Utah Department of Health & Human Services
Health Equity

REDiHealth OT-21
Data analytics project: Population health management

Introduction

The Utah Department of Health and Human Services Office of Health Equity started a project titled "OT21-2103: National Initiative to Address COVID-19 Health Disparities Among Populations at High-Risk and Underserved, Including Racial and Ethnic Minority Populations and Rural Communities." REDiHealth was awarded a contract to help with this initiative.

The activity title was defined as "Data capacity building for rural hospitals' implementation of population health management systems to support COVID-19 prevention and control."

The activity description was written as: "Part of Utah's rural health care system is made up of independent hospitals without integrated systems for electronic medical records (EMR). The Utah State Office of Rural Health (SORH) will work with the nine independent, rural hospitals to standardize population health data collection. The Utah SORH will contract with a consultant to help identify key areas of challenge and success for implementing population health, integrate population health management into daily operations, and increase capacity to collect and analyze relevant data. This will focus primarily on social determinants of health, post-COVID-19 syndrome, and chronic disease detection and prevention that leads to more severe cases of COVID-19. To ensure identified needs can be met for each patient, the Utah SORH will work with the hospitals and the communities to develop collaboration networks and establish community-clinical linkages for better management of conditions and risk factors."

REDiHealth worked with 6 of the 9 independent rural hospitals for 18 months and started work at various times between June 2022 and December 2022. Hospital 5 and hospital 6 were the first hospitals to start, while hospital 4 was the last.

The scope of work included identifying key challenges and successes in implementing population health, integrating population health management into daily operations, and increasing the capacity to collect and analyze relevant data. The initiative also focused on developing collaboration networks and community-clinical linkages to better manage conditions and risk factors.

As REDiHealth started work with the facilities and their data to achieve the project's goals, it became evident that to get the greatest engagement and buy-in, they needed to address the immediate needs and concerns of the hospitals. The scope of work was expanded to include solving a number of problems

with data such as scheduling, revenue integrity issues, eliminating manual processes, and improving data collection or reporting.

REDiHealth's goal has been to help each facility harness the power of data analytics to enhance financial management, clinical outcomes, operational efficiency, and population health, with a particular focus on health-related social needs. This report combines the achievements, challenges, and future directions from each hospital's involvement and highlights significant milestones and collective insights gained.

Success and growth

The OT-21 initiative has yielded significant successes in enhanced data collection, integration, and reporting systems in each of the 6 participating hospitals. These changes streamlined operations and improved decision-making processes, leading to a more efficient and effective healthcare delivery system. The automation of previously manual processes reduced the workload on staff and improved the accuracy and reliability of the data collected. This shift toward automated and integrated data systems has empowered hospitals to optimize resource allocation and focus on high-value services which results in better patient management and clinical outcomes.

One of the most notable achievements of the OT-21 initiative is the implementation of comprehensive clinical registries and data dashboards. These tools have given healthcare providers actionable insights which enables them to shift their focus from reactive to preventive care. Multiple clinical registries covering areas such as diabetes, heart failure, depression, surgical site infections, stroke, and women's and newborn care have been developed and deployed. The integration of data from various sources, including EMR, payer data, and non-EMR sources, has been central to these projects, enhancing accuracy, efficiency, and real-time monitoring capabilities.

Significant progress has been made through initiatives such as chargemaster reviews, denials management, and discharged not final billed (DNFB) reporting in the area of revenue integrity. These efforts have led to substantial financial benefits for the participating hospitals. Automation of denials management and discharged not final billed (DNCB) reporting has improved accuracy and efficiency, ensuring timely and appropriate billing processes. In addition, by identifying and addressing discrepancies between contracted and actual insurance reimbursements, hospitals have begun to recoup significant revenue. These advancements in revenue integrity not only enhance financial stability but also support the overall operational efficiency of these healthcare facilities.

