

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

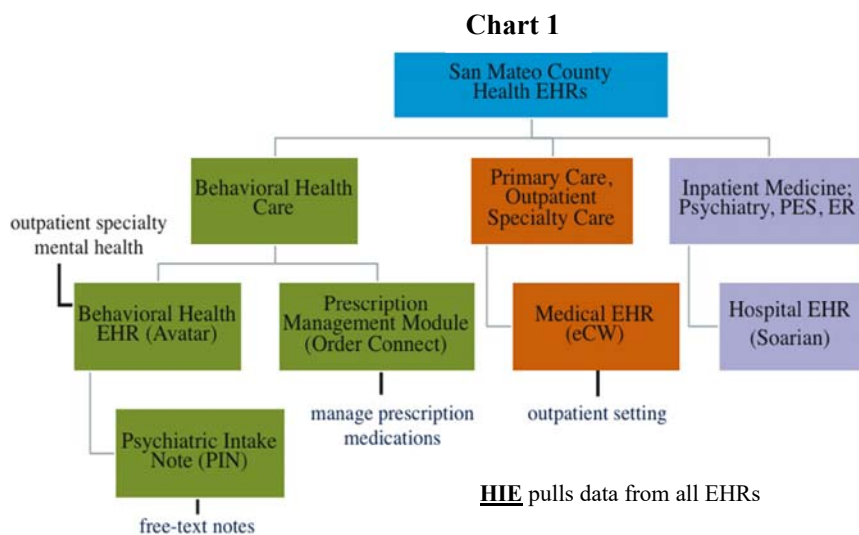


Table 1. Examples of Allergies recorded

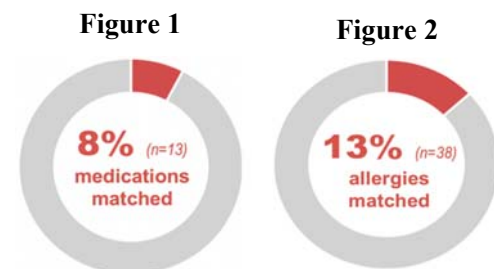
	PIN	Order Connect	eCW	Soarian
1	Risperidone - causes difficulty breathing. Zyprexa-causes difficulty breathing.	Tylenol Risperdal Zyprexa	Risperal: SOB Zyprexa: SOB	NKDA
2	NKDA	None	Aspirin	HLAB 1502 risk: Carbamazepine, Lamotrigine, Oxcarbazepine, Phenytoin Penicillin Beef Shrimp

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



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.