COMMUNITY CARE HUB ENABLES IMPROVED HEALTH & ECONOMIC OUTCOMES

How the Right Model and United Technology Can Bridge the Gap Between Healthcare and Social Determinants, Delivering Improved Outcomes and Sustainable Results

EXECUTIVE SUMMARY

Research has shown that an exposure to the lack of resources for Social Determinants of Health (SDOH) can cause poverty and have a demonstrated, significant, direct impact on the health and economic self-sufficiency of the individual and the community1. The Community Care Hub gives organizations the ability address SDOH and to increase the coordination of care while providing recurring billable services that create sustained revenue and sustainable services — all with the goal of improving overall community health, one person at a time.

For this transformational model to work effectively and grow at a sustained pace, technology must be leveraged that bridges the gap between healthcare and social determinants resources, enabling unique care originators (e.g. healthcare, government, faith-based organizations, human services organizations and educational systems) to have a unified approach and visibility into a client's information.

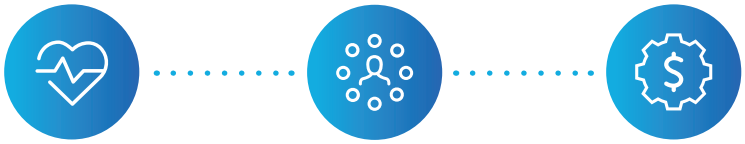
Collaborative technology, shared treatment protocols and shared data security can drive benefits in improved health outcomes, improved economic self-sufficiency, healthier communities, lower healthcare costs and better health education. This ultimately leads to the ability to realistically and effectively create a person-centric, transformational community change — maximizing existing funded services to improve health and economic self-sufficiency for individuals and families.

Medavate, Melagro Technology and RiverStar have teamed up to create a solution that effectively addresses the issue of the negative impact of poverty on healthcare — and creates a unified technology that bridges the gap between healthcare and the lack of resources for social determinants to deliver improved outcomes and sustainable results.

THE CHALLENGES WITH SUSTAINABLE CHANGE

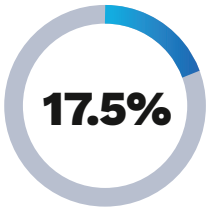
At no time in our nation's history have the needs of healthcare and human services been more aligned. Today's health and human services agencies share a central goal: serving clients and delivering quality services that lead to better outcomes. However with the complex physiological, social and economic pressures facing clients today, agencies find it increasingly challenging to deliver whole person care that leads to lasting change in a siloed delivery system.

The complex physiological, social and economic pressures make it difficult to deliver lasting change, and create a negative community impact.



This is especially true with the complex physiological, social and economic issues that are present in impoverished communities throughout the U.S. These can be difficult to predict or control; and out in the field where the work is being done, they can quickly present a series of unsurmountable challenges. Communities and the organizations trying to serve them, suddenly find themselves in a crippling spiral and the cumulative social and economic toll on the individual and the community can be staggering.

In a year-long analysis[1] commissioned by the Robert Wood Johnson Foundation (RWJF), 19 national experts in public health, civil rights, healthcare, social science, education, research and business reported on the national toll that health inequities have taken in recent years:



The money spent on healthcare in 2014 was 17.5 percent of GDP.

The number of young adults unable to serve in the military due to poor health and education or criminal misconduct

Healthcare: Between 2009 and 2018, racial health disparities alone are expected to cost $337 billion for health insurers, according to the RWFJ report. The money spent on healthcare in 2014, for example, was a whopping 17.5 percent of GDP.

National Security: Health inequities that produce stubborn health problems in young people, in concert with the problems of poor education or criminal misconduct, have caused about 26 million young adults to be unqualified to serve in the U.S. military.

Acknowledging that the root causes of health inequities are "diverse, complex, evolving and interdependent," the panel calls for greater investment and collaboration across sectors to address the multiple factors that influence health and to change the types of policies, practices and systems that have kept inequity in place.

Organizations and communities continue to struggle to realistically and effectively address and improve the environmental conditions necessary to improve health and economic self-sufficiency of those they serve. Because of this, patients in a lower socio-economic status continue to suffer from issues such as higher rates of chronic disease, higher infant and maternal mortality, substance abuse and addiction, domestic violence, child abuse, neglect, juvenile delinquency, violent crime, mental health disorders and the like.

This network of ailments often includes multiple combinations of the following maladies:

Chronic Disease and Malnutrition: According to the RWJF[2]: "Across all ages and demographics, our nation suffers from increased rates of chronic conditions. We are living shorter, sicker lives than people in many other countries." And it isn't just a problem in poor urban areas. Rural America, which includes close to three quarters of the nation's land and almost 15 percent of the American population[3], is struggling too. In an RWJF community spotlight[4], the author describes the Columbia Gorge Region as a huge area larger than Connecticut, yet it has a population of 75,000. In this region, despite its abundance of fruit orchards, one in five people are regularly running out of food. As the analysis points out, the problems of disease and malnutrition are closely related.

