Scottsbluff's RWMC Laboratory Moves to ELR

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Regional West Medical Center (RWMC) in Scottsbluff, NE has joined national efforts in establishing electronic health information through its leadership of a Regional Health Information Organization or RHIO. The knowledge gained in those efforts set the stage for the work by our laboratory team to begin transmitting electronic messages of reportable conditions and organisms using standard HL-7 formats. HL-7 is the electronic language of communication by medical computers and it is used by our Laboratory Information Management System (LIMS) developed by McKesson to transmit orders and reports in our hospital. We take very seriously the responsibility of submitting laboratory test results that meet the state requirements for reporting to public health authorities such as hepatitis C and HIV. However, we spend a considerable amount of our employee's time finding and documenting these cases. There had been a number of publications that indicated significant cost savings could be achieved if the manual process could be automated. This would potentially eliminate the need for technologists to remember to fill out paper reports or web based formats.

After extensive discussions and research, we employed a software program developed at the University of Nebraska Medical Center (UNMC) called PHIELD to automatically search lab reports and electronically package those that meet specific qualifications for transmission to the state. We also worked in collaboration with our county health officials, particularly Bill Wineman at Scotts Bluff County Health Department who provided constant encouragement. The system is particularly valuable because the reports that we send to the State Epidemiologist Dr. Tom Safranek can also be seen by people at the Scotts Bluff County Health Department using the National Electronic Disease Surveillance System (NEDSS) program. I was invited to give a presentation on the process and steps that needed to be accomplished at national meeting of laboratory information specialists and we received many questions. PHIELD is essentially an electronic filter or net that finds whatever it is programmed to catch and hold. While the PHIELD software was critical to the overall process, we also received outstanding support from Jim Svoboda (no relation), John Glock at UNMC, and John Hall at the Nebraska Department of Health and Human Services (DHHS). Their help was especially useful in the selection of specific codes from LOINC and SNOMED tables so that our reports would match those submitted by other laboratories around the state. After we established the process, John Hall at DHHS monitored our progress for three months before we moved our reports from a test mode into regular production.

Since moving into production, the amount of time we spend on reporting has dropped significantly and I am also more confident that we aren't missing important information that public health needs to monitor disease in our part of the state.