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Improving health, human services, and education outcomes and reducing poverty

Care & Benefits Coordination—A connected HHS delivery system

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White paper disclaimer

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Introduction

Historically, consumers have faced barriers in accessing services across disconnected health and human services agencies and providers. A lack of coordination has resulted in redundancies, inefficiencies, and poor outcomes. Today, there is both the urgency and opportunity to realize consumer-centered, coordinated service delivery. The fiscal crisis, aging populations, and calls for integrated health information, coupled with advancements in technology, support new models of coordinated care.

Innovations like cloud computing, ubiquitous Internet access, and mobile devices are rapidly changing the case worker's tool set. These advancements put the case worker in the client's world of connected, Internet-enabled access to information and services.

While technology is an enabler, achieving improved outcomes, greater access to care, and reduced costs depend on new and evolving service delivery models. These models include partnerships among non-profit health and human service organizations, education providers, foundations, and state and local governments.

One important model, highlighted in this paper, is committed to reducing poverty and improving self-sufficiency by increasing community college retention rates. The specific strategy deployed takes advantage of technology along with benefit and service coordination. The results are significant.

The nature of the problem

Health and human services professionals and policy makers focus on improving access to care, measuring performance and outcomes, and driving efficiencies in service delivery. They are concerned with the difficulties consumers encounter as they try to navigate disconnected health, human services, and education systems.

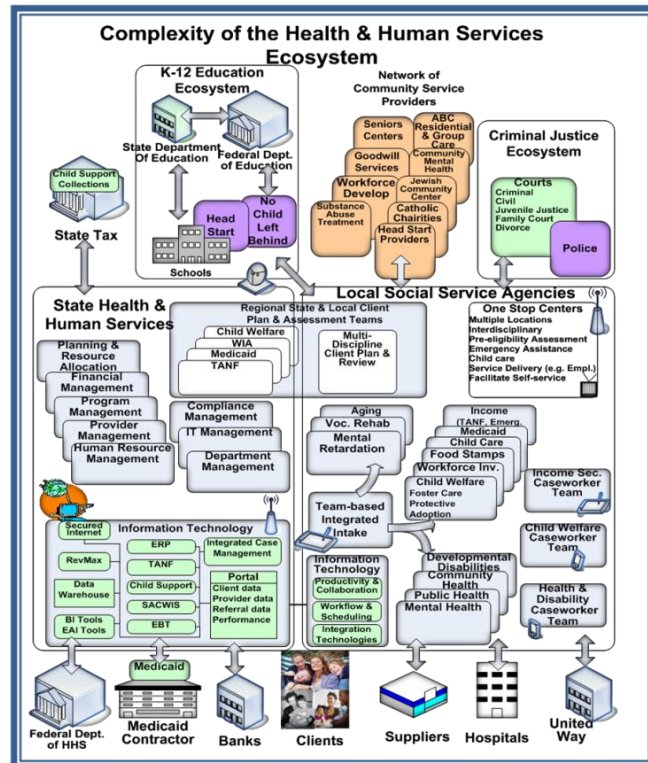
Parents who need benefits and services to supplement their wages to provide for their children must apply for multiple benefits with dizzying differences in eligibility rules at various locations across several government departments. Ninety-three percent of poor families do not use all the resources available to them.ⁱ Twenty-five percent of the working poor receive no benefits even though they are eligible.ⁱⁱ Only 7 percent of the working poor access all of the four major supports: tax credits, Medicaid, food stamps, and child care subsidies.ⁱⁱⁱ Patients with chronic medical conditions have to work with different doctors and other care providers in many locations—sometimes missing medications and overusing emergency rooms and other high-cost care. Unemployed workers search for employment and training opportunities in systems such as Workforce Investment Boards, community colleges, and corporations that all have different institutional priorities and levels of access.

Both human and fiscal costs are associated with disconnected systems. Consumers access some programs and slip through the cracks of others. This problem fosters inefficiency, redundancy, and poor outcomes. Those directly affected include the



parent who fails to receive essential services, the patient who overuses the emergency room because he's not managing his condition, the student who drops out of college because she cannot access the benefits that she is eligible for.

Historically, health and human service organizations were largely autonomous and disconnected from one another. A number of factors influenced this condition, including federal categorical funding; state-enabling legislation, which created distinct agencies; educational institutions and licensing organizations that support separate career and professional development paths; and funding limitations or program design, which discouraged benefit use.

