Factors Affecting Pediatric Coordination of Care and Specialty Referral Completion

A qualitative analysis of pediatric coordination of care at CentroMed Walzem clinic on the Northeast side of San Antonio, Tx

By Kelechi Anyaehie

MD/ MPH Candidate 2014, UT School of Medicine San Antonio

Primary Care Leadership Program,

August 2013

Introduction-

I began this PCLP experience with an interest in assessing the patient experience and the coordination of care among primary care physicians and specialty providers. Coordination of care applies integrating all of a patient's health care needs within the primary care setting. The purpose of this project proposed to look at the elements of coordinating care between CentroMed, a community health center, and other specialty clinics. The goals of this project were to provide examples of how coordination of care is approached at this site and to provide recommendations for improvement. As the project developed, I wanted to look further into referral completion rates for tangible data in assessing how the referral process affects the coordination of care.

Background-

Coordination of care is a very important concept of primary care, which serves to integrate all of a patient's health care needs within the primary care setting and between other health care settings. When the need for referrals to

specialists are made, the primary care physician must ensure communication and documentation of the management of a patient's health with other physicians, in order to provide the ideal concept of continuity of care. When there is poor coordination, the potential for missed diagnoses and treatments, repeated testing, and patient dissatisfaction are more likely to occur (Forrest et al 2000). This increases medical costs and wastes resources. In one study, Williams et al. proposed 3 coordination events essential to the referral process 1) the referring physician communicates reasons for the referral and relevant patient information, 2) the specialist completes and communicates findings to the referring physician, and 3) the referring physician, the specialist and patient negotiate continuing care (Forrest et al 2000). It is clear, that a cycle of communication must be maintained between the physicians and the patient. Breakdowns in the referral process can lead to lower rates of referral completion amongst patients who really need specialty services.

The effectiveness of specialty referrals as a tool of patient management depends on the physician's plan and the likelihood of the patient completing the referral (Forrest et. al 2007). Thus, for proper management of disease and coordination of an individual's health, primary care providers obtain suggestions from referrals and integrate them into a plan of care. Prior studies have shown that 60-80% of patients who are referred actually go to see that specialist for which they were referred to (Stille et al 2006). However, there has been little information on descriptive studies on the associations among patient, referring primary care physician and health care delivery system characteristics with referral completion (Forrest et al., 2007). It would make sense then to suggest that the quality and

improvement of the referral process relies on the determination of the factors that affect referral completion.

One prospective cohort study, the ASPN Referral study, examined some aspects and results of physician referrals. Specifically, the study identified rates of referral completion, predictors of referral completion, and patient reasons for completion or incompletion of specialty referrals (Forrest et al 2000). Similarly, the purpose of this project is to evaluate and examine the coordination of care between a community health center and other specialty clinics. This project aims to identify and highlight some of the factors that affect the coordination of care and referral completion process amongst pediatric patients in a predominantly Hispanic and underinsured population of the CentroMed community health center in San Antonio, Texas.

Methodology-

A total of 60 pediatric patients were interviewed in 8 days over 4 weeks during the morning sessions at the CentroMed Walzem clinic on the northeast side of San Antonio. Out of the 60, only18 received referrals and were thus surveyed. The survey was given to patient's parents who were referred to a specialist at the previous visit within the past 6 months. A referral was defined as those patients sent to specialists, physicians and non-physicians, and resulted in an in person encounter. Referrals to laboratory and imaging centers were excluded. Referral completion was defined as referrals with written or electronic medical record evidence of specialist feedback or patient verbal expression after a referral was completed, which usually happened at the follow up visit.

Data was collected in the form of answers to a questionnaire given to the physician and pediatric caregivers. Before interviewing the patient, the physician completed the survey and a chart review for the patient. Then each patient was interviewed and surveyed by myself before the physician saw them. The questionnaire for the patients' parents entailed questions about their demographics, what specialty they were referred to, how they were contacted and if they completed the referral. The questionnaire for the physician entailed information about type of specialist referred to, reason for referral, type of insurance, whether the physician or staff made the referral, and if relevant information was passed to the patient about the specialist. The physicians reasons were grouped into 3 categories 1) second opinion, 2) a specialized skill, 3) parent or patient request. The type of specialist the patient was referred to was grouped into 1) medical, 2) surgical, 3) mental health and behavioral specialist and 4) non-physicians. The percentage of each coordination activity was calculated to find the frequency of referrals and the rate of their completion in each category. An additional chart review was also done to confirm insurance provider and referral documentation feedback from the specialist.

