Introduction
What if one key to improving the quality and delivery of health care in the United States is held by frontline clinical support workers? This question lay at the heart of the Care Team Redesign (CTR) Initiative, a multiyear effort to transform workforce practices and the delivery of care in four high-performing primary care systems.

The U.S. health care system is plagued by high costs that too often yield middling patient care outcomes. Some attempts at solving this problem have focused on taking a team-based approach to delivering care. Such an approach provides more support to overburdened doctors and nurses, while improving the management of patient data.

However, there have been few efforts that really focus on the most common support staff members in primary care teams — medical assistants (MAs). Launched by the Hitachi Foundation in 2014, the Care Team Redesign Initiative sought to change that. It challenged each of the four primary care systems to develop career ladders for their MAs and find new tasks and roles for them within the care team. The sites each took a different approach to this challenge, but all fundamentally shifted roles and responsibilities on their care team, with the goals of improving patient care and increasing efficiency.

As part of the CTR Initiative, AltaMed Health Services Corporation in California was one of the four health care systems that each received a $200,000 grant from the Hitachi Foundation. Each organization also received technical assistance from the Healthforce Center and the Center for Excellence in Primary Care, both at the University of California, San Francisco.

After the Hitachi Foundation closed in 2016, the Care Team Redesign project continued through a collaboration involving the Good Companies, Good Jobs Initiative at the MIT Sloan School of Management and the Good Companies, Good Jobs Initiative at the Aspen Institute. A third-party evaluation of the results was subsequently conducted by a team of academic researchers, led by Jennifer Craft Morgan of Georgia State University’s Gerontology Institute. This case study describes the changes AltaMed Health Services made and the outcomes that resulted.

AltaMed
AltaMed Health Services Corporation (AltaMed) is a large, federally qualified health center that has been in operation since 1969 and has more than 40 sites distributed across two diverse counties. AltaMed has been designated by the National Committee for Quality Assurance as a Patient-Centered Medical Home (PCMH).
AltaMed’s mission is to eliminate disparities in health care access and outcomes by providing superior quality health and human services through an integrated, world-class delivery system for Latino, multiethnic, and underserved minorities in Southern California.

In 2015, AltaMed delivered over 1 million patient visits to approximately 188,122 patients in Los Angeles and Orange counties. More than 80% of AltaMed patients are Hispanic/Latino, and approximately 60% are best served in a language other than English (e.g., Spanish, Chinese). About 70% of AltaMed patients live below 200% of the federal poverty level. The majority of patients are either uninsured or insured by Medi-Cal, Covered California, or other public programs such as the Child Health and Disability Prevention program; for example, approximately two-thirds of patients are covered by Medicaid managed care. A significant percentage of patients are affected by chronic conditions such as diabetes, high blood pressure, and obesity.

How the Care Team Redesign Project Got Started

AltaMed is strongly committed to improving access, quality of care, and operational efficiency and is continuously evaluating different strategies for achieving these goals. After adopting the PCMH model in 2010, AltaMed identified a need to standardize and increase the skills of its medical assistants (MAs). As part of this effort, in 2013, AltaMed developed and implemented a 10-week Performance-Based Training (PBT) program intended to address basic skill gaps in AltaMed’s MAs (e.g., computer skills needed for entering data into the NextGen electronic health record [EHR] system, clinical competencies). AltaMed’s MA Training and Career Help (MATCH) program was identified as another opportunity for enhancing the skill sets of primary care support staff in ways that would improve provider efficiency and/or job satisfaction while also helping to retain and “grow” high-performing staff. The MATCH program built on the success of the PBT program by helping MAs develop more advanced skills (e.g., panel management, health coaching).

