CHCF Issue Brief

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by Katy Haynes

Health Data Exhange Drives Efficiency and Cuts Costs

With California's Data Exchange Framework constantly evolving, the California Health Care Foundation (CHCF) initiated research to explore how health data exchange can reduce health care costs and improve affordability. With new legislation under consideration to strengthen governance for the Data Exchange Framework, CHCF sought timely insights to guide strategy and investment. The goal is to identify real-world use cases, research findings, and early return on investment (ROI) signals that show where health information exchange (HIE) is already delivering value — and where untapped potential remains.

The effort included six expert interviews and analysis of more than 30 peer-reviewed studies, use cases, and evaluations. This brief is intended to inform stakeholders about the findings.

The findings underscore that the greatest near-term savings lie in reducing administrative waste, particularly time spent retrieving charts and avoiding duplicative imaging. Real-time Admission, Discharge, and Transfer (ADT) alerts also emerged as a powerful tool, enabling better care transitions, fewer readmissions, and even lower mortality when fully integrated into workflows. Cross-sector use cases, including housing and jail transitions, show early signs of improving both quality and cost but remain underleveraged. Importantly, the ROI depends on strong execution, which requires clear incentives, seamless technical integration, and robust Medicaid leadership. Stakeholders emphasized that traction depends on specific, high-impact use cases — when data exchange supports clearly defined workflows, meaningful results follow.

Five themes emerged that show where HIE is yielding ROI and where opportunities still exist.

1. Administrative waste is the biggest savings lever, especially time spent chasing charts and avoiding duplicative imaging.

"Most savings are in administrative waste: human capital, faxing, tracking down charts. It's not glamorous, but it's where the real cost reductions lie."

–Julia Adler-Milstein, UCSF

While clinical savings are often difficult to quantify, interviewees pointed to administrative time savings as the clearest value. Studies have shown that physicians spend substantial time that could otherwise be used for direct patient care navigating administrative tasks, such as tracking down patient records. One example

Lesson from the Field: Chart Retrieval Savings in California

Use case: Improving staff efficiency through reduced chart retrieval

Manifest MedEx worked with a large California health plan to reduce outbound calls to hospitals for chart retrieval, resulting in an estimated 9.7 hours of staff time saved daily. This streamlined process significantly cut administrative burden and freed up staff capacity for higher-value work.

comes from Manifest MedEx, a nonprofit health data network that partnered with a large California health plan to reduce time spent chart chasing, returning hours of staff time to more high-value tasks.

HIE use also reduces unnecessary and redundant testing and services, particularly in emergency settings. Emergency departments with HIE access saw 9–25% reductions in CTs, X-rays, and ultrasounds, and one large study found that HIE access significantly reduced both length of stay and 30-day readmission rates.[1] HIE use was also associated with cost savings of nearly $2,000 per patient, largely due to a reduction in unnecessary testing and hospital admissions.[2]

2. Admission, Discharge, and Transfer alerts drive real clinical gains, from fewer readmissions to smoother care transitions and even lower mortality.

"Knowing in real time when someone's admitted or discharged is what turns data into action — but only if that alert reaches the right team and the system is set up to respond."

–David Kendrick, MyHealthAccess

ADT alerts remain one of the most powerful tools in health data exchange. In Arkansas, the state HIE, State Health Alliance for Records Exchange (SHARE), uses them to notify primary care providers of patient discharges, enabling next-day follow-up and reducing readmissions. In the Veterans Health Administration system, alerts were associated with improved rates of timely outpatient follow-up, especially within seven days of discharge.[3] In California, an independent network of primary care practices using Manifest MedEx ADT notifications achieved 21–29% reductions in emergency department readmissions, with approximately one in seven Transitional Care Management (TCM) follow-ups preventing hospitalization. These changes translated into an estimated $4.2 million in annual savings through improved care transitions and reduced utilization.[4] Other studies suggest even broader benefits: among Alzheimer's patients, HIE access during readmissions was associated with a 39% lower in-hospital mortality risk.[5] However, the impact of alerts depends heavily on how well they are integrated into provider workflows and whether care teams are equipped to act on them.[6]

