



Refugee Health Screening Program: Monitoring and Improving Refugee Health Outcomes Through a Data Coordination Process



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Abstract:

Ensuring that refugees entering the US receive appropriate health assessment and timely follow-up is critical to the safety of the refugee as well as the public. In the fall of 2011, the University of Louisville School of Public Health and Information Sciences, Center for Health Hazards Preparedness (SPHIS CHHP), began a project with the Kentucky Office for Refugees/ Catholic Charities, to evaluate current processes used to obtain and monitor health screening data of refugees resettled to Kentucky.

The aims of this project are to 1) increase efficiency and accuracy of data entry, 2) decrease time between health screening and data entry, 3) decrease amount of missing information, and 4) improve follow-up capabilities based upon more real-time data analysis. Initial success in achievement of each of the project aims has occurred following a data coordination process that supported real-time data collection and entry and rapid intervention. Results demonstrate that partnerships between a School of Public Health and the Office for Refugees can realize rapid improvements that benefit individuals and communities

Introduction:

Since 1975, approximately 2.6 million refugees have been resettled in the US¹. Refugees that enter the United States are placed in a final destination through state and local offices designated by the Office of Refugee Resettlement housed in the Department of Health and Human Services². A refugee is defined as a person who has been forced from his or her home and has crossed an international border for safety, according to Kentucky Office for Refugees (KOR).¹

The Kentucky Office for Refugees serves as the policy leader for all resettlement agencies in the state, providing services for program planning and coordination of services, as well as making rules and regulations guiding refugee resettlement programs in Kentucky. Approximately 2000 refugees are resettled each year in Kentucky, primarily in Louisville and Lexington². Since 1994, over 25,000 refugees have entered Kentucky from over 50 different countries¹. Upon entering the state, refugees are eligible for certain services, including a health screening, immunizations necessary for citizenship and 8 months of cash assistance and health insurance¹. As part of the resettlement process, health screenings are performed to ensure that the refugee has the opportunity to receive appropriate medical and public health intervention. A critical aspect of this process involves timely data collection and real-time analysis to ensure effective and efficient follow-up.

The need for reliable data systems to monitor refugee health has been well documented^{3,4,5}. Woodland, Burgner, Paxton and Zwi recognize ten elements for good practice concerning refugee health including coordination of health care; intersectoral collaboration; data collection and evaluation; capacity building; and advocacy⁶. Despite these documented needs, little research concerning the effects of improved data collection on health outcomes has been conducted. This research project documents initial improvement in data collection from a data coordination process and demonstrates the impact and importance of collaboration between government and academia.



Refugee children at the Americana Community Center, retrieved from <http://americanacc.org/>

Methods:

Refugees who enter Kentucky are provided health screenings at a local health clinic. Based on the results of the screening and diagnostic test results, the health screening evaluation form is completed at the clinic. The forms are retrieved on a biweekly basis and data entered into a relational database (Microsoft Access). Date of data entry (DDE) was separated into three time periods in order to track month-to-month improvement in real-time data collection: "month 1" (Dec. 7, 2011 to Jan. 7, 2012), "month 2" (Jan. 8 to Feb. 7), and "month 3" (Feb. 8 to March 7). Days between DDE and the date of the clinic visit (DOV) were categorized into three groups: "within 30 days", "between 31 and 60 days" and "after 60 days". Discrepancies between forms from clinic and information in the database are resolved through email, phone and in-person communication with Catholic Charities and each clinic. Missing data are reported to clinics via secured email and the information is reported back to the research team via secured email. Reports include aggregate data only.

Analysis & Results:

The average time between DOV and DDE at baseline was 69.5 days. After three months of the changed process, the average time between DOV and DDE decreased to 32.4 days. This change was statistically significant (mean difference 37.1, 95% CI 31.0-43.2, p<0.001).

The percent of missing data has decreased from 80.7% at baseline to 34.7% after three months.

The improvements of reducing the time between DOV and DDE and the occurrences of missing data are demonstrated in Figures 1 and 2, respectively.