Results-

The study sample included 18 patients who met the inclusion criteria of the study and was referred by the same primary care physician as the other patients in the sample. The mean age of patients was 6 years old and the male to female ration was 50/50. There was only 1 patient that was uninsured and the majority, about

83.3% had Medicaid. Table 1 shows the patient demographics for the sample population of the study.

The most common reason for a referral by the primary provider was for a second opinion, 56%. The CentroMed Pediatric clinic has a very high population of patients that get referred to behavioral specialists as the rate of ADHD continues to grow in the population. Extensive counseling and observation is sometimes needed for evaluation and treatment (Rushton 2002). The referrals for specialized skills were usually to optometry for those patients who fail their vision screening and are in the need of corrective lenses. Most parental requests were due to dermatological concerns of acne or hairy nevi. The data is listed in the table 2. Of all the specialty referrals made, the most common one was for mental/ behavioral health. In the table below, the results show that 44% of all of the referrals made during this study were to mental/ behavioral health. Interestingly, there is a high pediatric population that fits the criteria for ADHD and gets referrals for extensive counseling and evaluation.

The coordination activities were also analyzed and listed below in the table. The referring physician scheduled the specialty appointment for 80% of the visits. With every referral that was made electronically, it was assumed that the specialist received information about the patient through access to their chart. However, for one of the referrals to Early Childhood Intervention, a speech therapy program, a phone number was given to the parents who would then call to set up an appointment for a home visit. About 67% of the time, the referring physician was aware that the patient had completed the visit. This was usually due to the fact that

the scanned referral letter was never uploaded to the patient's chart. Thus, only 61% of the patients actually had tangible information regarding suggestions for management or treatment from the specialist. In the other cases, the referring physician relied on the details from the patients or caregiver.

During this study about 78% of the patients reported that they completed the referrals. According to the patients who did not see a specialist, the most common reason was that they never received a call from the specialist office. As seen below, 50% of the time patients don't receive any communication because the referrals were not thoroughly processed electronically. Other times, the caregiver feels as if the referral is not necessary or they are under time constraints and work obligations. For all of the patients none of them had issues with insurance. Medicaid coverage was more likely an issue with prescription refills than referrals in this pediatric group.

Discussion-

This study demonstrates that the referral process plays a big role in the management of patient health. About 30% of follow-up appointments were centered around referral results and co-management. According to the results, 14 out of 18 patients completed physician referrals. The frequency of referral completion shows that there is still room for improvement in the quality of the referral process. Increasing efforts amongst both primary care physicians and specialists positively affect the referral process (Mehrotra 2011). Collaborative efforts are needed to effectively and efficiently manage the health of the patient.

Furthermore, studies have found that assisting patients in scheduling the referral appointment has contributed to higher rates of referral completion (Forrest et al. 2000). This study showed that about half of those who did not complete referrals occurred because they did not receive an expected phone call. The referral process at CentroMed is done electronically for almost all referrals. CentroMed has an electronic referral system that allows the primary care physician to refer through a tab in each patient's medical record. This referral usually gets sent to a care coordinator who sets up the referral with the specialist's office. The patient is then notified by phone by the specialist office for their appointment date and time. After referral completion, it is supposed to be documented in the chart with a scanned copy of a letter from the specialist. This process is not flawless, as some requests don't get through to the coordinator and patients end up not hearing from the specialist office at all. Most parents fail to follow up and usually forget about it if it is not an urgent referral. More studies should look into the effectiveness of electronic referral systems.

In addition, many patients actually complete the referral but have no proof to show for it. The primary care physician depends on specialists' referral completion letters, which usually discuss plans for treatments and suggestions, to be uploaded in the patient's chart. However, a lot of the times, it is missing and the nurses or physician have to make a call to retrieve it. This can alter the physician's and patient's satisfaction with the purpose for the referral. Adding more nonclinical duties to the physician decreases the ideas of efficient and quality health care. Thus,

it is important that both primary care physicians and specialists value the exchange of information and communication for the benefit of the patient.