Lesson from the Field: Embedding Alerts to Improve Outcomes at an FQHC

Use case: Real-time ADT notifications integrated into care coordination at Northeast Valley Health Corporation (NEVHC)

By embedding real-time admission, discharge, and transfer (ADT) alerts into clinical workflows, NEVHC — a Federally Qualified Health Center (FQHC) with 17 sites in Los Angeles County — through its participation in the Los Angeles Network for Enhanced Services (LANES), was able to significantly improve care coordination and reduce hospital utilization. Over six months, emergency department visits for patients with diabetes dropped by more than 85%, and hospitalizations for this group declined by 68%. Among adults with asthma, emergency department visits fell by 82%. This case shows how integrating real-time data into primary care workflows can drive better outcomes for high-needs populations.

3. Care coordination use cases, like jail transitions and housing services, show early evidence of both quality and cost improvements.

"When homeless service providers have access to encounter data, they completely change how they do business. It's a full-person view, not a black box."

–Dan Chavez, Santa Cruz Health Information Organization

Despite clear examples of cross-sector impact, many high-potential use cases remain underleveraged. In Los Angeles County, the Los Angeles Network for Enhanced Services (LANES) HIE enabled Alta-Prospect Health System and Partners in Care Foundation to coordinate services for high-risk Medi-Cal patients, resulting in a 68% reduction in inpatient visits over one year.[7] Similarly, Rady Children's Health Network used a closed-loop referral model to improve care continuity for at-risk youth, reducing emergency department visits by 30% and inpatient admissions by 48%.[8]

Other cross-sector efforts show promise but are still emerging. Jail reentry programs using HIE showed better continuity and improved care coordination, and HIE access in nursing facilities has been associated with improved discharge documentation and care coordination.[9] Public health efforts, in contrast, have struggled to adopt HIE consistently, yet targeted successes illustrate its potential.[10] In San Bernardino County, real-time alerts about syphilis in pregnant patients enabled timely treatment during pregnancy and delivery, helping reduce cases of congenital syphilis and prevent disease transmission.[11] Still, these opportunities have yet to be fully realized: a systematic review found public health efforts still struggle to adopt HIE consistently.[12] Yet when implemented effectively, HIE infrastructure can support time-sensitive public health interventions.

Lesson from the Field: Reducing Avoidable Inpatient Visits for Adults with Chronic Conditions

Use case: Integrated data sharing for high-risk Medi-Cal patients

Alta-Prospect Health System, a network of six Los Angeles County hospitals, partners with its affiliate, the Coordinated Regional Care Group (CRC), to manage 130,000 high-risk Medi-Cal patients. In 2024, CRC and the Partners in Care Foundation (PIC), an Enhanced Care Management provider, worked together to improve care coordination for patients experiencing housing instability, behavioral health needs, or chronic conditions. LANES, the local health information organization, supported data sharing and referrals across CRC and PIC. Due to this care coordination and information sharing, inpatient visits for this population declined by 68% between January and December 2024.

Lessons from the Field: Coordinating Care for At-Risk Youth Through Closed-Loop Referral

Use case: Improving continuity of care for vulnerable adolescents in Southern California

Rady Children's Health Network in San Diego and Riverside counties developed a closed-loop referral process that connects pediatric care teams with school-based and behavioral health providers. Their model, which is part of a broader CalAIM-aligned care coordination initiative, improved continuity of care across systems. Over a six-month period, sites using the model reported a 30% reduction in emergency department visits and a 48% reduction in inpatient admissions.

4. ROI depends on execution and requires clear incentives, real integration, and strong Medicaid leadership.

"You don't see ROI unless there's deep integration...and when it comes to vendors, it's less about financial incentives and more about governance that enforces transparency and performance."

–Julia Adler-Milstein, UCSF

Real return on investment depends on how data exchange is designed and enforced. Systems that pair aligned incentives with strong governance and deep technical integration see greater uptake and better outcomes. Medicaid agencies in particular hold unique leverage to mandate and support statewide efforts.