How AltaMed’s MATCH Program Works

Program overview. The purpose of the MATCH program is to better position MAs to support primary care providers according to PCMH principles. AltaMed originally planned to train 50 MAs in one of three tracks: panel management, health coaching, or clinical scribe. However, due to a number of organizational changes, AltaMed ultimately ended up reducing the planned...
scope of the program. The clinical scribe track was eliminated entirely, and the final training curriculum focused only on medical terminology, panel management, and health coaching. The number of MAs trained was also reduced, due in part to unanticipated costs associated with obtaining backfill/coverage for MAs participating in the program.

Under the revised MATCH program, high-performing MAs receive standardized training in medical terminology, panel management, and health coaching. Specifically, the panel management module provides training on the provision of proactive evidence-based preventive and chronic care based on standing orders; upon completing the module, MAs will be able to use NextGen EHR and clinical registries to identify and contact patients with care gaps or overdue services (e.g., screening, immunizations), and also use alerts in the EHR to flag care gaps for physicians at the time of office visits. The health coaching module teaches MAs how to provide self-management support to patients with chronic conditions, including disease-specific health education, assistance with lifestyle changes and medication adherence, and encouragement for patients to become active participants in their own care. The MATCH training curriculum was developed by a team from AltaMed’s Education & Training Department, and was specifically tailored to address unique barriers, cultural/linguistic differences, and health disparities present in AltaMed’s patient population.

The MATCH program is delivered over a four-month period, with in-person classes two days a week led by a nurse educator supplemented by online modules, on-the-job shadowing, and supervision and reinforcement of learned skills by clinic preceptors. MAs were trained in two cohorts:

**Program eligibility.** Prior to the MATCH program, there were three MA job grades at AltaMed (MA 1, MA 2, and MA 3). To be eligible for the MATCH program, an MA must be an MA 2 or MA 3, employed at AltaMed for at least six months, and not currently involved in a performance improvement plan. MAs also had to be nominated for the program by a manager/supervisor.

**Planned program outcomes.** AltaMed planned for 10%-20% of MAs who successfully completed the program to receive a promotion and increase in compensation. To further develop an internal career ladder for MAs, a new care gap coordinator role was developed and approved by physician leadership.

**Health System Characteristics and Other Implementation Context**

**A complex organization.** AltaMed is a large organization, and change management can be trickier in large organizations due to the need to obtain input and buy-in from a greater number of stakeholders, and to account for local variation. To assist with innovation, AltaMed has invested in a director of innovation position to be held by a physician champion committed to forging partnerships with other organizations and developing new programs, while still seeing patients and remaining connected to patient needs.

**Physician organization.** AltaMed’s providers include a mix of staff physicians directly employed by AltaMed Medical Group as well as more than 500 Independent Practice Association (IPA) providers (i.e., community-based primary care physicians who are affiliated with AltaMed’s managed care network via contractual relationship with AltaMed’s IPA). The specific mix of employment/compensation models varies by county. As might be expected, AltaMed has less control over IPA providers’ behavior and much more control over its staff physicians’ behavior. Currently, full-time primary care providers at AltaMed are responsible for a panel of approximately 1,500 patients. Providers are also responsible for meeting performance metrics related to both
quality of care and patient satisfaction. AltaMed’s medical director is hopeful that over time, panel size can be increased to approximately 1,800-2,000 patients without adversely affecting provider job satisfaction or quality of care.

**Hierarchical change management model.** Physician discretion to make changes to clinic workflow is minimal because much of that is handled at a “higher” level (regional and/or corporate). However, physicians can individually decide how they wish to review materials with their MAs or front-office teams. In terms of implementing changes, there is a multilevel process for feedback, in which clinic directors are expected to make rounds monthly with their providers to ask about what processes are working well and to identify any desired areas of improvement. The regional medical director (one per county) then is expected to make monthly rounds with these clinic directors to obtain feedback, which they then share with the Medical Leadership Council (under the leadership of the chief medical officer). Processes that are not working well are highlighted via a “stoplight report.” Red denotes urgent issues that need to be addressed immediately, yellow denotes issues that can be put on hold but will eventually require attention, and green denotes issues that have been successfully addressed.

