The Use of Psychiatric eConsults in Primary Care

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INTRODUCTION

Many mental health problems are identified, treated, and managed in primary care. But, primary care providers (PCPs) sometimes struggle to address patients' mental health conditions. Mental disorders are frequently undiagnosed, untreated, or inadequately managed in primary care,¹ and PCPs report having poor access to mental health specialist consultation.² A recent innovation, the electronic consultation (eConsult), may help alleviate these problems. eConsults are asynchronous consultations between providers, either over a shared electronic health record (EHR) system or via a web-based platform. An eConsult could support PCPs in delivering mental health care while avoiding specialty referrals, or could identify patients who acutely need a specialty referral. Psychiatrists may be well-situated to respond to eConsult requests because patient "no-shows" are relatively common.³

We add to the limited literature on eConsults for mental health care^{4–6} by assessing the adoption of psychiatric eConsults in a large integrated delivery system serving the Twin Cities region of Minnesota (Allina Health). Allina introduced psychiatric eConsults in 22 of its primary care clinics on August 1, 2015. A PCP would initiate an eConsult request through the EHR and eConsult requests were routed to Allina's psychiatrists in the corresponding service region. Psychiatrists would respond to eConsult requests in the order received. Patients had no fees for eConsults, and psychiatrists received 0.75 work relative value units for each eConsult

completed. PCPs did not receive reimbursement for ordering eConsults.

METHODS

The data for these analyses were derived from Allina's EHR. We identified all primary care office visits for adults with an associated mental health-related diagnosis code, between August 1, 2015, and December 31, 2016. The sample included 95,105 encounters across 219 PCPs. We included variables for the type of PCP (MD, DO, NP, or PA), whether the primary care clinic had co-located mental health services, encounter diagnoses and primary diagnosis flag, whether a psychiatric eConsult was ordered, and the date of the eConsult's response. Available patient characteristics were age, sex, race/ethnicity, and primary language. This study was approved by the IRBs of the University of Minnesota and Allina Health (which used Quorum IRB).

RESULTS

Only 256 of the primary care encounters (0.27%) had a psychiatric eConsult order (Table 1). Among the 37,606 encounters with a primary mental health diagnosis, only 138 (0.37%) had an eConsult order. There was no evidence of a time trend in eConsult use over the study period. Ninety-three percent of the eConsult requests had a response from the consulting psychiatrist that was sent within the EHR, and 86% of those responses occurred within 1 day. Anxiety disorders (66%) and depressive disorders (48%) were the most common diagnoses in primary care encounters with eConsult requests (Table 2). Anxiety disorders and depressive disorders were the most common diagnosis types for primary care encounters without an eConsult order, but the percentages were smaller than for encounters with an eConsult order. Schizophrenia and psychotic disorder diagnoses were relatively more common in encounters with an eConsult order, and bipolar disorder diagnoses were

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Table 1 Characteristics of the Sample

	Number or mean	Percent or SD
Female	62,478	65.69%
Male	32,627	34.31%
Age (mean)	46.57	17.81
Non-Hispanic White	87,026	91.51%
Non-Hispanic Black	2568	2.7%
Hispanic/Latino	1615	1.7%
Asian/Pacific Islander	1369	1.44%
American Indian/Alaskan Native	483	0.51%
Other/not-specified	2044	2.15%
Primary language is English	94,234	99.08%
Primary language non-English or not-specified	871	0.92%
Primary visit diagnosis is MH	37,574	39.51%
Multiple MH diagnoses in the visit	20,801	21.87%
Total number diagnoses in the visit (mean)	4.88	2.8
SUD diagnosis in the visit	4603	4.84%
Non-physician PCP	17,022	17.9%
Physician PCP	78,083	82.1%
Co-located mental health	74,656	78.5%
An eConsult was ordered	256	0.27%

Source: Electronic health records from primary care office visits in 22 primary care clinics

relatively more common in encounters without an eConsult order. We also examined the reason for an eConsult request for 67 eConsult orders where that information was available to the researchers. Fifty-seven percent of those eConsults were for medication-related issues, 33% were for a specific mental health diagnosis, and 15% were for psychiatry without specifying detail. The use of psychiatric eConsults was uneven across PCPs. Sixty-three percent of PCPs never ordered an eConsult, while the top ten users of eConsults accounted for 46% of the total eConsult orders.

Table 2 Percent of Primary Care Encounters with Specific Mental Health Diagnosis Categories for Primary Care Encounters with any Mental Health Diagnosis, With and Without an eConsult Request

	Primary care encounters with an eConsult (N = 256)	Primary care encounters without an eConsult (N = 94,949)
Mental illness category		
Anxiety disorders	66.4%	58.1%
Depressive disorders	48.0%	38.3%
Adjustment disorders	7.4%	8.6%
Attention or conduct disorders	7.0%	7.5%
Childhood or adolescence disorders	5.5%	6.4%
Schizophrenia or psychotic disorders	5.1%	1.2%
Personality disorders	2.3%	0.4%
Impulse control disorders	1.2%	0.1%
Bipolar disorders	0.4%	3.8%
Suicide or self-harm	0.0%	0.1%

Source: Electronic health records from primary care office visits in 22 primary care clinics

DISCUSSION

As primary care practices and psychiatrists gain EHR capabilities, psychiatric eConsults can be a relatively low-cost and low-burden intervention to support and improve the delivery of mental health services in primary care. We found that the adoption of psychiatric eConsults by PCPs in a large integrated delivery system was relatively low, but that eConsults led to timely psychiatrist advice. It is unclear whether low eConsults use was due to unawareness of the tool, a perception that psychiatric eConsults were not useful, or that PCPs already feel overburdened and did not want to take additional time to engage with eConsults. Future research should assess the use and value of psychiatric eConsults in different clinical settings and aim to understand the barriers to using these services.

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Compliance with Ethical Standards:

This study was approved by the IRBs of the University of Minnesota and Allina Health (which used Quorum IRB).

Conflict of Interest: Ms. Carruthers and Dr. Goering were both employed by Allina Health when this research took place. The study authors affirm that they had access to all data from this study, both what is reported and unreported, and that had complete freedom in conducting and reporting the analysis without any influence from study sponsors. There was no editorial direction or censorship from study sponsors. Drs. Golberstein, Joseph, and Druss report no conflicts.

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