The initiative's emphasis on preventive care and community health has also led to the development of tools like the community care dashboard and annual wellness visit tracking to better address the needs of specific populations. These tools are instrumental in closing care gaps and providing comprehensive care management to make sure vulnerable populations receive the attention and resources they need. Improved reporting and surveillance capabilities, particularly in tracking surgical site infections, antibiotic use, and COVID cases, have led to better patient outcomes and more efficient care provision. The ability

to produce accurate and reliable reports quickly has transformed clinical and operational decision-making, collectively enhancing the community and population health capabilities of the hospitals, and improving care delivery, health equity, and public health response.

Financial

The OT-21 initiative resulted in positive financial improvements for the hospitals from several key aspects. Enhanced transparency of information has been achieved where visibility was previously lacking which enables better evaluation of profitability, adjustments to services, and improved resource planning. Inefficient and often manual processes have been automated which frees up time and improves accuracy. Direct involvement with revenue integrity has also led to immediate increases in revenue.

Automation of processes has resulted in significant time savings and improved accuracy. For example:

- Automated aged trial balance reports save hospitals up to 4 hours monthly.
- Automated discharged not final billed (DNFB) reports ensure more timely billing and payment.
- Cash posting automation saves more than 5 days per month for 1 hospital.
- Manual creation of census reports and service line analyses has been replaced with automated financial and executive dashboards which reduces the time to report.
- Automation of manual processes like cash posting reconciliation and denials tracking has reduced workloads and improved accuracy.

Significant efforts across 5 of the hospitals to improve denials management has resulted in substantial financial recoveries and process improvements. Using denials management dashboards, time-to-bill reports, billing holds reports, and registration quality reports have improved the time to bill and reduce denials which decreases the amount of time for payment. Chargemaster analyses have also identified revenue optimization opportunities by ensuring active current procedural terminology (CPT) codes and descriptions are in place and prices are aligned with Medicare allowable rates. Initial efforts to analyze payer reimbursements against contracted rates revealed substantial underpayments which highlighted revenue recovery opportunities for hospitals such as hospital 3 and hospital 5.

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Outlined below is a representation of the financial reports, registries, and dashboards implemented across the 6 hospitals, with opportunities to expand these efforts in the future:

Hospital:	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
Denials management & dashboard	X	X	X	X	X		**5**
Financial &/or executive dashboard	X	X	X	X	X		**5**
Discharged not final billed report				X	X		**2**
Automated aged trial balance	X	X			X		**3**
Census report	X	X			X		**3**
Service line analysis	X	X	X				**3**
Time to bill				X			**1**
Department/service line profitability			X		X		**2**
Cash posting/cash management						X	**1**
Visit type analysis report	X	X					**2**
Chargemaster cursory review			X	X			**2**
Contracted vs actual payments			X		X		**2**
Accounts receivable aging report			X	X			**2**
Registration quality report				X			**1**
Total	**6**	**6**	**7**	**7**	**7**	**1**	**34**

Specific successes in revenue integrity:

- **Hospital 3:** Successfully reclaimed more than $3 million in Medicaid reimbursements through a contracted vs. actual review of payments from Medicaid which uncovered issues with the new payment system, PRISM.
- **Hospital 4:** Focused efforts on chargemaster improvements are projected to recoup at least $600,000 in 2024. The automated DNFB report is anticipated to increase revenue by $100,000 in 2024.
- **Hospital 5:** Advanced analytics identified $54 million in denied claims over an 18 month period, leading to root cause analysis and future denial prevention. Expected reductions in timely filing denials for 2024 amount to approximately $500,000. Additionally, a cursory review of 4 out of more than 50 insurance products revealed more than $5 million in underpayments from a single-payer.

Below is a simple representation of the expected impacts on revenue in 2024. It's important to note that some revenue integrity opportunities cannot be fully quantified, as the revenue impact will occur in the future and cannot be accurately predicted. Additionally, we are not only identifying revenue opportunities but also helping in efforts to recover this revenue.