Uncompensated time for coordinating activities could also affect the rates of referral completion (Forrest et al 2000). A care coordinator plays an essential role and lightens the administrative demands of the referring physician. CentroMed Walzem now has a pediatric care coordinator that helps the primary care physician tremendously with coordinating referrals amongst different specialists. As the need for services to pediatric patients expand, it is essential that primary care physicians enhance their capacity to coordinate care. Patient satisfaction and high quality care depends on effective coordination of care within the primary care office (Forrest et al 2006).

There were many limitations to the study. This study did not focus on the referring physician's satisfaction of the referral process, which could have added substantial information on quality. However, based on observation alone, specialists increase referring physician satisfaction when the communication of results is made by phone or letter before the follow up visit. The perspective of the specialists or the evaluation of the patient's experience with the specialist, were also not addressed which could have enhanced the importance of the whole referral experience. These issues may be explored in future studies.

Recommendations-

The components of the referral process are important determinants of patients completing referrals. Most of the times, the referring physician has to search for the completion document or make a call to the specialty office. Referral

completion awareness could be improved with an electronic medical record that is compatible with updating the patient's primary care records once a specialist appointment has occurred. As of right now, at CentroMed the primary care provider makes a referral through the EMR as part of the patient encounter. Then after that, if they don't follow up on the patient, they wait to hear back from the specialist in the form of a scanned letter. When physicians are unaware of referral completion, quality problems may ensue which could lead to repeating tests, procedures, or medication prescriptions. In general, patients may not be able to receive the services that they may need. Thus, an electronic system that could notify physicians when an appointment has been completed or canceled could help with having all encounters documented for any needed co-management of care. Currently CentroMed has hired a pediatric care coordinator that helps with sorting out the logistics of referral completion and appointment scheduling.

Other studies have shown that assisting patients with making their appointments had a strong positive effect on completion of referrals. In addition, physicians and care coordinators should implement a system of following up on completed referrals once they occur. Sometimes, there is incomplete transfer of information from the referring physician to the specialist and vice versa. Physicians should communicate with care coordinators to ensure that all information necessary for the specialist encounter is included. Another recommendation is to engage the patient in scheduling the appointment (Jarve and Dool 2011). The coordinator can help with finding the best time for calls or better days for

appointments. This helps to avoid the numerous missed calls or voicemails that may occur when trying to schedule referral appointments.

Conclusions-

In conclusion, the referral process involves the relationship between the referring physician, specialist and patient. The decision for referral is very common in primary care, however the referral process continues to present many challenges. Depending on the referral process, care coordination can be affected by the way information is transferred between the referring physician and the specialist. This study shows that, the completion of referrals depends on many factors of the referral process. Prior studies have shown that there is need for improvement in this process. Suggestions for increasing referral completion include helping patients scheduling their appointments and continuously emphasizing the need for continuity of care.

Appendix

Example of Patient Questionnaire

1. Age
2. Sex
3. Insurance
4. Reason for referral: Physician request Parent request
5. Type of specialist referred to:
6. Completed Referral: Y N
7. If No, why?

Example of Physician Questionnaire

1. Patient name
2. Age
3. Sex
4. Referral made at last visit? Y N
5. Type of specialist referred to: Medical Surgical Mental/Behavioral Non-physician
6. Reason for the referral: Second opinion Specialized skill Parent request
7. Did staff or physician make the referral appointment? Y N
8. Referral completion letter by specialist in patient chart? Y N

Table 1: Patient Demographics

Age	Number of patients
<1	4
1-3	3
4-7	6
8-11	1
>11	4
Sex	
Female	9
Male	9
Insurance	
Medicaid	15
Non-Medicaid	3

Table 2: Reason for Referral

Second Opinion	10	56%
Specialized skill	5	28%
Parental Request	3	16%

Table 3: Type of specialist Referred to

Medical	5	28%
Surgical	0	0%

Mental/behavioral health	8	44%
Non-physician	5	28%

Table 4: Coordination of activity

Referring physician or staff scheduled their appointment	17	94%
Referring physician was aware that patient had completed visit	12	67%
Referring physician received feedback from specialist	11	61%
Referrals completed	14	78%

Table 5: Reasons for Incomplete referral

Diagnosis disagreement with physician	1	25%
Did not receive a call by specialist office	2	50%
Social factors (transportation, work, etc.)	1	25%

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