



Comprehensive Refugee Health Surveillance Program in Philadelphia, PA

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Acknowledgement

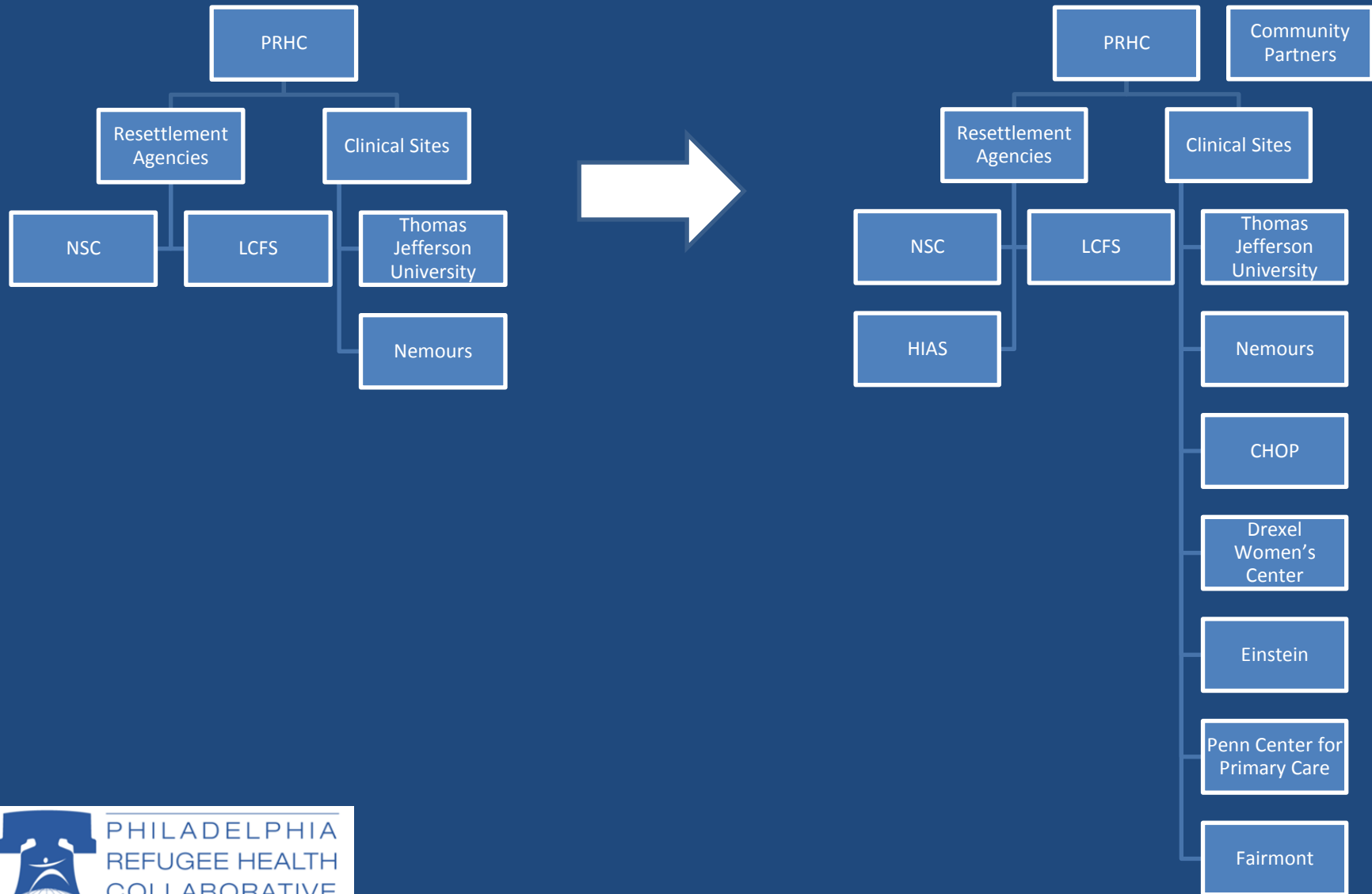
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PRHC: Strategic Plan 2013-2020