**Established technical infrastructure.** AltaMed’s NextGen EHR system has been in place for five or six years, and is widely used by administrators, providers, and staff to inform decision-making. However, the EHR templates are still regularly tweaked and can affect MA training needs. For example, in primary care, the scheduling template was altered in 2015 so that clinics could only schedule patients for up to three months out. Patients requiring a follow-up appointment four months out get placed on a “recall” list and are followed up with and scheduled by a centralized call center. Changes like that that require additional MA training may affect the amount of time MAs have to participate in the MATCH program and may also affect curriculum development. For example, panel management modules will need to be tailored to ensure they are compatible with AltaMed’s EHR.

**Increased emphasis on strategic human resource management.** Within the last five years, AltaMed hired new HR administrators (e.g., VP of human resources and director of workforce development), developed new HR functions, and also initiated a number of other changes resulting in the more deliberate alignment of HR functions with AltaMed’s strategic priorities and business needs. To increase capacity for internal workforce development, AltaMed also opened its own training center — “AltaMed University and Training Center” — and has been developing relationships with community colleges and other training programs in the community. From a strategic human resource management perspective, MA-focused workforce development programs such as the MATCH program are evaluated for the ability to retain and develop a strong internal pipeline of talent and/or for their impact on provider efficiency and/or quality of care.

“We have adopted a much more planful [HR] development approach based on business needs. We look at where our business is going, the key jobs, and then we build training programs and initiatives that help us advance our talent agenda in those particular areas more quickly.” —Senior Administrator, follow-up site visit

**Transition to a new staffing model in primary care.** At the time the MATCH program was first developed, AltaMed utilized a primary care staffing model of two MAs per provider (one MA focused on intake and the other
on discharge), plus ancillary support from a 0.25 RN and a 0.25 *promotora* health coach for additional support and outreach related to chronic care management. In 2016, in an effort to reduce costs and increase efficiency of care, AltaMed made the decision to transition to a new staffing model. Instead of being supported by two MAs, providers are now paired with a single “provider partner” who handles all intake and discharge functions as well as with 0.33 of a care gap coordinator to assist with panel management and referrals. AltaMed’s preference is for the provider partner role to be filled by licensed vocational nurses (LVNs) due to limitations on MA scope of practice in California’s Medical Practice Act. However, in implementing the staffing model, AltaMed determined that the LVN provider partner was more critical in certain specialties than others and adjusted expectations accordingly (e.g., having an LVN was mandated in pediatrics due to the large number of vaccines provided, but other specialties were able to use MAs as the provider partner). The transition to the new staffing model reduced MA scope of work and meant that the original vision for the MATCH program was no longer closely aligned with AltaMed’s strategic priorities. MATCH program training relating to panel management still remained highly relevant for the new care gap coordinator role; however, health coaching was viewed as useful primarily in providing MAs with an orientation in customer relation management and for ensuring that MAs understood the value of referring patients for health education/health promotion related to managing chronic conditions.

“Our new staffing model was rolling out the same time as the [MATCH] program, so instead of moving MAs into the originally planned redesign function of health coaches and scribes, we had to move in a different direction to support the new staffing model.” —Senior Administrator, follow-up site visit

“With the new staffing model, the flexibility for MAs to provide more teaching or health education is not really there anymore. . . . We have a timing cycle where we need to room patients within a certain amount of time . . . [so] the time to deliver more information to patients at the beginning of the visit sometimes just isn’t there anymore. Now it’s focused more to the end of the visit and usually provided by the promotora or one of the LVNs.” —Nurse Manager, follow-up site visit

**Implementation Strategies at AltaMed**

*Modifying the MA career ladder.* Prior to implementation of the MATCH program, AltaMed had three MA job grades. Now they have a fourth: care gap coordinator.