	Denials	Contracted to actual	Chargemaster	DNFB	Total
Hospital 1	180,000				180,000
Hospital 2	90,000				90,000
Hospital 3	TBD	3,000,000			3,000,000
Hospital 4	TBD		600,000	100,000	700,000
Hospital 5	500,000	TBD			500,000
Total	770,000	3,000,000	600,000	100,000	4,470,000

These financial gains underscore the return on investment potential of leveraging data analytics to optimize revenue cycle management and improve financial stability in rural healthcare settings.

Clinical

The successes in the clinical area are closely tied to 4 main areas:

1. **Development and deployment of clinical registries:** Multiple clinical registries were developed and deployed across different healthcare facilities. These registries cover a wide range of clinical areas, including diabetes, heart failure, depression, medication administration, surgical site infections, stroke, women and newborn care, opioid usage, and COVID reporting. These registries have given healthcare providers some actionable insights, leading to better patient management and outcomes.
2. **Automation and data integration:** Automation of previously manual processes and the integration of data from various sources (EMR, payer data, non-EMR sources) have been central to these projects. This led to improved accuracy, efficiency, and real-time monitoring capabilities. Process automation has reduced workloads, improved accuracy, and enabled real-time surveillance and intervention.
3. **Focus on preventive care and comprehensive management:** There has been a strong focus on preventive care, closing care gaps, and providing comprehensive care management. Tools like the community care dashboard and annual wellness visit tracking are prime examples. These tools have been instrumental in making sure vulnerable populations receive the attention and resources they need which leads to better health outcomes and reduces healthcare disparities.
4. **Improved reporting and surveillance capabilities:** Enhanced reporting and surveillance capabilities, particularly in tracking surgical site infections, antibiotic use, and COVID cases, have

led to better patient outcomes and more efficient care provision. The ability to produce accurate and reliable reports quickly has transformed clinical decision-making and care delivery.

Below is a representation of the clinical registries, reports, and dashboards created for use with the hospitals. Some hospitals have made greater use of the data and begun to incorporate it into their workflows while others are lagging.

Hospital:	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
Diabetes	X	X				X	**3**
Medication/opioid use	X	X		X			**3**
Surgical site infection	X	X	X				**3**
Women & newborn services	X	X	X				**3**
Community care (comorbidities)	X	X			X		**3**
COVID	X	X	X		X		**4**
Depression	X	X					**2**
Stroke (initial stages)	X	X					**2**
Wellness visits					X	X	**2**
Welcome to Medicare					X	X	**2**
Behavioral health				X			**1**
Cancer registry				X			**1**
Chest pain quality metrics				X			**1**
Mortality report				X			**1**
Sepsis report				X			**1**
Medicaid qualification	X	X			X		**3**
Readmissions report			X				**1**
Infant mortality			X				**1**
Antibiotic stewardship						X	**1**
HPV vaccine eligibility						X	**1**
Vaccination tracking						X	**1**
Provider scorecard					X		**1**
EMS transfers				X			**1**
Total	**9**	**9**	**5**	**7**	**6**	**6**	**42**

Specific successes at individual hospitals:

- **Hospital 3:** Automated surgical site infection tracking drastically improved the quality of care by providing real-time surveillance which reduced the nursing staff workload. This project led to better detection and treatment of infections while patients were still in the hospital.

- **Hospital 4:** Implemented numerous clinical registries, including automated detection of detox indicators to expedite support for at-risk substance abuse patients. They also replaced cumbersome data management processes for the cancer registry with an automated, streamlined registry to improve oncology care coordination.

- **Hospital 5:** Succeeded in moving from reactive to preventive medicine. The development of an annual wellness project that ties demographic and payer data has significantly increased the number of wellness visits. These visits maximize the value of insurance coverage for patients and establish individualized care plans. The community care dashboard integrates diabetes and heart failure registries and highlights gaps in care for coordinators. It also serves as an actionable worklist for providers. This system has improved preventive care, shifted focus from costly inpatient care to more effective clinic-based management, and integrated data across registries to create insights into patients with chronic conditions. Hospital 5 is also linking scheduling data with chronic disease data to help clinic staff be prepared to address more patient care needs during appointments which maximizes the clinical value of office visits and reduces the need for future visits.