Related Goals for Collective Impact Measurement

- Short-term
 - Establish minimum data set of refugee health and resettlement measures to collect across PRHC membership
- Mid-term
 - Use multi-agency aggregated refugee health data to inform decisions and planning efforts
- Long-term
 - Produce data report for external audience

Current Data Collaborators and Our Goal



Data Timeline



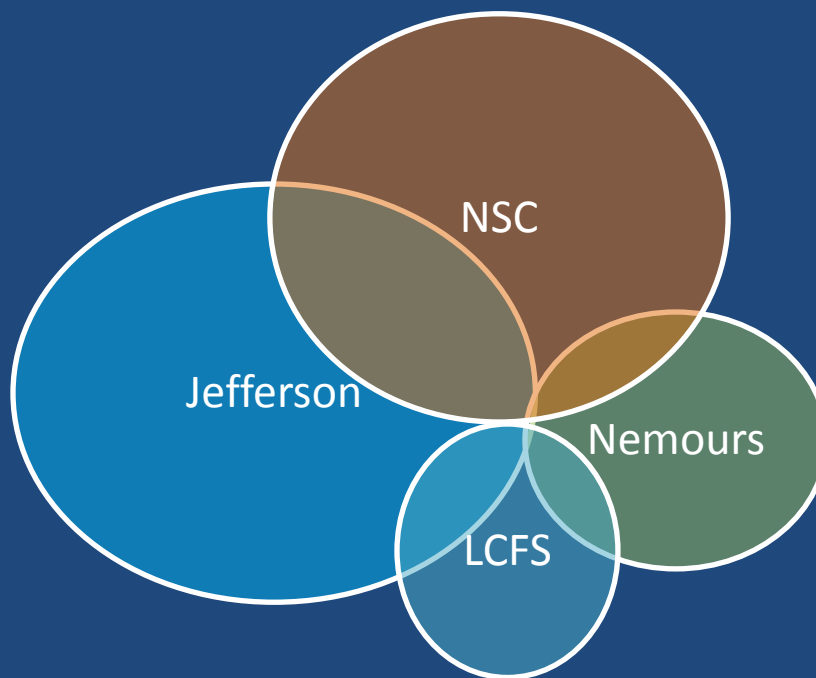
Current Data Collaborators

Total of 2,050 unique patients in the PRHC Longitudinal Patient Registry with resettlement and clinic data overlapping for patients

- Jefferson = 1,256
- Nemours = 345
- NSC = 742
- LCFS = 161



- Merged Data = 454
- Not Merged = 1,596
 - Clinical = 1,147
 - Resettlement = 449



Current Data Collection Methods



- Secure web application for building and managing online databases
- Any device with internet access; no extra software required
- Great for collaboration
 - Merges resettlement and clinical data
 - Separate modules with privacy settings
 - Audit trails for tracking data manipulation and user activity
- Export to Excel, PDF, or Statistical packages (SPSS, SAS, Stata, R)
- <https://isley.kcc.tju.edu/redcap/>

Resettlement and Clinical Data

Resettlement Data

- Demographics
- Screening appointment
- Health orientation
- Health insurance enrollment
- School enrollment
- WIC enrollment
- Specialists appointments
- Follow-up tests
- Dental care
- Eye care
- Significant medical needs
- Pregnancy
- Employment