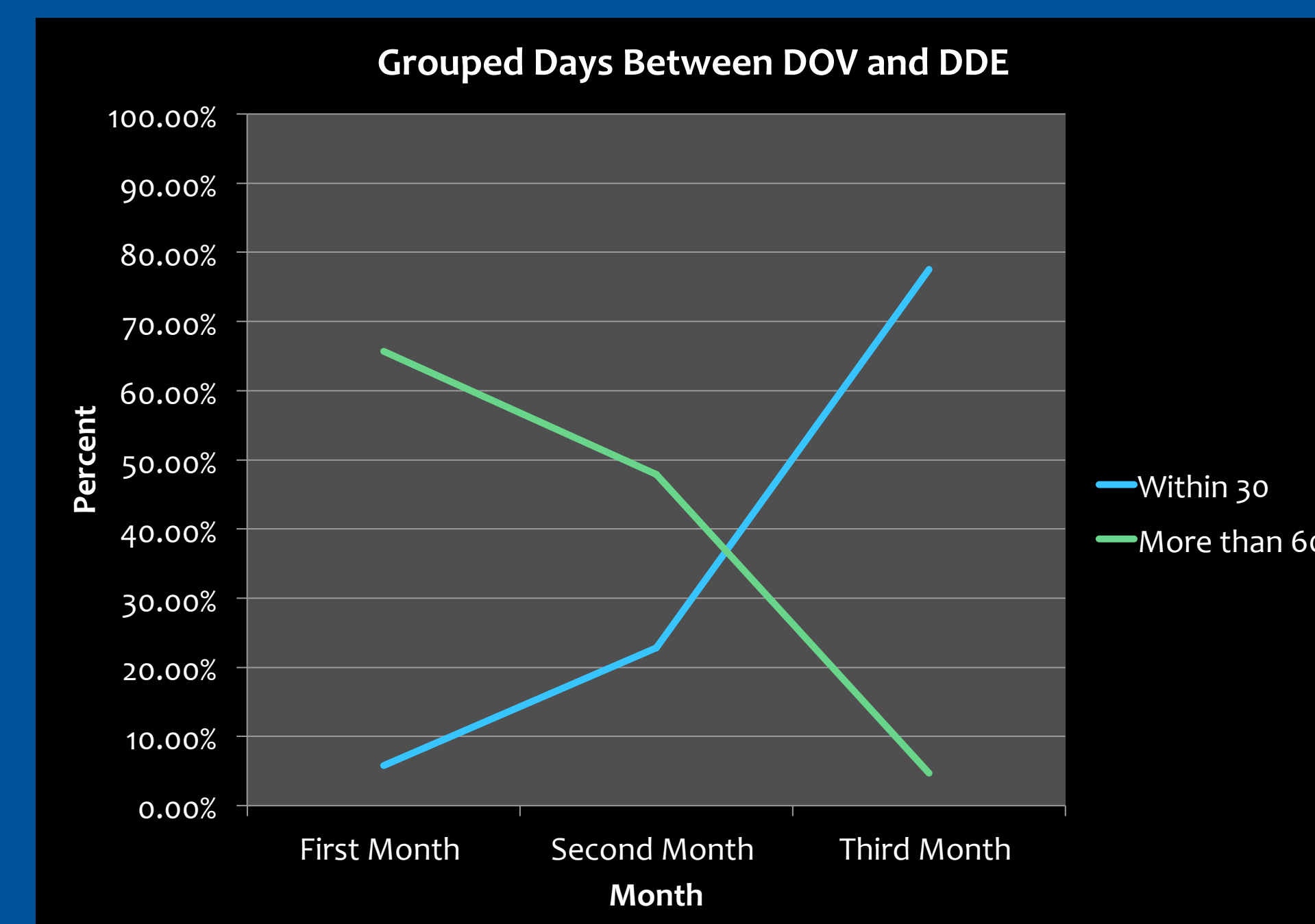


Figure 1 Days between DOV and DDE

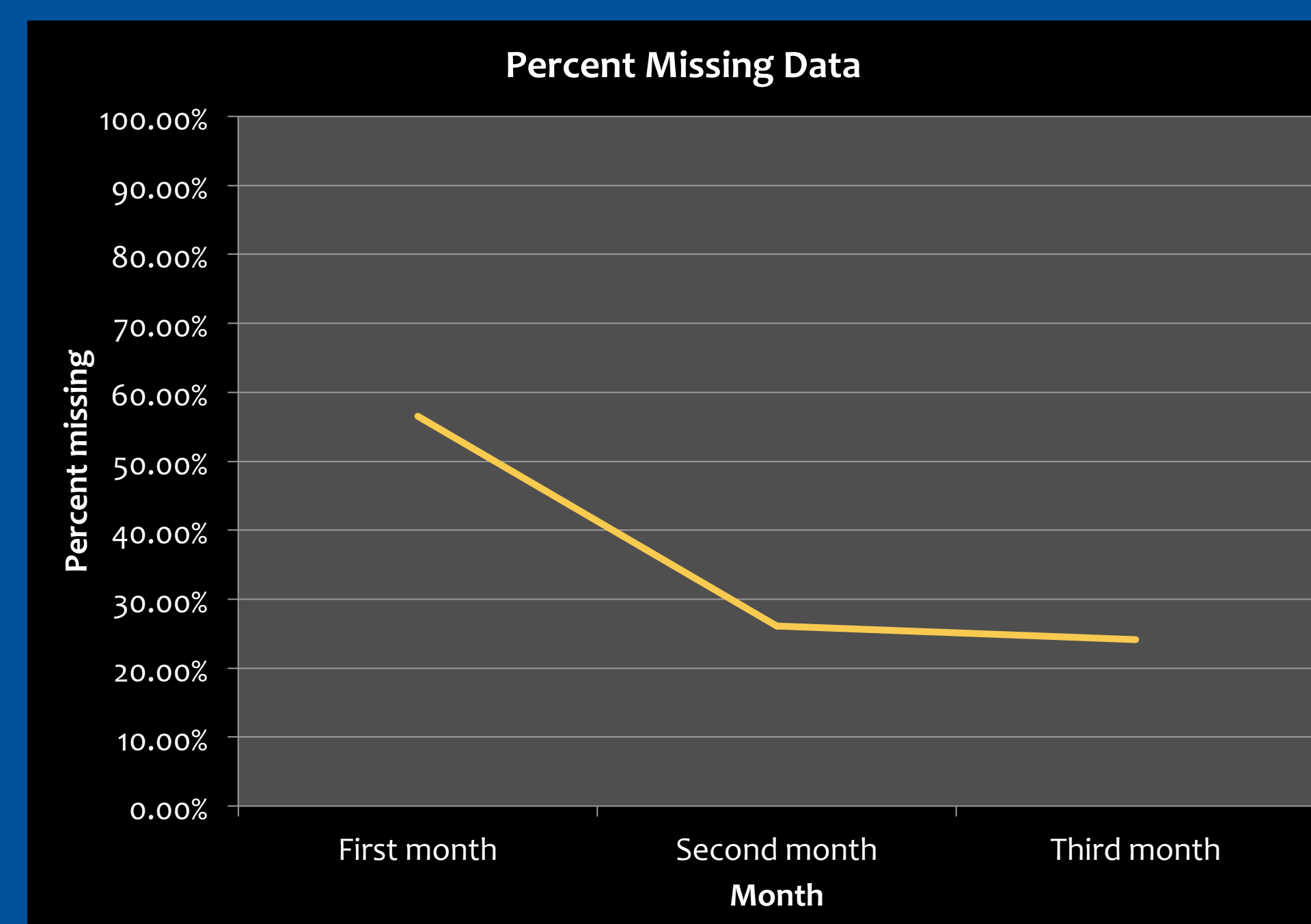


Figure 2 Missing Data

Conclusions:

Results indicate that each month since the beginning of the research project has seen a statistically significant increase in real-time data entry. The overall percent of missing data has also decreased since the start of the project.

These results support the notion that increased communication and coordination between SPHIS and health clinics provide the potential for improved response times to future communicable disease outbreaks and increased opportunity to ensure that the refugee is provided with services such as immunization in a more timely manner. These rapid interventions support improved health outcomes in refugee populations. Acting as navigators for coordination of efforts concerning refugee populations in Kentucky, the SPHIS project team has demonstrated the importance and value of an approach that focuses on data coordination and synergy between Schools of Public Health and Refugee Resettlement agencies.

References:

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