- Medical Assistant 1, average annual salary $32,502
- Medical Assistant 2, average annual salary $35,113
- Medical Assistant 3, average annual salary $38,608
- Care Gap Coordinator, average annual salary $45,698

In preparing to implement the MATCH program, leadership reviewed the market rate of pay for MAs and further differentiated MA skill sets at each job grade; market adjustments for MAs typically amounted to between 2%-5% increases in pay. AltaMed also further developed the MA career ladder by adding the new care gap coordinator role that MA 3s who successfully completed the MATCH program could be eligible for. Care gap coordinators help coordinate patient flow for providers; the role does not involve face-to-face interaction with patients and is
heavily focused on panel management (e.g., schedule scrubbing, submitting and monitoring referrals, addressing in-scope telephone inquiries, and making outbound calls to follow up with patients on behalf of the provider).

Assigning a dedicated nurse educator. The grant provided by the Hitachi Foundation meant that AltaMed could assign a dedicated nurse educator to develop and maintain the curriculum and follow up on the training. Having a dedicated nurse educator assigned to the program was identified as critical to successful program implementation. The nurse educator was a critical part of the Education & Training team that developed the MATCH program curriculum. She also delivered the didactic part of the curriculum and was responsible for developing preceptor roles and ensuring that the job shadowing went smoothly. The nurse educator has also played a critical role in helping extend and/or adapt the MATCH program curricula for use with other clinics and types of workers.

Planning for coverage and backfill via a per diem pool of MAs. AltaMed had not initially budgeted for or fully addressed backfill/coverage issues associated with pulling high-performing MAs out of clinic to participate in the MATCH program. Very early on, backfill/coverage was quickly and consistently identified as a barrier to supervisor/manager buy-in to the program. At AltaMed, MA coverage is typically provided via a per diem pool. To help assist with backfill/coverage issues, leaders at AltaMed made staff from this pool available to managers/supervisors with staff participating in the MATCH program. Planning for coverage and backfill was a large, unanticipated cost for AltaMed and represented a key lesson learned in implementing this type of program. Although the per diem pool was critical to the success of the program, the pool was still described by clinic managers/supervisors as not always available or sufficient for meeting clinic needs, even for MAs on vacation or absent due to illness. For example, one clinic manager indicated that her requests for coverage were only granted 40%-50% of the time, and the rest of the time her clinic ended up operating short-staffed. Another manager noted that per diem MAs could not be considered a genuine replacement for her high-performing MAs because their skills were not at the same level. Larger clinics were better able to accommodate being short-staffed; in smaller clinics, backfill/coverage issues may have prevented managers/supervisors from nominating MAs to participate in the program.

“We had to train the MA who was providing coverage. Instead of her helping us, we were training her. It took a while before she was productive. It was a challenge.” —Clinic Manager, follow-up site visit

Outcomes Achieved

Number of MAs trained. As of July 2017, a total of 23 MAs from 14 clinics completed the MATCH program (10 in Cohort 1 and 13 in Cohort 2).

MA outcomes. As of July 2017, six of the MAs who completed the MATCH program had been promoted (e.g., from MA 2 to MA 3, from MA 3 to the care gap coordinator role, or from MA 3 to supervisor of health information), with associated pay increases. MAs who completed the program but had not yet received a promotion still received a merit pay increase ranging from 3%-5%. These promotion and merit increases were in addition to previously discussed market adjustments to MA salaries. An additional two MAs were selected from
a competitive pool of over 100 applicants to participate in a new MA → LVN program being piloted at AltaMed. Additionally, a number of managers/supervisors also reported that the MATCH program increased MAs’ confidence in interacting with patients. MAs also reported high satisfaction with the program.

**New structural resource for training on panel management and health coaching.** The development of standardized training modules on medical terminology, health coaching, and panel management were viewed as a positive project outcome that could be sustained regardless of which staffing model AltaMed ultimately decides to employ. Modules could be repurposed for training other staff as needed. For example, the health coaching module was described as providing valuable skills on how to better interface with patients, and thus of utility to staff in many different roles.