The strongest savings appear when HIE is embedded into clinical and administrative workflows and paired with aligned financial models. Medicare spending dropped by 1.4% overall — and by 6.7% in regions with mature exchange systems and aligned incentives.[13] New York's statewide HIE was estimated to generate $160–$195 million annually, mostly through administrative efficiencies like reduced manual chart pulls, faxes, and record requests.[14] Persistent challenges like information blocking and vendor friction continue to limit the potential of data exchange, even in otherwise promising use cases.[15]

5. High-impact use cases are the key to traction: when exchange participation is tied to specific, valuable workflows, results follow.

"Every single business case has winners and losers. You have to define the use case, otherwise, people don't engage."

–Tim Pletcher, Michigan Health Information Network (MiHIN)

"The lowest-hanging fruit? Pick one use case. Solve it across five geographies. Package it. Scale it. Don't wait for the market; it won't solve this on its own."

–Timi Leslie, BluePath Health

Stakeholders across sectors emphasized the importance of clear, targeted use cases that demonstrate near-term value. By designing participation around specific workflows — such as care transitions, behavioral health integration, or housing navigation — initiatives gain traction and sustainability.

In Oklahoma, MyHealth Access Network demonstrated how interoperability can drive measurable quality improvements. By integrating external data sources into care workflows, they increased colon cancer screening rates and reduced duplicative imaging. CEO David Kendrick emphasized that these results were enabled not just by technical infrastructure, but by strong community governance and a shared understanding of value across stakeholders.[16]

Some efforts have also achieved measurable improvements in quality. For example, a Maryland value-based care program saved $20 million in its first year thanks to statewide HIE infrastructure that enabled preventive outreach and care coordination.[17]

Lesson from the Field: Improving Chronic Disease Outcomes Through Integrated Navigation

Use case: Pair Team and Inland Empire Health Plan (IEHP) pursue Enhanced Care Management

Pair Team partnered with IEHP to support Medi-Cal members with complex needs through a model that combined intensive care management, telemedicine, and social service integration. Their care teams used a custom-built platform that integrates real-time data from health information exchanges into care workflows, enabling timely follow-up after hospital visits, virtual medical care, and coordination with community-based organizations. Compared to the year prior to enrollment, participants saw a 52% reduction in emergency department visits, a 26% reduction in inpatient stays, and a 21% increase in outpatient care.

Taken together, these examples show that data exchange is already delivering value. Realizing its full potential depends on deeper integration, stronger Medicaid leadership, and clearer use cases.

Appendix A. Use Cases by Type and Stakeholder Value

USE CASE	EVIDENCE	IMPACT
Transitional Care Management (TCM)	Aledade-MX case study	$15,000 saved per avoided hospitalization; one in seven follow-ups prevent readmit
Chart retrieval/chart chasing	Fecher et al., Galvez interview/MX large health plan case study	Quantified staff time savings; "real money back to the system"; 9.7 hours daily savings
Statewide ADT Infrastructure	Pletcher interview, universal stakeholder value	Enables value-based payments; foundation for multiple use cases
Clinical Data Collection for Health Plans	McCrary interview	Health plans spend millions to acquire clinical data, highlighting high costs that robust data exchange could reduce.
Reduced duplicate testing	Lammers et al., Carr et al.	9–25% reduction in imaging; $1,037 average charge reduction per ED visit
Behavioral Health / Sobering Centers	Chavez interview	Diverts high-cost ED and jail utilization to lower-cost intermediate care
Medically Tailored Meals waste reduction	Chavez interview	Prevents service delivery to readmitted patients; reduces resource waste
Congenital Syphilis Prevention via Public Health Alerts	Galvez interview, San Bernardino County	Real-time public health alerts helped reduce congenital syphilis by ensuring treatment during pregnancy and delivery.

Source: Katy Haynes, 2016.

Notes: *ADT* is Admission, Discharge, and Tranfer; *MX* is Manifest MedEx; *ED* is emergency department.