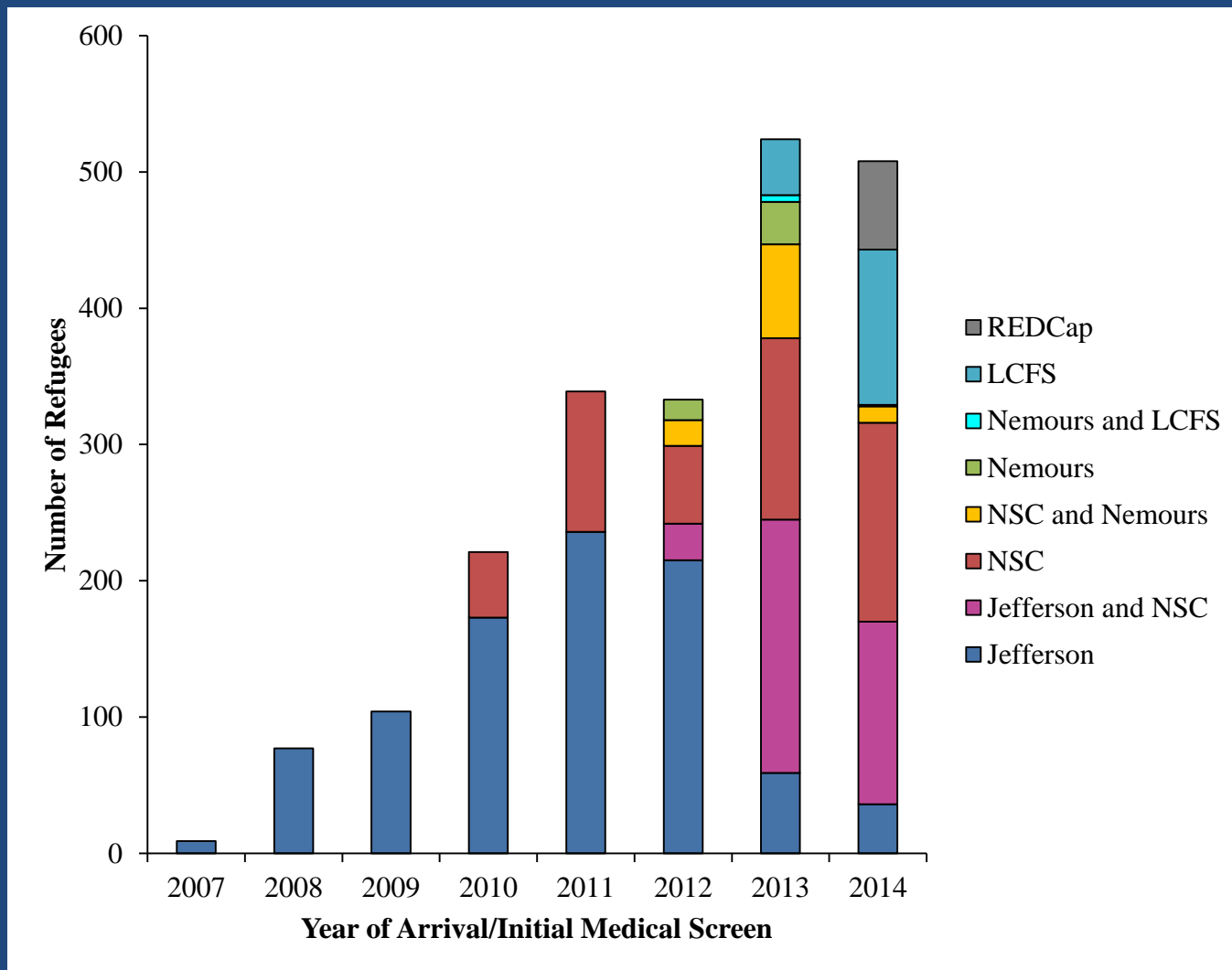
Clinical Data

- Demographics
- IOM
- Immunizations and titers
- Chronic disease: HTN and diabetes
- BMI
- Smoking
- Infectious disease
- Lead screening
- Pregnancy
- Cancer screening
- Specialists
- Geriatric
- Dental health
- Mental health

PRHC Longitudinal Patient Registry:

