Investigating the Reasons of Undeliverable Mail Sent to Communicable Disease Patients. **Hassan Shah** <sup>1,3</sup>, Uzay Kirbiyik <sup>2,3</sup>, Brian E. Dixon <sup>2,3</sup>

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Preventing spread of communicable diseases is a primary objective of public health (PH). Marion County Public Health Department (MCPHD) notifies carriers of contagious diseases via United States Postal Service (USPS) to remind patients their social responsibility not to spread the disease. We examined MCPHD's completed case files for hepatitis C, acute hepatitis B and salmonellosis. We investigated the rate and cause of delivery failure of documented returned letters for these periods: acute hepatitis B and salmonellosis (8/2010-7/2012 & 9/2013-5/2014), hepatitis C (2/2012-7/2012 & 9/2013-5/2014). These patient addresses used on the letters were obtained from provider and lab reports and from databases that have records of previous addresses. We examined the address source and the process information went through. The overall initial delivery failure rate of the letters sent to these patients was 6.6% (80 out of 1211). We grouped the reasons into patient-originated (44%) and process-originated (56%). Patientoriginated reasons included patient giving false information to avoid the bill, being homeless (shelters, churches given as address). Process-originated reasons included typo, incomplete address, and postal errors. Since there are several steps to the process, there is no single solution to undeliverable mail problem. Using Coding Accuracy Support System (CASS) system may help initial entry errors, sending an initial confirmatory mail by the provider or using phone or email may be alternatives. Our analysis establishes a baseline for error rates for the management of address information, thus gives insights to improve the process. The framework also allows cost-effectiveness analysis for possible solutions like implementing CASS or using electronic records.

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