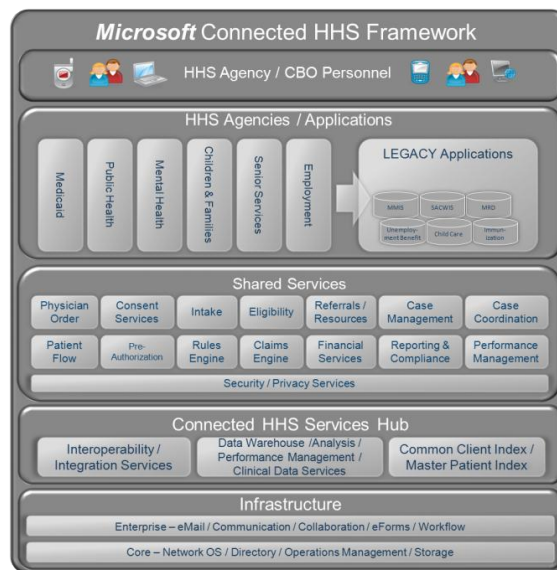


Often, information technology impeded coordination instead of enabling it. Before the advent of electronic files, the enormity of databases and the complexity of identifying users made data sharing prohibitively expensive and incredibly time-consuming. Even with the use of computers and electronic databases, many organizations and departments used their own software or coding process.

Among state agencies, transfer legacy systems were exceedingly costly. Even when multiple agencies shared common clients, their IT systems could not communicate with one another.^{iv} Moreover, the systems took so long to build that they were effectively obsolete when they were completed and required constant modifications.

It doesn't have to be that way. In the words of Aneesh Chopra, United States Chief Technology Officer, "President Obama has challenged us with a bold vision to grow our economy through innovation and entrepreneurship...."^v "...[W]e're trying to set a culture of sharing and reusable solutions...."^{vi} Today, there is both the opportunity and the urgency to dramatically improve services and client outcomes, reduce costs, and increase consumer access through advancements in technology along with service delivery innovation. Health and human service organizations are able to share data and coordinate practices as never before. We have entered a digital age, increasingly populated by digital natives adept at using collaboration and social networking tools. Ready access to the Internet and information are fundamentally transforming the way that consumers and case workers learn about, coordinate, and access benefits and services.

A connected HHS technology framework demonstrates how interoperability and services can be deployed in IT architecture.^{vii} Core infrastructure, with enterprise-level communications, collaboration, and other services provide the stable building blocks that facilitate an agile applications environment. A connected HHS services hub enables interoperability across programs and systems through web services; provides the data services used for business performance management tools; and provides a unified view of clients and resources across departments. The shared services layer provides extensible applications and loosely-coupled web services that are deployed across agencies targeting areas such as intake, pre-eligibility, referrals, benefit coordination, case coordination, and security and privacy services. The shared services enable a flexible and rapid mechanism to implement process, program, or legislative changes.



The Agency Applications layer has added value in the connected HHS environment. Information that would have been stored away, in legacy systems can now be accessed through the connected services hub. New applications and functionality can be introduced through the shared services layer. Moreover, even within single departments, workers can derive more utility from their legacy system through



increased data-access and analytics or by implementing a new, simplified or web-enabled user-interface that utilizes the existing business logic and data in a legacy system. Workers are freed-up to spend more time with clients by leveraging richer information and collaborating with others involved with their clients, anytime, anywhere through a variety of tools including Smartphone, PDA, and Tablet PC.

The connected HHS framework provides for all of these capabilities—without the need for a massive, new integrated system—by adhering to the tenets of service orientation, federated data, federated security, and trustworthiness. Further, the framework provides the ability to make the important connections to community organizations and directly to the individuals and families who receive services.

Medicaid Information Technology Architecture (MITA) is an example of a connected services approach. MITA was created to improve Medicaid administration by adopting “a patient-centric view not constrained by organizational barriers.” MITA allows for interoperability among healthcare agencies and organizations within and between states. It allows for web-based access and use of commercial software, and it integrates public health data.

Advancements in technology occur at a time of urgency that demands greater coordination of care. Governments, business, communities, and families are reeling from the effects of a deep recession, increasing costs of care, and aging populations. They are concerned about America’s competitiveness in the global economy. These factors put significant pressure on health, human services, and education systems to break down organizational barriers and connect systems and services.

The results are emerging models of community care that involve partnerships among non-profit organizations, state and local governments, foundations, primary and secondary education systems. Approaches range from school-based medical homes to benefits-coordination services.