Infant and Maternal Health: According to an RWJF report[5], the percentage of low-birthweight infants in the U.S. rose in 2015 and this was the first rise in seven years. Ironically, health inequity and infant and maternal health in Washington, D.C. is among the worst in the nation. Washington infants who are born to poor parents are ten times more likely to die than the richest infants in the same city, as noted by Newsweek[6].

Substance Abuse and Addiction: The recent opioid crisis has been acute in impoverished areas and is linked to many other problems[7] ranging from socio-economic disparities to domestic issues.

Domestic Violence: *VAWNet.org*[8] notes a clear relationship between low socio-economic status and increased domestic violence.

Juvenile Delinquency: An abundance of research has shown a link between juvenile delinquency and poverty. An experiment and study conducted by the University of Chicago[9], for example, demonstrated that when teenagers were moved from high-poverty to low-poverty neighborhoods, the rate of juvenile delinquency decreased.

Child Abuse and Neglect: The National Bureau of Economic Research[10] sums up an analysis of child abuse by noting that "children with working mothers and absent fathers are more likely to be subject to neglect and abuse." When one or more parents are forced to work non-stop because of poverty, the kids become vulnerable to abuse and neglect.

Violent Crime and Family: In a report by The Atlantic[11], the author examines bodies of research and comes to an inescapable conclusion: there exists a complex but very real correlation between broken family structures and violent crime in communities. Many of the conditions of broken families have close connections to the other maladies in this list.

Mental Health Disorders: The Robert Wood Johnson Foundation[12] notes how mental health disorders are often exacerbated by poverty or health inequity. The study looks at military veterans as an example, particularly those in challenging socio-economic conditions. In 2014, for example, VA-enrolled veterans accounted for 17.9 percent of suicide deaths among U.S. adults.

THE COMPLEX REALITY OF ECONOMIC CONSEQUENCES

The socio-economic and health issues noted above account for massive economic consequences. As noted previously, racial health disparities are expected to cost $337 billion for health insurers between 2009 and 2018. Because of significant health inequities, the money spent on health from year-to-year can be as high as 17.5 percent of GDP.

In a report entitled The Economic Case for Health Equity[13], the Association of State and Territorial Health Professionals concluded that between the years 2003 and 2006, about $230 billion in direct medical care costs and over $1 trillion in indirect costs related to sickness and premature death would have been saved if health disparities for racial and ethnic minority groups had been eliminated.

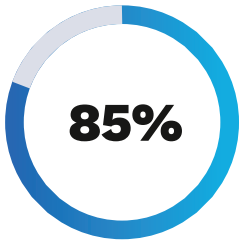
Estimated medical costs caused by racial and ethnic disparities from 2003 -2006:

INDIRECT COSTS:
$230 BILLION

DIRECT COSTS:
$1 TRILLION

The Ongoing Struggle to Address Social Needs

A study by the Robert Wood Johnson Foundation[14] concludes clearly:



85 percent of physicians believe lack of resources for social determinants lead to poor health

Four in five physicians say patients' social needs are as important to address as their medical conditions... For physicians serving patients in low-income communities, nine in ten physicians believe this is true.

In this national survey of primary care providers and pediatricians, 85 percent believe that unmet social needs — things like access to nutritious food, reliable transportation and adequate housing — are leading directly to worse health for all Americans. Furthermore, 4 in 5 physicians do not feel confident in their capacity to meet their patients' social needs and they believe this impedes their ability to provide quality care.

This is healthcare's blind side: Within the current healthcare system, physicians do not have the time or sufficient staff support to address patients' social needs.

With so much at stake, it's crucial that organizations and communities re-assess their usual approaches and consider a new approach to tackling these problems.

The Community Care Hub does just that.

A UNIQUE CARE MODEL THAT ADDRESSES POVERTY AS A TREATABLE DISEASE

Poverty can be tied directly to the unmet social needs that beset the millions of clients served by health and human services organizations across the country. This unique care model begins with the premise that poverty is not a character flaw. Poverty, like any known health issue, is caused by environmental exposures, and is a treatable condition.

Social determinants of health can be addressed by coordinating care across healthcare, human services, government, faith-based organizations and educational organizations. By aligning on a uniform set of coordination of care protocols and analytics based on evidence-based practices, health and self-sufficiency for clients of all ages can be improved. Established protocols assess, respond to and measure outcomes related to social determinants affecting health, education and economic self-sufficiency across 19 domains.