Appendix B. Additional Resources

Research by category

Administrative Efficiency and Cost Savings

1. **"Does Health Information Exchange Reduce Redundant Imaging? Evidence From Emergency Departments."** Emergency departments with access to HIE saw reductions in repeat imaging: approximately 9% fewer CT scans, 13% fewer chest X-rays, and 11% fewer ultrasounds, compared to departments without HIE access.
2. **"Impact of a Health Information Exchange on Resource Use and Medicare-Allowable Reimbursements at 11 Emergency Departments in a Midsized City,"; and "Observational Study and Estimate of Cost Savings from Use of a Health Information Exchange in an Academic Emergency Department."** HIE use in emergency departments was associated with significant cost savings — nearly $2,000 per patient in some cases — largely from avoiding unnecessary tests and hospital admissions.
3. **"Reducing Medicare Spending Through Electronic Information Exchange: The Role of Incentives and Exchange Maturity."** Mature HIE systems with aligned incentives were associated with a 1.4% overall decrease in Medicare spending, and a 6.7% reduction when exchange maturity is high and financial incentives are aligned.
4. **"Studying Workflow and Workarounds in EHR-Supported Work to Improve Health System Performance."** Hospital leaders widely reported perceived time savings and improved workflow efficiency from HIE use — especially when data was integrated into the EHR — but effects were not consistently quantified.
5. **"The Business Case for Payer Support of a Community-Based Health Information Exchange: a Humana Pilot Evaluating its Effectiveness in Cost Control for Plan Members Seeking Emergency Department Care."** Payer-supported HIE pilot (Humana) found that ED visits where clinicians accessed HIE data were associated with lower costs per visit primarily from reduced diagnostic testing. The intervention group also had fewer inpatient bed days and shorter hospital stays.
6. **"The Impact of EHR and HIE on Reducing Avoidable Admissions: Controlling Main Differential Diagnoses."** EHR and HIE access to external patient data significantly reduced early readmissions and avoidable single-day admissions for conditions like gastroenteritis, abdominal pain, and UTIs.
7. "**Usage and Effect of Health Information Exchange: A Systematic Review."** Systematic review found evidence of reduced imaging and improved quality, though results varied and were limited by study design.
8. **2019 New York eHealth Collaborative Year-End Report (PDF).** The Statewide Health Information Network for New York (SHIN-NY) HIE was estimated to generate $160–195 million in annual system-wide value, largely from administrative efficiency.
9. **Manifest MedEx Large Health Plan Case Study.** A large California health plan using Manifest MedEx ADT notifications achieved a 20% reduction in outbound calls to hospitals and saved 9.7 hours of daily staff time.

Care Coordination and Clinical Outcomes

1. **"Accuracy of an Electronic Health Record Patient Linkage Module Evaluated Between Neighboring Academic Health Care Centers."** Use of a point-to-point HIE tool in the ED improved provider understanding, reduced duplicate testing, and enhanced care quality for patients with complex histories.
2. **"Association Between Use of a Health Information Exchange System and Hospital Admissions."** When HIE was accessed during ED encounters, the odds of admission were 30% lower, resulting in $357,000 in annual savings.
3. **"Effects of Health Information Exchanges in the Adult Inpatient Setting: a Systematic Review."** Systematic review of 11 studies found low-strength evidence that HIE reduces unplanned readmissions and possibly mortality, with insufficient evidence for impact on cost or utilization outcomes.
4. **"Health Information Exchange Associated with Improved Emergency Department Care Through Faster Accessing of Patient Information From Outside Organizations."** In emergency departments, faster access to outside information (enabled by HIE) was associated with shorter visits, fewer imaging orders, lower admission rates (2.4%), and $1,187 lower average charges per visit.
5. **"Health Information Exchange."** Systematic review found evidence of reduced duplicative testing and improvements in some quality-of-care measures, though clinical outcomes like adverse drug events were inadequately studied.
6. **"Health Information Technology to Improve Care for People with Multiple Chronic Conditions."** When emergency room physicians accessed patient medical history through EHR and HIE systems, it led to reductions in unnecessary 7-day readmissions and single-day admissions.
7. **"The Benefits of Health Information Exchange: An Updated Systematic Review."** Systematic review of 24 studies found mixed but promising evidence of HIE benefits in adult inpatient settings, particularly in reducing repeat diagnostics and improving care coordination.
8. **"The Impact of Health Information Exchange on In-Hospital and Postdischarge Mortality in Older Adults with Alzheimer Disease Readmitted to a Different Hospital Within 30 Days of Discharge: Cohort Study of Medicare Beneficiaries."** For Alzheimer's patients readmitted to a different hospital, shared HIE access between hospitals was linked to a 39% lower chance of in-hospital mortality during the readmission.
9. **"The Potential for Community-Based Health Information Exchange Systems to Reduce Hospital Readmissions."** Accessing HIE data within 30 days of discharge was linked to a 57% lower chance of readmission, resulting in an estimated $605,000 in annual savings from avoided hospital stays.
10. **"The Value of Health Care Information Exchange and Interoperability."** National model projected $77 billion/year in savings from full HIE interoperability.
11. **Manifest MedEx and Aledade Case Study.** Partnership delivering real-time ADT alerts into primary care EHR workflows achieved 30% increase in TCM rates, 21-29% reduction in ED readmissions, and $4.2 million in estimated annual savings through improved care coordination.