- **Hospital 6:** The antibiotic stewardship registry helped monitor and manage antibiotic use effectively, addressing various infections and promoting better patient outcomes.

In summary, the greatest accomplishments span the creation and deployment of registries and automated reporting systems, which have significantly enhanced preventive care, improved clinical outcomes, and streamlined operations across multiple healthcare facilities. Key challenges include making sure there is adequate administrative support and how best to manage transitions to new systems. Key takeaways emphasize the importance of data integration and automation in modern healthcare.

Operational

The achievements in an operational capacity center around creating efficiency and eliminating manual work, Other achievements include bringing to light critical information to make better data-informed decisions, simplifying the processes associated with regulatory reporting, and strategically focusing on how to improve patient care.

Key areas of success include:

- **Data literacy and integration**: Addressing the lack of data literacy has been essential. Automation of data processes and integration of various data sources have been pivotal in enhancing operational efficiency and clinical outcomes.
- **Automating data processes**: The automation of previously manual tasks has not only saved time but also improved accuracy and reliability.

- **Resource optimization**: Reducing manual workloads for nursing and hospital staff has eased staffing shortages and allowed for better allocation of resources toward patient care.
- **Rapid reporting**: The ability to produce accurate, reliable reports quickly has transformed clinical and operational decision-making.
- **Public health preparedness**: Enhanced data capabilities have significantly improved hospital readiness to handle public health emergencies, ensuring timely and effective responses.

A few hospitals had needs unique to their facility. During this project we were able to assist in the following ways:

- Track CT scans ordered from hospital 2 that required transfer from hospital 2 to hospital 1 and show patterns by provider.
- Assist hospital 4 in automation of tracking out-of-state patients who are transported by ambulance to ensure proper reimbursement.
- Provide hospital 6 with a master patient list spanning 5 clinics for a comprehensive view of patient visits.

Below is a sample of some of the reports, registries, and dashboards created to ease operational burdens and help with future strategy.

Hospital:	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
Service leakage/future services	X	X	X	X		X	**5**
Transfer report	X	X		X			**3**
Key process analysis tool	X	X					**2**
Medicaid eligibility	X	X					**2**
Hospital stats report	X	X					**2**
Admits report				X			**1**
Surgical suite report				X			**1**
Trauma registry				X			**1**
Casemix index report				X			**1**
Provider schedule optimization					X		**1**
Patient experience dashboard					X		**1**
Total	**5**	**5**	**1**	**6**	**2**	**1**	**20**

Descriptions of key reports and dashboards

- **Hospital stats report**: Provides utilization trends by financial class and integrates operational data, automating inpatient/outpatient census, labs, imaging, and long-term care (LTC) data collection.
- **Transfer report**: Highlights discharge disposition, transfer volumes, and diagnoses to evaluate service needs.
- **Service leakage/future services analysis**: Tracks care patients seek inside and outside the facility to identify growth opportunities.
- **Medicaid eligibility work queues**: Ensures continued enrollment and identifies underserved patients.
- **Master patient list**: Creates a report spanning 5 clinics for a comprehensive view of patient visits and better continuous care.
- **Admits report**: Automates tracking to prevent errors which enhances data quality for staff planning, revenue forecasting, patient flow management, and regulatory reporting.
- **Surgical suite report**: Efficiently tracks and manages surgical suite workloads, automating operational workflow tracking.
- **Trauma registry**: Ensures compliance with trauma reporting requirements, reducing penalties and increasing accuracy and efficiency with automated reporting.
- **Casemix index report**: Informs data-driven staffing decisions to optimize resources, manage costs, and enhance patient care by understanding the patient population.
- **Patient experience dashboard**: Integrates data from multiple sources, including Press Ganey surveys, providing near real-time insights for care providers and leadership. Enables drill-down views by department and physician.
- **Provider schedule optimization**: Simplifies a manual process involving nurses and schedulers to ensure accurate MD scheduling, matching provider schedules with patient availability and care gaps for accountable care organizations (ACO) members which allows care coordinators to efficiently book patient appointments.
- **Executive dashboard**: Aggregates key reports (casemix index, accounts receivable days, emergency department, transfers, lab, radiology, surgeries, and clean claims rate) for a comprehensive operational overview.