Data to Date

PRHC Longitudinal Patient Registry

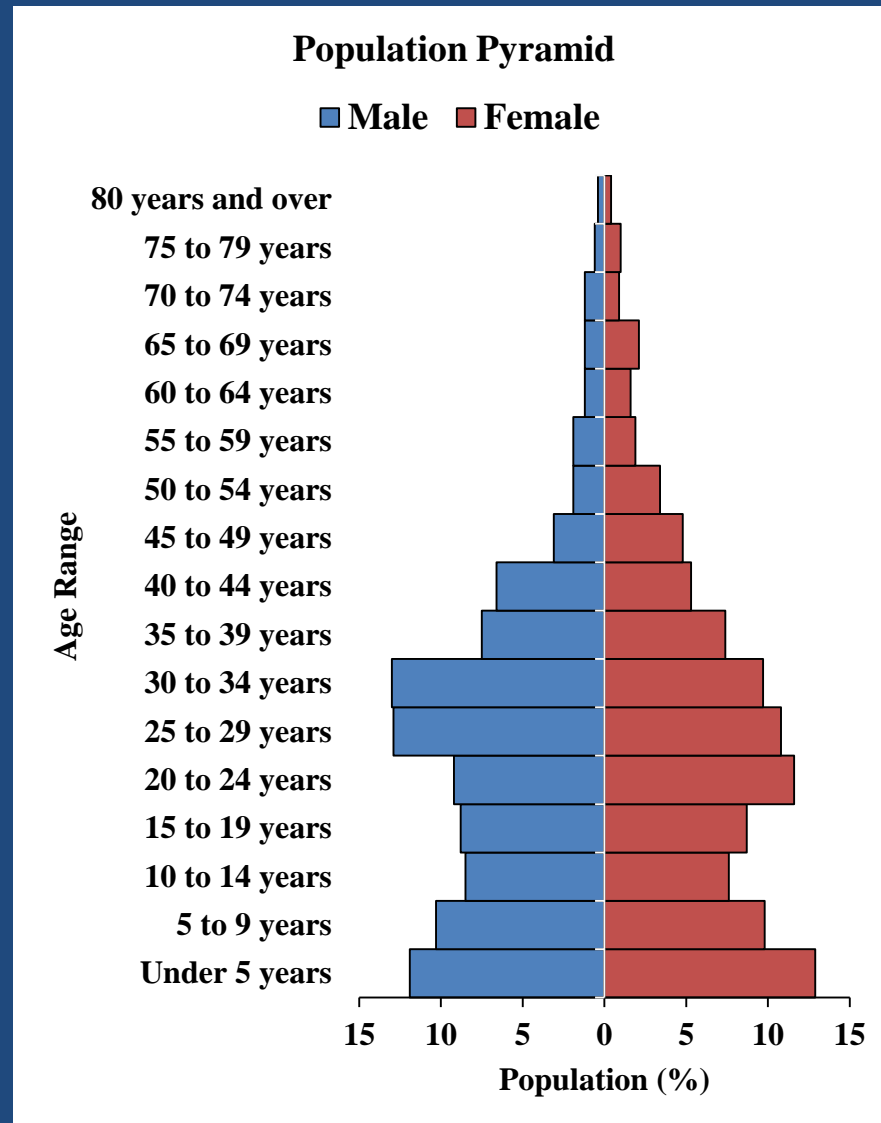


$N = 2,050 \text{ patients} + 165 \text{ in REDCap} = 2,215 \text{ total patients}$

PRHC Longitudinal Patient Registry: Demographics

Patient Characteristics	Frequency	(%)
Country of Origin	2,050	(100)
Bhutan/Nepal	602	(29)
Iraq	601	(29)
Myanmar/Burma	323	(16)
Democratic Republic of Congo	106	(5)
Eritrea/Ethiopia	97	(5)
Other*	321	(16)
Male	1,119	(55)
Age Range At Arrival		
< 18	746	(36)
18-29	515	(25)
30-39	388	(19)
40-49	203	(10)
50-59	92	(4)
60-69	61	(3)
≥ 70	45	(2)

