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BRIEF COMMUNICATION

Completion of Primary Care Referrals Among New York State Refugees

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Abstract An important component of the New York State Refugee Health Program's (NYSRHP) mission is to ensure refugees with identified medial conditions are referred to primary and specialty care. A programmatic evaluation was conducted to assess the completion rate for primary care referral appointments made during the initial domestic health assessment among refugees in NYS (exclusive of New York City). Upon arrival in NYS, refugees may receive a domestic health assessment by one of NYSRHP contracted providers. As part of the assessment, referrals for primary and specialty care may be assigned. From July 2010 to June 2011, 69 % of NYS-bound refugees that received a primary care referral by a NYSRHP contracted provider completed their appointment.

Keywords Refugee · Referral · Follow-up · Primary care · United States

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Introduction

A refugee is someone who has crossed an international border owing to a well-founded fear of persecution [1]. In federal fiscal year 2011 New York State (exclusive of New York City) resettled 3,307 refugees. Prior to arriving in the United States, refugees receive a mandatory medical examination to identify applicants with health-related conditions that may render them inadmissible [2].

The New York State Refugee Health Program's project area consists of New York State's fifty-seven counties (excluding New York City). The program contracts public and private providers located throughout the state to provide domestic health assessments for new refugee arrivals to the state. The domestic health assessment is designed to identify individuals with health conditions not observed during or developed after the overseas exam, ensure refugees with identified problems are referred to primary and specialty care, initiate appropriate immunizations, eliminate barriers to successful resettlement, and protect the health of the US population.

A unique component of the program is the outreach provided by field representatives. Now a fully integrated service in high resettlement areas, staff plays a crucial role in coordinating health services and ensuring timely communication between various partners involved in resettlement such as the resettlement agency and the contracted provider. Through the coordination efforts, the provider network has made notable progress in assuring initial health assessments for new refugees.

A key component of the program's mission is to ensure refugees with identified medical conditions are referred to primary and specialty care. This evaluation assessed the rate of primary care referrals completed among refugees that received a domestic health assessment. Previous

studies primarily conducted interviews with small groups of refugees. Studies conducted in different settings and for other populations reported referral completion rates ranging from 20 to 83 % [3–7]. A study assessing completion of overseas referrals for further medical evaluation among immigrants and refugees in San Francisco, CA found 87 % of immigrants and 66 % of refugees south further medical evaluation [8]. Being a refugee was an independent predictor of failure to seek further medical evaluation in the United States [8]. Another study assessing completion of mental health referrals among refugees in a clinic in Denver, CO found a 37 % completion rate [9], citing co-location of physical and mental health services as an important factor in ensuring access to mental health treatment [9]. This observation was of particular interest to the program since not all contracted providers have primary care services on site and this could affect the patients' access to primary care. Barriers to follow-up completion previously discussed include: health literacy, access, transportation, lack of culturally competent providers and issues with enrollees being members of Medicaid as HMOs [10]. Other variables affecting referral completion among different populations include age [5], gender [5], and type of provider seen [3, 5].

Methods

Design

A retrospective cohort evaluation was undertaken to determine the rate of primary care referral appointment completion among refugees in New York State (exclusive of New York City) who received a referral by a RHP contracted provider as part of the domestic health assessment. Ethical approval was not necessary due to the nature of the evaluation which used previously established and regularly implemented programmatic protocols.

Setting and Population

The cohort was comprised of refugees who arrived in NY State (exclusive of New York City) from July 1, 2010 to June 30, 2011. Out of the 3,029 arrivals, 2,056 (68 %) received a domestic health assessment. Sixty-two percent of those (1,283) received a primary care referral. A representative sample of 400 refugees, proportional to contracted provider's refugee patient population size, was randomly selected from the pool of 1,283 refugees that received a domestic health assessment and a primary care referral. Out of these 400 refugees, 388 received a primary care referral to be completed within 180 days after the second health assessment visit. Information from these patients was analyzed (see Table 1). Seven RHP contracted providers located in the five counties where a majority of refugees are resettled across New York State were included in the evaluation (see Table 2). Providers were classified as either health assessment only or health assessment and primary care available sites. The sample of providers included public and private institutions. The refugee patient population seen among providers was comparable, varying from 207 to 363.

Protocol

Site and referral tools were utilized to gather a standardized set of data and referral practices across providers. Tools were distributed among providers and selected resettlement agencies.