Cross-Sector and Public Health Use Cases

1. **"Despite the Spread of Health Information Exchange, There Is Little Evidence of Its Impact on Cost, Use, and Quality of Care."** HIE is still underutilized in public and population health efforts.
2. **"Health Information Exchange between Jails and Their Communities: A Bridge That Is Needed under Healthcare Reform."** Multi-stakeholder HIE implementation between jails and community providers showed improved care coordination for populations cycling between custody and emergency departments
3. **"Impact of Event Notification Services on Timely Follow-Up and Rehospitalization Among Primary Care Patients at Two Veterans Affairs Medical Centers."** Event notification services reduced rehospitalization and improved follow-up timeliness.
4. **"Improving Poison Response with Statewide HIE."** By integrating real-time HIE access, the Connecticut Poison Control Center reduced call times and helped prevent unnecessary ED visits and hospitalizations by giving clinicians complete, timely exposure histories.
5. **"The Use of Health Information Exchange to Augment Patient Handoff in Long-Term Care: A Systematic Review."** HIE enhances handoffs and continuity in long-term care environments.

ROI Drivers and Implementation Barriers

1. **"Differing Strategies to Meet Information-Sharing Needs: Publicly Supported Community Health Information Exchanges Versus Health Systems' Enterprise Health Information Exchanges."** Hospitals that participated in HIEs pursued different implementation strategies based on their organizational priorities, with more proactive engagement linked to greater perceived value from information exchange.
2. **"Electronic Health Records, Adoption, Quality of Care, Legal and Privacy Issues, and Their Implementation in Emergency Departments."** ROI is highly dependent on alert timeliness, user behavior, and EHR integration.
3. **"Information Blocking Remains Prevalent at the Start of the 21st Century Cares Act: Results from a Survey of Health Information Exchange Organizations;"** and **"Information Blocking: Is It Occurring and What Policy Strategies Can Address It?"** Information blocking and vendor limitations impede full ROI realization.
4. **"The Effects of Health Information Exchange Access on Healthcare Quality and Efficiency: An Empirical Investigation."** Empirical study of 80,000+ ED encounters found HIE access significantly reduced length of stay and 30-day readmission rates, with amplified benefits for chronic conditions and when physicians had greater HIE experience.

HIE is health information exchange; *EHR* is electronic health record; *ED* is emergency department; *ADT* is Admission, Discharge, and Transfer; *TCM* is transitional care management; *ROI* is return on investment.

About the Author

Katy Haynes is a Bay Area–based consultant working with the California Health Care Foundation to explore the cost-saving potential of California's Data Exchange Framework. Haynes has 15+ years of experience in product development, public policy, and health care. She specializes in digital strategy, health technology, and public sector innovation, and has led initiatives at the intersection of AI, data infrastructure, and health systems through work with the White House, the US Digital Service, the Chan Zuckerberg Initiative, and Nightingale Open Science.

About the Foundation

The **California Health Care Foundation** (CHCF) is an independent, nonprofit philanthropy that works to improve the health care system so that all Californians have the care they need. We focus especially on making sure the system works for Californians with low incomes and for communities who have traditionally faced the greatest barriers to care. We partner with leaders across the health care safety net to ensure they have the data and resources to make care more just and to drive improvement in a complex system.

CHCF informs policymakers and industry leaders, invests in ideas and innovations, and connects with changemakers to create a more responsive, patient-centered health care system.

Endnotes

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