PRHC Longitudinal Patient Registry: Demographics

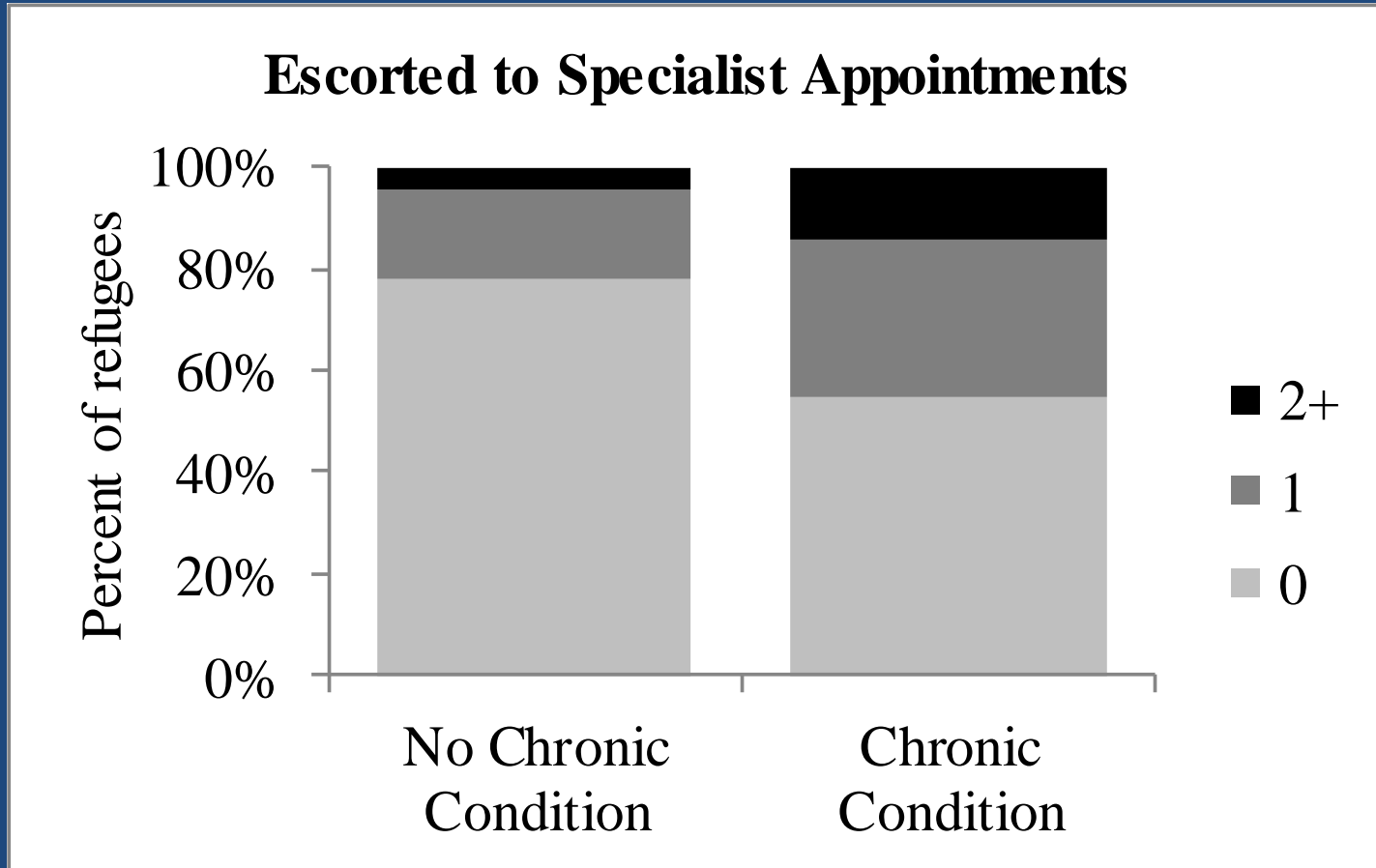


PRHC Longitudinal Patient Registry:

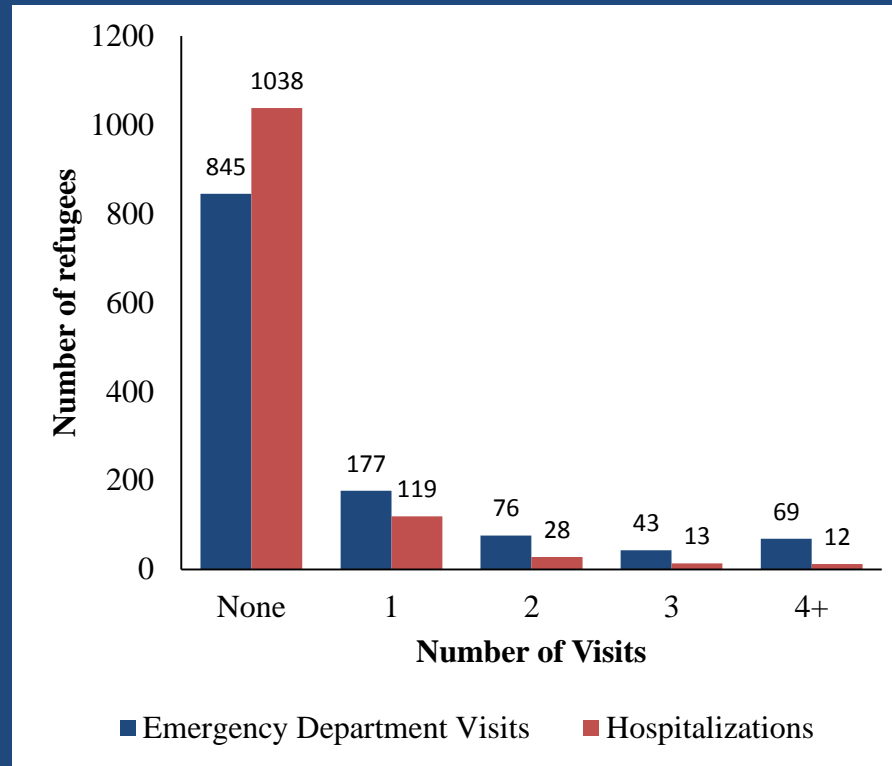
Time to medical screening, school, employment, and health insurance

Number of Days Until Mean (SD) [n]	Country of Origin			Age Range (years)			Adults Diagnosed With Chronic Conditions
	Iraq	Bhutan/ Nepal	Myanmar	Pediatric <18	Adult 18-64	Geriatric >65	
Initial Medical Screen	40.62 (43.81) [n = 501]	28.97 (58.23) [n = 521]	26.45 (25.51) [n = 265]	31.81 (57.40) [n = 619]	37.86 (62.28) [n = 995]	23.02 (11.82) [n = 60]	22.32 (9.84) [n = 138]
School Enrollment (Pediatric Patients)	37.61 (18.59) [n = 62]	36.16 (19.27) [n = 55]	31.95 (10.79) [n = 19]	34.51 (20.10) [n = 184]	-	-	-
Employment (Adults in the Employment Program)	80.16 (38.34) [n = 19]	58.58 (29.02) [n = 55]	56.66 (19.51) [n = 35]	-	65.83 (29.68) [n = 152]	-	72.97 (41.47) [n = 33]
Health Insurance	7.57 (13.31) [n = 294]	3.76 (3.82) [n = 219]	5.46 (13.27) [n = 103]	7.51 (12.22) [n = 314]	6.04 (18.75) [n = 530]	3.81 (3.46) [n = 31]	3.43 (2.52) [n = 138]

