



Frequently Asked Questions: Return on Investment from HIE Participation

Q: What is Return on Investment (ROI)?

A: ROI is the ratio of the benefit derived from an investment versus the cost of an investment. It can relate solely to financial benefits or can be viewed in terms of intangible benefits.

ROI is a key performance indicator often used to determine the benefit of an expenditure. It is useful for measuring success over time and taking the guess work out of future business decisions.

Q: Why should I care about ROI from participation in an HIE?

A: When physicians access HIE data they access a patient's longitudinal history and may review medical appointments or incidents the patient has experienced in other clinics or hospitals, study all medications prescribed to the patient, and view the patient's results from lab tests or x-rays. This level of increased information, found in one place, may lead to enhanced patient encounters, more effective coordination of care, efficiencies in workflow and productivity for the physician and the staff, and cost savings in staff time and expensive medical tests and labs. Time saved by the physician and staff may allow the scheduling of additional patients in a day or in a work week.

For example: 15 minutes saved in gathering 1 patient's medical information = 15 minutes that could be utilized in scheduling one additional patient a day. $\$50$ (1 additional appt. per day) \times 5 days \times 40 weeks = $\$10,000$ annually. In a 3-physician practice, the amount would be $\$30,000$ in annual revenue.

NDHIN fees for a small practice (3 physicians) are approximately $\$1,080$ annually with an average initial $\$10,000$ EMR integration expense to establish the necessary interfaces. Doing the math means in the first year, the practice could realize $\$18,920$ ($\$30,000$ annual revenue increase minus $\$11,080$ HIE investment) or a ROI of $\$1.58$ for every $\$1.00$ invested. In year two, $\$30,000$ annual revenue increase minus $\$1,080$ annual HIE fee = $\$28,920$ realized increase, or a ROI of $\$27.00$ for every $\$1.00$ invested.

Q: How can HIE participation impact ROI for a hospital?

A: ROI for a hospital is more complicated to determine. Through the HIE, the facility utilizes longitudinal patient data to deliver better care, so patient records are up-to-date, the problem list is more complete, and the patient's lab work and medications are complete and current.

The opportunity to capture significantly richer clinical documentation enables coding that more accurately reflects the severity of patients' conditions, which can result in improved revenue through higher case mix index (CMI) and risk adjustment scores (RAF).

By including HIE data, one medium-sized PPS hospital recently participated in a retrospective study which demonstrated the potential for an average CMI increase of .44 through better coding, which would represent an increase of $\$90,000$ in MS-DRG payments annually. That same hospital could also realize a 75% RAF increase for its Medicare Advantage patients, resulting in significantly higher revenue. The potential financial benefits far outweigh the cost of HIE participation.

Q: How can I learn more about the North Dakota Health Information Network?

A: To receive more information regarding the exchange of health information in North Dakota please contact NDHIN at (855)761-0534 or ndhin@nd.gov