These efforts have collectively enhanced the operational capabilities of the hospitals and improved patient care, resource allocation, and public health response.

Public/population health

The OT-21 project has significantly enhanced public health and population health capabilities across the hospitals, particularly in preparing for future health emergencies and disease outbreaks. Key achievements include:

- **Advanced reporting capabilities**: Hospitals can now accurately report on any set of diagnosis and procedure codes within a short timeframe which enables rapid response and data-driven decision-making during health emergencies.
- **Clinical registries for chronic disease management and mental health**: The creation and deployment of numerous clinical registries has improved the management of specific populations, focusing on chronic diseases like diabetes.
- **Collaborative data sharing**: Initiatives at hospital 1 and hospital 2 have established innovative data-sharing agreements which enhances county-wide public health views and enables comprehensive disease surveillance and management.
- **Healthcare utilization tracking**: These hospitals have developed capabilities to track healthcare utilization both within and outside their facilities, identifying growth opportunities and enhancing local care delivery.
- **Improving demographic data collection**: Hospital 3 has integrated race, ethnicity, and gender into clinical registries, to better identify health disparities in care and outcomes to ensure equitable healthcare delivery.
- **Economic insecurity and preventive care**: Initiatives at hospital 3 focus on measuring economic insecurity through Medicaid qualification, and promoting preventive care and wellness initiatives for vulnerable populations.
- **Tailored care for specific populations**: Hospital 3 has tailored care specifically for the American Indian/Alaska Native population which improves outcomes through targeted interventions and enhanced care coordination.
- **Data integration and analytics**: Hospital 5 has led the effort in deploying validated reports, dashboards, and registries, integrating trusted data across clinical, financial, and operational areas to inform public health initiatives and improve patient outcomes.
- **COVID-19 response and preparedness**: Hospitals like hospital 5 have overlaid COVID-19 reporting on existing patient registries, identifying disparities and gaps in care to enhance pandemic response strategies.

Population health: Hospitals such as hospital 5 have developed reporting capabilities, focusing on at-risk populations and preventive care measures to improve population health outcomes. These initiatives underscore the project's commitment to leveraging data integration, collaborative efforts, and targeted interventions to enhance public health preparedness and improve patient care across rural populations.

Key takeaways

These key takeaways summarize the essential findings from the overall project across all 6 facilities, highlighting critical insights that underscore the transformative impact of data analytics in rural healthcare settings. After all, in the words of W. Edwards Deming, “Without data, you’re just another person with an opinion.”

- **Integrated data insights:** Comprehensive integration of clinical, financial, and operational data facilitates informed decision-making and operational efficiencies which is essential for sustainable healthcare delivery in rural settings.
- **Collaborative efforts:** Establishing data-sharing agreements and collaborative initiatives across hospitals and clinics is necessary to develop comprehensive public health views and enhance the ability to address emerging health needs.
- **Enhanced clinical outcomes:** Improved patient safety and care quality through clinical scorecards and disease registries highlights the transformative impact of data-driven clinical interventions on healthcare outcomes.
- **Improved demographic data collection:** Integrating race, ethnicity, and gender data into existing registries is necessary to reveal disparities in care provision and outcomes, and prompt initiatives to deliver fair and equitable care.
- **Financial returns from analytics:** Tangible financial returns, such as denials management savings and enhanced billing processes, underscore the return on investment potential of data analytics in healthcare settings, supporting long-term sustainability and growth.
- **Economic and social drivers:** Building measures around economic insecurity and preventive care will prepare hospitals to address the broader drivers of health to ensure comprehensive wellness for vulnerable populations.
- **Mutual benefits:** Collaborating with a group of hospitals simultaneously enables each hospital to benefit from the experiences and progress of the others which accelerates the processes and delivery of outcomes.