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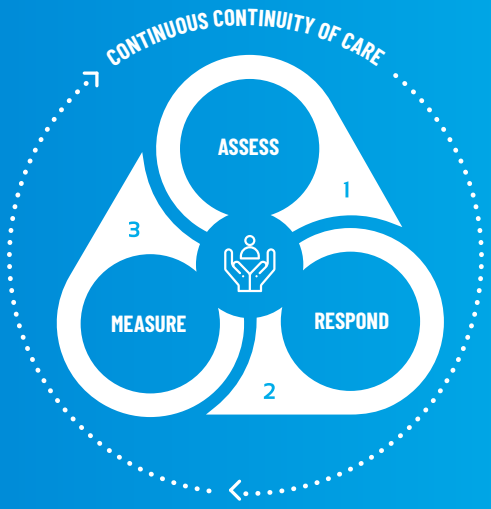


Multiple providers can collaborate closely with one another (including health, education, faith-based, government and human services) to coordinate existing services that are already funded into logical, effective step-by-step processes. Let's take a closer look at how it works on the following pages.

BEGINNING WITH ACCURACY: COORDINATED SCREENINGS AND ASSESSMENTS

To start, a provider must be able to accurately assess the issues that are impacting the patient. With the myriad of factors that may be at play at any given time, this is nearly impossible to do with sustained validity and accuracy.

Melagro technology has developed a HIPPA compliant health and wellness screening assessment that provides validated results to diagnose and pinpoint issues related to behavioral health and substance abuse. The behavioral health portion of the screening tool screens for DSM-V Behavioral health issues in adults and children, including issues such as suicide, homicide and opiate use. The social determinants screening tool screens for issues such as financial health, food, housing, healthcare, employment, transportation and others.

Once the screening is complete, this provides a detailed snapshot of the individual that outlines the areas of assistance required for patient care. From here, the care professional can identify each need and work with the client to set appropriate priorities for these needs.

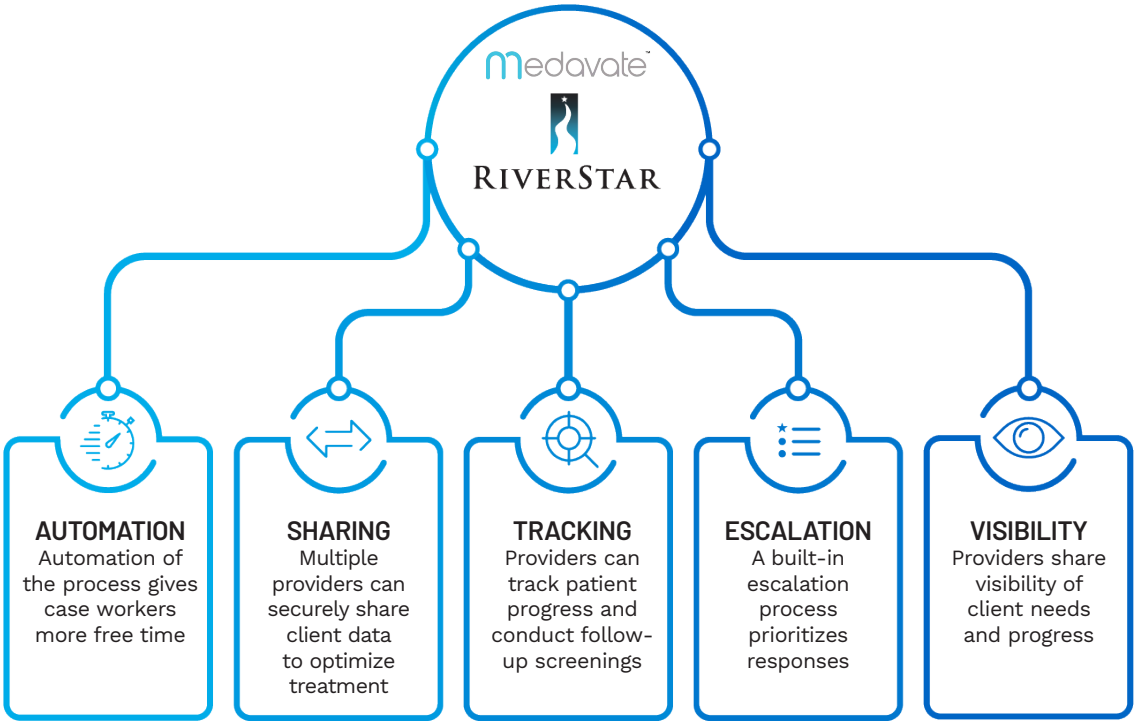
Factors that require attention.