In each of these instances, technology is an enabler, but it is only part of the solution. The human component—the caseworker or care provider—are indispensable in managing, coordinating, and delivering care. Consumers have expanded access to information, but case workers take advantage of rapidly evolving technology to advise clients and help them navigate across services.

An example is ACCESS Florida, which has found that even a well-run, state-wide technology platform requires support from several community partners to interface with clients. Florida’s online applications of benefits have been successful at reducing cost and improving accuracy of food stamp applications. ACCESS Florida relies heavily on a network of 1,500 community-based organizations across the state that provide application and other assistance.^{viii}

The following case study of Single Stop USA’s Community College Initiative illustrates the benefit to a client of technology-enabled, coordinated case.

Research has shown that students who have access to additional financial resources, such as scholarships or emergency cash assistance, stay in school longer and are more likely to graduate.

A case study of coordinating services at community colleges

The path to educational attainment and economic success for America's most vulnerable students runs through community colleges. Community colleges can move people from poverty to self-sufficiency by making post-secondary education accessible to low-income, high-need populations. In fact, a community college degree gives many of these students the opportunity to move from the lowest income percentiles to the middle class in one generation. Educating 11.5 million Americans a year, community colleges are the launching pad for our competitive future as a nation.^{ix}

The problem, though, is keeping young men and women in school. Economic barriers and financial obstacles prevent most from graduating, and the dropout rate among students is overwhelmingly high. Nationwide, 45 percent of community college students drop out without attaining a degree.^x The low retention and completion rates are not surprising given the many obstacles students confront. We know that many community college students struggle with barriers such as inadequate child care, housing issues, and financial insecurity that make it exceedingly difficult to stay in school, let alone succeed. Twenty-nine percent of community college students have incomes under \$20,000.^{xi} Seventy-nine percent of community college students work.^{xii} Thirty-five percent of community college students are parents.^{xiii}

Research has shown that students who have access to additional financial resources, such as scholarships or emergency cash assistance, stay in school longer and are more likely to graduate. The impact can be life-altering. A person from a family in the bottom 20 percent of earners has an 85 percent chance of earning significantly more and a 62 percent chance of joining the middle class if he or she graduates from college. An associate's degree results in 15 percent higher annual earnings for men and 48 percent higher annual earnings for women compared to those who have only a high school education. Even without graduation, simply staying longer in community college is proven to lead to higher earnings.

Health and human services programs and benefits are a powerful, effective tool for lifting families out of poverty, particularly when accessed in concert with comprehensive social services including legal counseling, financial advice, and free tax preparation services. These benefits promote family stability and job security, increase disposable income and improve long-term educational and health prospects. Child care subsidies give a parent time to look for a job. SNAP (i.e. food stamps) increases the purchasing power of families by 40 percent.^{xiv} Children enrolled in health insurance programs are 80 percent less likely to have untreated medical needs.^{xv} A \$1,000 increase in family tax credits correlates with increased test scores for children.^{xvi}

Because these benefits and services also have the potential to help students to stay in school and graduate, the Single Stop Community College Model of accessing and

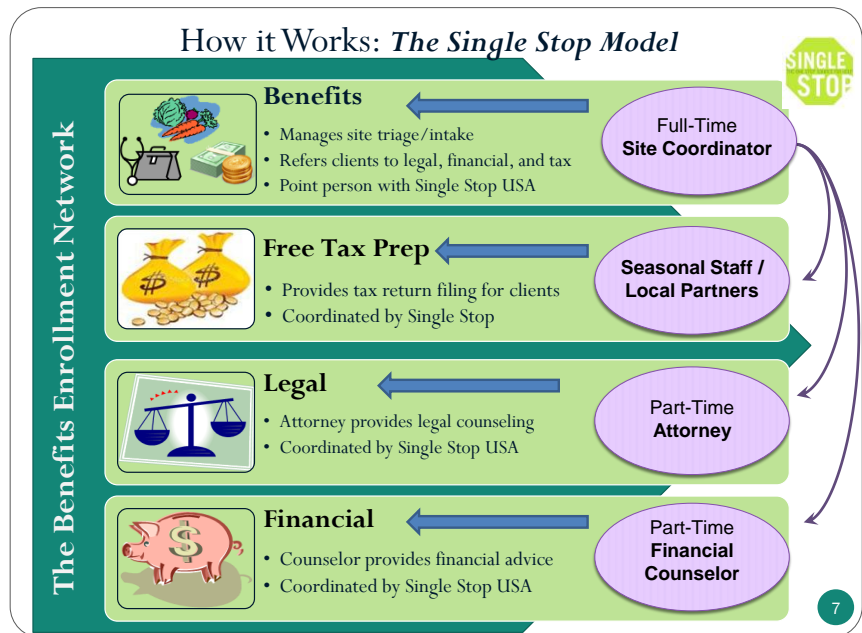


coordinating benefits is a remarkably powerful intervention and works to alleviate poverty in two ways:

- In the *short term*, by providing students and their families with immediate access to critical benefits and services that are proven to alleviate poverty
- In the *long term*, by helping students stay in school through completion and thus increasing lifetime earnings and, ultimately, facilitating intergenerational change

Single Stop's work is more accurate, more efficient, and more effective because of its proprietary benefits-access technology, the Benefits Enrollment Network (BEN). BEN is a groundbreaking web-based technology solution that simplifies, accelerates, and streamlines the savings-assistance and benefits enrollment processes for low- and moderate-income students and families. Defined by an intuitive user interface, BEN is fully integrated with Microsoft Dynamics CRM, an enterprise-class, comprehensive case management system. BEN is a unique and adaptable software solution and has been used in a variety of contexts including benefits screening, asset building, college-aid guidance, corporate-benefits bundling, and low-cost life insurance screening: For Single Stop and its partners, BEN makes it easier to integrate and coordinate processes across multiple sites, programs, and agencies. It increases the reach and impact of our work. At the same time, BEN facilitates engagement, cooperation, and data exchange with government partners and presents a range of unique and scalable solutions to potentially reach millions of people. With the highest level of automated efficiency, functionality, and security, BEN bridges critical gaps in service delivery and enhances the capacity of its national network of users to serve clients more efficiently, more accurately, and more effectively. BEN enables the critical community connection that is the last-mile of human-services delivery.

In 2010, Single Stop's community college sites filed taxes for more than 4,500 student families at an estimated value of almost \$6 million. Preliminary data from select sites indicate an improvement in semester-to-semester retention rates of students who received Single Stop services.



The BEN software is one of the leading benefits-screening technologies in the country. A detailed assessment of BEN conducted by a third party expert technology consultant and an independent evaluation found the BEN software to be the superior technology of its kind. In addition, BEN is based on a platform that can be deployed on-site or in the cloud. BEN's cloud architecture is particularly well-suited for the rapid deployment and multi-location deployment that is prevalent in community setting. No need for servers or IT staff— an Internet connection is all that's required.

The BEN software has been recognized by Microsoft as a Showcase Application (a designation awarded to just 20 organizations worldwide annually) and has been featured in numerous pilots with partners including the Brookings Institution, Harvard University, the MIT Poverty Lab and the Cal Berkeley Food Stamp Research Project. In 2007, BEN was the first technology platform to deliver a biometric, electronically signed food stamp application to a government agency. It was also used in a promising research project funded by the Bill and Melinda Gates Foundation, "Increasing College Enrollment among Low and Moderate-Income Families," which was aimed at improving information and access to financial aid for students. With BEN, Single Stop USA has access to sophisticated client tracking and reports that make it easier to provide direct services and to leverage large-scale policy change. Specifically, BEN offers

- Comprehensive screening capacity.
- The flexibility to capture and store client data for multiple programs and sites to help initiate interagency referrals.
- The ability to complete and submit applications electronically.

As a case management tool, BEN enables tracking, customizable reporting, and client flow



However, BEN like any other client-focused, human services technology needs a case worker to be most effective. A case worker combats barriers to accessing human service programs and benefits, including language barriers, disabilities, confusing forms, and bureaucratic constraints. Many Americans, especially young families and immigrant parents, do not access benefits that have stigma associated with them.^{xvii}
^{xviii} These populations are, at best, skeptical, often afraid, and consistently resistant to benefits that they and others perceive as handouts. As a result, the case worker can play a critical role in allaying clients' concerns and helping them consider these benefits and services in the context of their needs and expenses.

By tapping into existing public resources, Single Stop's community college sites are achieving remarkable outcomes. In their first year of operation, these sites drew down an average of \$1,500 per student served in tax refunds alone—a staggering 15 percent of that same group's average gross income. At the same time, approximately 50 percent of students served during this period confirmed that they received public benefits; received legal services; or were referred to on-site Single Stop financial counselors to address issues like debt management, budgeting, and credit improvement. In 2010, Single Stop's community college sites filed taxes for more than 4,500 student families nationally at an estimated value approaching \$6 million. Anecdotally, we know that these services have already had an enormous impact. Even more compelling, preliminary data from select sites indicate an improvement in semester-to-semester retention rates of students who received Single Stop services.