These key learnings summarize the multifaceted benefits and strategic advantages achieved through effective data analytics implementation across all 6 facilities. They underscore the critical importance of leadership, integration, client focus, financial returns, clinical improvements, and public health readiness as foundational elements for ongoing advancements.

Barriers to success

During the 18-month project, we encountered various barriers to success:

- **Resource constraints:** Competing priorities like EMR implementations and expansions strained resources, delaying engagement with OT-21 initiatives.
- **Data literacy and engagement:** Hospitals struggled to promote data literacy, particularly at hospital 4, hospital 1, and hospital 2.
- **Administrative buy-in:** Securing consistent leadership support challenged and impacted project effectiveness at hospital 6 and hospital 4.

- **EMR implementations:** Implementing new systems posed technical challenges at hospital 2, hospital 1, and hospital 6 which diverted attention from OT-21 initiatives.
- **Data security concerns:** Hospital 5 faced disruptions due to a data breach which shifted focus to security over project advancement.
- **Lack of baseline metrics:** While not an actual barrier to success, it is important to note the challenge of providing measurable, quantifiable results for all aspects of the project. Before the OT-21 initiative, the hospitals lacked the ability to use data effectively, resulting in no baseline measurements. Additionally, many metrics observed could have been influenced by patient volume or procedural changes which made it difficult to determine whether improvements were due to process changes or volume fluctuations. Moving forward, improvements can be measured more accurately using established metrics.

Addressing these specific barriers is essential to unlock the full potential of our collaboration in advancing healthcare analytics. We can enhance the hospitals' ability to leverage data for improved patient care, operational efficiency, and strategic decision-making when we recognize and mitigate these challenges.

Recommendations to overcome barriers

Here are suggested best practices to overcome some identified barriers and enhance effectiveness:

- Integrate analytics initiatives into strategic planning along with EMR implementations and other projects to prioritize resource allocation. Establish dedicated teams or roles to oversee analytics projects to ensure continuity and focus.
- Invest in ongoing data literacy training programs for staff across all levels. Demonstrate the value of analytics through case studies and success stories tailored to each hospital to foster a culture of data-driven decision-making.
- Engage executive leadership early and consistently throughout project phases. Highlight the strategic benefits of analytics in terms of patient outcomes, operational efficiency, and financial sustainability. Align analytics goals with organizational objectives to secure ongoing support.
- Implement change management strategies to facilitate the adoption of new analytics tools and processes. Engage frontline staff in the design and implementation phases to address workflow challenges and minimize resistance. Continuously monitor and adjust strategies based on feedback to sustain improvements.

Successfully navigating these challenges requires dedicated time and resources which can be especially challenging for small hospitals. Yet, investing in these areas is essential to realizing the full benefits of data-driven healthcare.

Essential elements for future analytics success

We identified several critical elements important for the success of future analytics initiatives. Without these foundational components, the creation of reports, registries, and dashboards may fail to identify problems or drive meaningful improvements:

- **Client-centric approach:** True engagement and trust are cultivated when the specific needs and concerns of the hospital drive project priorities. Collaborative projects that resonate with stakeholders foster stronger relationships and yield more impactful outcomes.
- **Leadership engagement and buy-in:** Strong commitment and active involvement from leadership teams are essential for project success. This engagement accelerates project adoption and nurtures a culture of data-driven healthcare which is important to overcome resource allocation challenges and engage staff effectively.
- **Ensuring data quality:** Data elements must be used consistently and well-defined across systems. They are fundamental for reliable analytics. Ensuring data is uniformly recorded and easily accessible is critical for effective analysis and decision-making. Adhering to established standards such as those set by the Office of Management and Budget (OMB) facilitates integration both within and beyond the facility.
- **Acknowledgment of existing data:** Many times the data necessary to solve problems exists but is inaccessible. When you bring attention to existing data it results in evaluation and causes team interest which lays the groundwork for refining data for future analyses.
- **Implementation of change management:** The true impact of creating data is it drives actionable change. Effective change management strategies are essential to translate data insights into real improvements in patient care, operational efficiencies, and financial outcomes. Many hospitals face challenges in adopting these strategies due to a lack of expertise, time, or resources. Effective change management ensures smooth transitions, minimizes resistance, and maximizes the benefits of data-driven initiatives.

Additional note: Although all these elements contribute to project success, leadership engagement initiates projects, and change management ensures their benefits are realized. As Peter Drucker said, "The greatest wisdom not applied to action and behavior is meaningless data." See below for further explanation of the importance of change management.

Change management overview

Change management involves systematic approaches and strategies to prepare, support, and facilitate organizational changes. It typically includes:

1. **Planning:** Develop a comprehensive strategy to manage the change process that includes setting objectives, identifying stakeholders, and anticipating challenges.
2. **Communication:** Effectively convey the need for change, its benefits, and expected impacts to all stakeholders.
3. **Training and education:** Make sure employees have the necessary knowledge and skills to adapt to new processes or technologies.
4. **Engagement and participation:** Involve employees and stakeholders in the change process, address concerns, and foster buy-in.
5. **Monitoring and evaluation:** Continuously assess progress, gather feedback, and make adjustments to ensure successful implementation.
6. **Sustainability:** Establish mechanisms to maintain changes over time, reinforce new behaviors, and embed them into the organizational culture.

Future initiatives

As the OT-21 initiative progresses, future plans to advance data integration and community health strategies vary across participating hospitals:

- **Hospital 1:** Future efforts could focus on safely integrating hospital data with community organizations and the local health department once the outpatient and clinic services integration with Cerner is complete. This aims to enhance operational integration across hospital1, preparing for health disparities and future pandemics.
- **Hospital 2:** Plans include developing and deploying a community health data strategy to integrate hospital and clinic data with local community organizations. This strategy aims to address local health disparities and improve pandemic response through more comprehensive data sharing and analysis.
- **Hospital 3:** We will focus on integrating hospital information with community organizations to continue the no-cost extension. This collaborative approach aims to strengthen operational integration to reinforce efforts against health disparities and future pandemics.
- **Hospital 4:** Future work with hospital 4 could involve developing a community health data strategy to integrate hospital data with community-based organizations. This strategy aims to enhance reporting and response capabilities for future public health crises while addressing local health disparities.
- **Hospital 5:** We will integrate hospital data with community organizations and local health departments to continue efforts under the no-cost extension. This approach aims to strengthen operational integration to enhance preparedness for health crises and disparities.
- **Hospital 6:** There is currently no dialogue with hospital 6 to advance OT-21 efforts.

By aligning these strategic directions, in collaboration with the hospitals and the state of Utah, REDiHealth aims to leverage data integration to improve healthcare delivery and resilience across rural communities, with ongoing commitment from hospital 5, hospital 3, and hospital 4 under the no-cost extension funding.

Conclusion

The OT-21 initiative showcased the large impact of data analytics in rural healthcare and highlights significant advancements in financial management, clinical outcomes, operational efficiencies, and population health across 6 Utah hospitals. Despite challenges in staff availability and leadership transitions, these hospitals have laid a strong foundation for future growth and innovation in healthcare delivery. As they continue to integrate data-driven insights into their workflows, they are poised to achieve sustained improvements in patient care, operational performance, and community health outcomes and set a precedent for data-driven healthcare excellence in rural settings.