PRHC Longitudinal Patient Registry: Chronic Disease in Adults

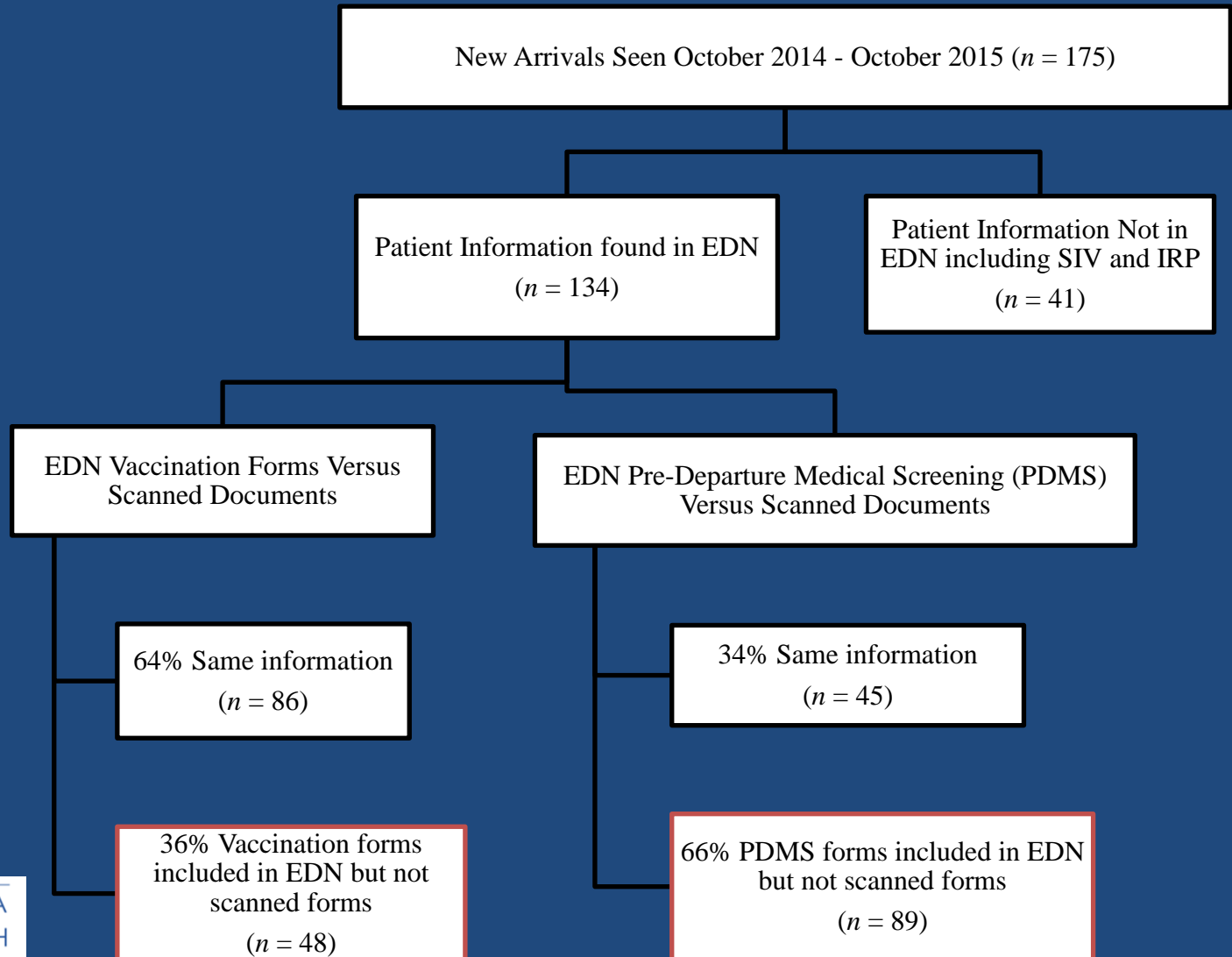


PRHC Longitudinal Patient Registry: Utilization



Utilization	Average Emergency Department Visits <i>M (SD)</i>	Average Hospital Admissions <i>M (SD)</i>
Total [<i>N</i> = 1,210]	0.73 (1.67)	0.23 (0.84)

Direct Access to EDN: Tracking October 2014 – October 2015



Direct Access to EDN: Benefits

- Improved capacity to provide appropriate medical care
 - **Vaccinations for 1/3 of refugees**
 - Avoided duplication of vaccines
 - Reduced risk of side effects
 - Decreased time to full vaccination
 - Decreased number of visits required
 - Decreased delay in entering school and work
 - Reduced total cost of vaccines and vaccine administration
 - **Empiric treatment for 2/3 of refugees**
 - Improving capacity of providers to evaluate eosinophilia and gastro-intestinal symptoms
 - Additional potential saving for others sites
 - Reduction in need for stool ova and parasite testing and patient education, urinalysis, and potentially duplicative treatment
- Resettlement agency time
 - **Reduction of 3% FTE for a single resettlement agency with 14 arrivals per week**

PRHC: Strategic Plan 2013-2020

Related Goals for Collective Impact Measurement

- Short-term
 - Establish minimum data set of refugee health and resettlement measures to collect across PRHC membership
 - **Expand clinical and resettlement agency data collection to more completely cover Philadelphia refugee arrivals**
- Mid-term
 - Use multi-agency aggregated refugee health data to inform decisions and planning efforts
 - **Example: Hearing loss project – utilized hearing data to advocate with an agency to provide hearing aids for a reduced cost for all refugees seen by anyone in PRHC**
- Long-term
 - Produce data report for external audience
 - **Multi-state and multi-institutional collaborations that have driven the conversation for chronic conditions and the importance of care coordination and provide feedback to other agencies and refugees**

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