Conclusion

Today, business, economic, and policy concerns have created a need and a demand to better coordinate health and human service delivery. Partnerships among non-profit organizations, care providers, foundations, and state and local governments are delivering new models of service coordination. Advancements in technology, leveraging the Internet, provide the opportunity to connect information and services.

Combining technology advancement with innovation in service and benefit coordination can yield dramatic improvements in outcomes. Such is the case with Single Stop USA's Community College benefit coordination initiative, which is reducing poverty and increasing student self-sufficiency by working with students to measurably improve college retention rates.

ⁱ *Is there a System Supporting Low-Income Working Families?* The Urban Institute. Sheila Zedlewski, Gina Adams, Lisa Dubay and Genevieve Kenney, February 2006.

ⁱⁱ Ibid.

ⁱⁱⁱ Ibid.

^{iv} "Achieving the Consumer-Centered, Connected Health and Human Services Vision" Presented at "InterOptimability: Human Services 2.0: Preparing Child Welfare for the 21st Century"; hosted by the Yale School of Management and Stewards of Change, October 30, 2007.

^v Chopra, Aneesh January 31, 2011, guest blog post on TechCrunch, <http://techcrunch.com/2011/01/31/startup-america-a-campaign-to-celebrate-inspire-and-accelerate-entrepreneurship/>

^{vi} Chopra, Aneesh keynote address, 2010 Health Summit in Washington, D.C.

^{vii} O'Leary, W.D., and David Meyers, "Connected Health and Human Services" June, 2008. http://download.microsoft.com/download/2/5/0/250e30bf-0d81-4141-bf8f-4e4ad222fbfd/Microsoft_Connected_HHS_Executive_Summary.pdf

^{viii} "ACCESS Improved Productivity; Additional Refinements Would Better Manage Workload" (2008). Office of Program Policy Analysis & Government Accountability, Florida Legislature. <http://www.oppaga.state.fl.us/reports/pdf/0813rpt.pdf>

^{ix} American Association of Community Colleges; <http://www.aacc.nche.edu/AboutCC/Pages/fastfacts.aspx> (6.7 million for-credit + 5 million not-for-credit enrollees)

^x 2006, Digest of Education Statistics 2005, Table 310. Percentage distribution of enrollment and completion status of first-time postsecondary students starting during the 1995-96 academic year, by type of institution and other student characteristics: 2001

^{xi} U.S. Department of Education, NCES (2006). Profile of Undergraduates in U.S. Postsecondary Education Institutions: 2003-04, p. 91.

^{xii} Ibid., p.13

^{xiii} U.S. Department of Education, NCES (2006). Profile of Undergraduates in U.S. Postsecondary Education Institutions: 2003-04, p. 99.

^{xiv} *Making Ends Meet: Six Programs That Help Working Families and Employers*. Center for Law and Social Policy. Nisha Patel, Mark Greenberg, Steve Savner and Vicki Turetsky, June 2002.

^{xv} *Improving Children's Health: A Chartbook about the Roles of Medicaid and SCHIP*. Center on Budget and Policy Priorities. Leighton Ku, Mark Lin, and Matthew Broaddus, January 2007.

^{xvi} Statistics of Income Division, Individual Master File System. IRS, January 2007 and *The Impact of Family Income on Child Achievement*. Institute for Research on Poverty, Discussion Paper no. 1305-05 Gordon Dahl and Lance Lochner, August 2005; <http://www.wlu.ca/documents/9276/Dahl-Lochner-Oct-2005.pdf>

^{xvii} Bartlett, Susan and Burstein, Nancy, (2004) "Food Stamp Program Access Study: Eligible Nonparticipants." Economic Research Service. U.S. Department of Agriculture.

^{xviii} Dion, M. Robin and Pavetti, LaDonna, (2000) Access to and Participation in Medicaid and the Food Stamp Program: A Review of the Recent Literature." MPR Reference No.: 8661-401.

Martinez, Olivia Arvizú, Widom, Rebecca and Ewart, Ella. "Nourishing NYC: Increasing Food Stamps Access in Immigrant Communities" (2008). Urban Justice Center.