Data Sources

Data on type of referral and date referral was given were acquired from the RHP database. The RHP maintains a database which documents demographic and health assessment information on over 27,000 arrivals dating back to July 1, 2001. Information on the clinic to which the patient was referred was obtained from providers or resettlement agencies. Date of appointment and whether the appointment was completed was collected by: reviewing electronic patient records, individual patient charts,

Table 1 Cohort

	All arrivals (n = 3,029)	Sample (n = 388)
Age (years) at time of arrival		
Mean	25	25
Median	23	23
Range	0.24–94	0.54–86
	%	%
Gender		
Male	54	56
Female	46	44
Top countries of origin		
Burma[a]	37	33
Bhutan[b]	31	33
Iraq	10	12
Ethiopia	4	3
Somalia	3	6
Other	14	12

[a] Includes refugees from Burma and Thailand

[b] Includes refugees from Bhutan and Nepal. Note that arrivals are from July 2010 to June 2011

Table 2 Primary care referral completion rates by provider, county, and resettlement agency

Provider	County	Sample total (n)	Completed (n)	Percent
A[a]	2	50	13	26
B[a]—County 1	1	13	9	69
B[a]—County 2	2	22	11	50
B[a]—County 5	5	32	31	97
C[b]	2	46	18	39
D[a]	4	54	52	96
E[b]	3	67	57	85
F[b]	1	46	24	52
G[b]	5	59	53	90

County	Total resettled (n)			
1	300	59	33	56
2	1,064	118	41	35
3	541	67	57	85
4	292	54	52	96
5	751	90	84	93

Resettlement agency	County			
1	1	1	1	100
2	3	67	57	85
3	5	33	32	97
4	1	58	32	55
5	2	35	4	11
6	2	19	14	74
7	4	54	52	96
8	2	64	23	36
9	5	57	52	91

[a] Health assesment only site

[b] Health assessment and primary care available site

resettlement agency case manager notes and/or by calling providers and asking the earliest date a specific patient had a scheduled primary care appointment and whether the appointment was completed.

Data Analysis

The primary outcome of interest was whether the patient completed the primary care referral upon receiving one. For a referral to be marked as completed the date of the appointment and confirmation of attendance were required. Also, the referral appointment had to be completed within 180 days after the second health assessment visit. Data analysis was conducted utilizing SAS 9.2 and Epi Info. Analysis compared completion rates across identified variables of interest (provider type, individual provider, county and resettlement agency).

Literature Search

A systematic literature review on factors related to referral completion and known referral completion rates was conducted.

Results

The referral completion rate for the cohort was 69 %. Eighty-one percent of all completed appointments were attended within 90 days after the referral was given. There was no statistically significant difference (70 vs. 68 %) between providers classified as "health assessment only site" and "health assessment and primary care available site." The results suggest that provider type and services available at site may not be as important as with other populations [3, 5]. The referral completion rates varied among individual providers with Provider B—County 5 and Provider D having the highest rates (97 and 96 %), and Providers C and A showing the lowest completion rates (26 and 39 %). Provider B's referral completion rates varied significantly across counties, from 50 to 97 %. Referral completion rates greatly vary among resettlement agencies from 11 to 100 %. See Table 2 for a full list of completion rates by provider, county, and resettlement agency.

Provider B provides services in 3 different counties:

- County 1 staff schedules appointments for the refugees (referral completion: 69 %).
- County 5 staff works with a third-party Medical Coordinator at the refugee assistance center (referral completion: 97 %).
- County 2 staff does not schedule appointments for the refugees and does not work with a third-party Medical Coordinator (referral completion: 50 %).

Refugees resettled in the three counties work with resettlement agency's (RA) case managers responsible for providing comprehensive services to the refugee, including coordinating medical access. This suggests that Provider B staff scheduling the appointments, as shown in other studies [7], may be a positive factor and the third-party Medical Coordinator plays a greater role in appointment completion. The Medical Coordinator schedules appointments, arranges for translation services, and transportation for refugees.

Provider E, health assessment and primary care available site, schedules primary care appointments to take place on the same day as the second health assessment visit. Their high referral completion rate (89 %) suggests that this policy is effective and should be implemented at other sites. Provider D, health assessment only site, has worked with RA 7 for over 20 years (referral completion:

96 %). RA 7 works alongside an interpreter services organization located in the same building. Interpreters work closely with case managers to ensure refugees attend their medical appointments. County 5 (referral completion: 93 %) and County 1 (referral completion: 56 %) have two contract-providers each, which share similar characteristics and procedures. However, County 5 has a third-party Medical Coordinator and our evaluation suggests that she is the main factor contributing to the high success in referral completion appointments.

Discussion

This project is the first known state-level assessment of primary care referral completion rates among US refugees. High variation in referral completion rates was seen among providers, counties and resettlement agencies. The evaluation was limited by our referral completion definition, appointments completed before the second health assessment visit were not included (11). Also, data on refugees' out-of-state migration status fluctuates. Further exploration should be conducted on what determines refugees receiving a domestic health assessment and whether any of those factors have an effect on primary care referral completion.

An array of variables such as age [5], gender [5], and type of provider seen [3, 5], have been found to affect referral completion rates in other populations; our statistical analysis suggests that country of origin, county, resettlement agency and provider are the most significant factors affecting referral completion among US bound refugees. Further research is necessary to elucidate the role refugees' demographic characteristics play in the completion of health care referrals.

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