ignored. With the establishment of routine data collection directly from patients, via medical informatics, change is possible. This change is supported by the same quality improvement strategies known to be helpful in other parts of healthcare, including include alignment with clinical and system priorities, data-driven change, monitoring of service utilization, providing continuous feedback, and integrating quality improvement into regular clinic management.

Conclusions

Although there is a history of poor care quality for people with SMI, it is possible to improve this care, and substantially improve individuals' outcomes. A wide range of successful quality improvement strategies have been used to improve care for SMI. These efforts need wider dissemination to make an impact on the population as a whole. Effective approaches have included the use of outcomes monitoring and feedback, implementation of evidence-based practices, increasing treatment fidelity, improving provider competencies, providing clinical decision support, using quality improvement teams, and implementing collaborative or chronic care models. Quality improvement increasingly relies on health informatics systems to efficiently and feasibly provide the data required to improve care. While many mental health provider organizations have been slow to adopt these systems, there are encouraging signs. Mobile information technologies are being widely disseminated, including in populations with SMI. Electronic medical records are becoming more common at mental health provider organizations, and are nearly ubiquitous in psychiatric hospitals. As mental health becomes increasingly integrated with general medical care, and pay for performance accelerates, we can expect substantial pressure to monitor and improve the quality of care for SMI. Mental health clinicians can provide high-value care. Quality improvement provides methods for enhancing care value, and a strategy for obtaining the resources needed to improve the outcomes of people with serious mental illness.

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