THE POWER OF COLLABORATION: FINDING AND COORDINATING HELP

Once the screening is complete and the case worker understands what the patient's needs and priorities are, a host of agencies must work in coordination to provide assistance. RiverStar's Community Care Hub enables case workers and health and human service providers to take the screening results and quickly translate them into a set of identified needs that query the local resource database to locate the local and national resources that are available to address each identified need. This is all done automatically, in a matter of seconds, providing an exhaustive list of providers that is filtered by business logic to provide a workable list of resources for the case worker and client to choose from and trigger the RiverStar solution to contact or draw upon these resources.

The RiverStar Community Care Hub stores this snapshot of prioritized resources, enabling the case worker to easily request information from any service agency, empowering them to:

- Request assistance or a referral
- Close the loop on referrals that were made
- Ensure un-addressed needs have been met
- Schedule additional resources as needed
- Manage additional resources in the future as the patient's situation improves or as needs change
- Annotate each referral; view and track results
- Share information with other agencies fluidly and quickly



Because RiverStar manages this information and the process in an automated fashion, case workers are able to reach out to many more service providers in the fraction of the time it would take to do the same tasks manually — allowing workers to manage more cases in less time with more accuracy and effectiveness.

In addition, multiple service providers can leverage the same application to share client data and collaborate together securely to optimize treatment. RiverStar can integrate client information from siloed applications, so that serving clients more effectively remains at the forefront; encouraging agencies to share knowledge among the client's care team, cooperatively develop shared treatment protocols and team together on treatment options. The benefits are clear:

Visibility into the client's screening and referral history across the entire care team

Elimination of duplicative screening and referral activities

True cross-agency coordinated care for the client

Increased visibility into outcomes, client satisfaction and tangible results

More consistent answers and information, available immediately

Over time, as the patient improves, the case worker can track the patient's progress to get the person from where they are to where they want to go. Additional screenings and assessments can be conducted over time to track patient progress against all the social determinants in a single, closed-loop process.

The system is building in an escalation process, which is unique to RiverStar's implementation. Responses are categorized based on clinical levels of treatment need, e.g., emergent, urgent, routine.

THE STRENGTH OF VISIBILITY: INTEGRATED DATA ANALYTICS AND REPORTING

Because the RiverStar Community Care Hub stores the Melagro assessment, which houses the client-specific needs and captures all the interaction data for screenings, assessments, interviews, referrals and follow-ups, all this information is made available for analysis and reporting. For example, case workers across multiple agencies and service providers can securely and easily:

- View individual client records to follow up on provider help requests, referral status, appointments, notes and next steps
- Aggregate client data across time periods, geographic data, demographic variables and other variables for broader, agency-wide or district-wide reporting
- Establish provider effectiveness and conduct gap analysis reports
- Map providers and clients geographically to assist clients with provider selection and transportation options
- Map client populations for research, planning and funding requests
- Track results for reporting outcomes to local, state and national agencies

SUMMARY: INTEGRATED CLINICAL & TECHNOLOGY SOLUTIONS FOR COORDINATED CARE

A proven care model, combined with integrated technology, can properly position any organization to lead a person-centric, transformational community change realistically and effectively, using existing funded services to improve health and economic self-sufficiency for individuals and families. This model effectively bridges the gap between healthcare and social determinants — providing separate care originators with a unified approach and visibility into a client's information. This results in improved health outcomes, increased economic self-sufficiency, healthier communities, lower healthcare costs and better health education.

ABOUT OUR PARTNERSHIP

About Medavate

We believe that healthcare should serve everyone to the greatest extent possible regardless of how they are currently served today. Medavate is the ultimate Intersection of Health and Technology that uses data management, privacy protection, and machine learning to lower the cost and increase the personalized care of every individual.

Our vision of a network of integrated systems aims to provide a highly coordinated continuum of care. Medavate is a vertically integrated healthcare ecosystem that is aimed to serve each individual at every level involved.

About RiverStar

RiverStar delivers tailored agent-facing and mobile self-service solutions that empower United Way and 2-1-1 agencies to deliver exceptional customer experiences across programs and equip agents with the answers they need, when they need them. RiverStar has partnered with Transition to Success (TTS) and Melagro Technologies to create a Community Care Hub to deliver coordinated care across clinical and social services agencies that enables 2-1-1 contact centers to unlock new revenue opportunities with an integrated, coordinated client care solution that is billable to Medicare and Medicaid — creating a sustainable income stream.

About Melagro

Melagro Technology LLC, Provides Client / Patient Relationship Management (PRM), Behavioral Health screenings and assessments for social service agencies and primary care organizations with real time scoring. Melagro's offerings include Poverty Management programs, screenings and assessments for social determinants of health with real time scoring. Melagro's Technology's HIPPA compliant solutions give healthcare payers, providers, social service organizations and health care systems access to a platform equipped with the analytical tools to easily prescribe personalized care plans referrals, resources, and roadmaps for patients/clients to achieve desired outcomes.

SOURCES

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