

Examining potential safety concerns secondary to deficits in system integration in a public specialty mental health clinic

What we know

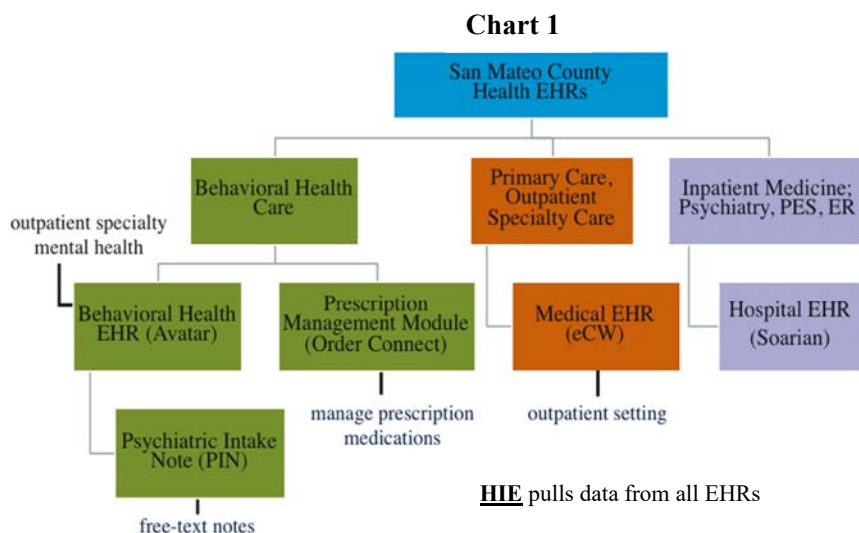
- Patients with severe mental illness have high rates of co-occurring health condition¹
- Integrated care may improve health outcomes for SMI patients.
- San Mateo Health have many EHRs across system with poor integration. (Chart 1)
- In previous studies:
 - 72% of behavioral health records correctly identified a patient's medical home even if they have ICM²
 - Only 68% of psychiatric medications were acknowledged by the primary care provider at next visit following a psych visit³

What we want to know

- Are psychiatrist recording all the medications documented by PCP at a psychiatric intake?
- Do patient's allergies match across different EHRs?
- Evaluate provider usage of San Mateo Health Information Exchange (HIE), a system that integrates information from different EHRs

What we did

- Mixed study design: retrospective chart review & provider satisfaction survey about HIE
- Setting: South County Clinic is an adult specialty mental health clinic in San Mateo, CA
- Study groups: medications (n=13), allergies (n=38), HIE Survey Response n= 22
- Analysis: matching record = ALL medications or allergies are listed in EHRs being compared



	PIN	Order Connect	eCW	Soarian
1	Risperidone - causes difficulty breathing. Zyprexa-causes difficulty breathing.	Tylenol Risperdal Zyprexa	Risperal: SOB Zyprexa: SOB	NKDA
2	NKDA	None	Aspirin	HLAB 1502 risk: Carbamazepine, Lamotrigine, Oxcarbazepine, Phenytoin Penicillin Beef Shrimp

What we found

- **8%** of patients' psych intake noted all medications that were on their PCP note (Figure 1)
- **13%** of patients had allergies that matched across four EHRs (Figure 2, Table 1)
- **77%** of providers have heard of HIE but only **41%** have used it and **9%** have used it within the last 3 months; majority reported that HIE was not helpful
- Found an excessive amount of Tylenol allergies in data, suspect system error.

What does this mean for our system

- Poor information continuity between different EHRs have the potential to cause harm.
- Previous solutions (e.g., HIE) invested by the County have not been helpful
- Lack of provider training and technical constraints may contribute to the issue
- Limitations of our study include small sample size and use of data from only one clinic
- Moving to a more integrated EHR may improve information exchange, safety, and delivery of care

Figure 1

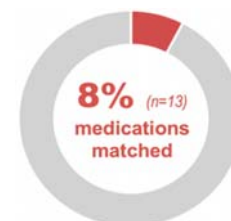


Figure 2



1. De Hert M, Correll CU, Bobes J, et al. Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. World Psychiatry. 2011;10(1):52-77.

2. Garcia, ME, Goldman, EL, Thomas, M. et al. Accuracy of Primary Care Medical Home Designation in a Specialty Mental Health Clinic. Psychiatr Q. 2020 Aug. <https://doi.org/10.1007/s11126-020-09829-z>.

3. Colaiaco B, Roth CP, Ganz DA, Hanson M, Smith P, Wenger NS. Continuity of information between mental health and primary care providers after a mental health consultation. Psychiatr Serv. 2018;69(10):1081-1086.

4. Sutherland JJ, Morrison RD, McNaughton CD, et al. Assessment of Patient Medication Adherence, Medical Record Accuracy, and Medication Blood Concentrations for Prescription and Over-the-Counter Medications. JAMA Netw Open. 2018;1(7):e184196. doi:10.1001/jamanetworkopen.2018.4196.