**Stable MA turnover rates.** Senior leadership at AltaMed indicated that, although the limited reach of the program meant they could not evaluate effects on provider efficiency, they were interested in identifying effects on workforce retention and engagement, particularly for participating MAs. HR noted that turnover of MAs was stable. Provider turnover had been trending upwards and spiked in mid-2016 but was subsequently dramatically reduced. Given other ongoing initiatives, changes in turnover could not be directly attributed to the MATCH program.

**Other workforce outcomes.** Nurse managers reported increases in MA self-confidence and skill sets following completion of the MATCH program. MAs who completed the program expressed high levels of satisfaction with their work and with AltaMed’s willingness to invest in development of frontline staff, particularly if they were promoted into a new role.

“The health coaching module helped provide MAs with perspective. . . . One challenge we have is that even though we have a promotora on-site, referrals weren’t always going through due to lack of MA understanding of the value promotoras have and the benefits of health education for patients. So, the training helped MAs become advocates for that.” —Nurse Manager, follow-up site visit

“Medical assistant is an entry-level position. These are vulnerable positions because sometimes [for] that workforce, there aren’t any other professionals in their families. They come in a little bit insecure, in need of mentorship, in need of direction. Programs such as the MATCH program allow them to enhance their skills, build their confidence. There’s a lot more value than just at the surface level. It helps them gain much more . . . the ability to come back and lead, be more confident in their roles and how they present themselves . . . and interact with patients.” —Nurse Manager 2, follow-up site visit

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**Sustaining the Changes**

**Extending the training to other clinics and types of workers.** The transition to the new staffing model meant that
there was no clear business case for continuing to train primary care MAs through the MATCH program. However, staff in Education & Training Development were proactive in identifying opportunities for extending the training to other clinics and categories of workers. For example, in 2017, AltaMed’s Program of All-Inclusive Care for the Elderly (PACE) clinics agreed to pilot the MATCH program with four MAs who comprised a new Cohort 3. PACE clinics utilize a different staffing model from the rest of primary care, and the scope of work for MAs is even more limited. However, if the training program is successful, then PACE clinics would consider extending the training to other MAs and categories of frontline staff (e.g., nursing assistants). The clinical nurse educator also reported using the health coaching curriculum with staff in medical management who could benefit from skills in motivational interviewing (e.g., LVNs and other staff serving as case managers or patient care coordinators). Senior leaders at AltaMed noted that they were evaluating other options for innovating and redesigning the role of MAs.

“There is still a business case for training MAs. The key issue is what type of training. Many innovations in health care work delivery . . . such as health care educational call navigation or patient support services would be well-suited for MAs in a more administrative support and coordination role. . . . I think there is a lot of potential for creatively training and using MAs in different ways . . . just not clinical training, at least in our organization’s model.” —Senior Administrator, follow-up site visit

Development of a new MA → LVN program. Informed in part by its experience with the MATCH program, in July 2017, AltaMed launched a new “LVN Licensure” pilot program. The purpose of the LVN Licensure program is to (1) develop an internal pipeline of skilled LVNs to support the new staffing model, and (2) increase retention of MAs, certified nursing assistants (CNAs), and care gap coordinators by providing an internal career path. The LVN Licensure program is run as a joint partnership involving AltaMed, the Los Angeles Unified School District Division of Adult and Career Education, the Maxine Waters Employment Preparation Center, and the East Los Angeles Skills Center. The program is offered at a significantly reduced cost compared to comparable LVN training programs — an estimated $6,300 total inclusive of textbooks and other fees. AltaMed employees are eligible for tuition reimbursement of $5,000/year, which means that participants who successfully complete the program might only pay $1,300 out of pocket. The program requires a commitment of 24 hours/week over a 16-month period and is conducted “after work hours.” Training is competency-based, and students will complete the state-mandated 1,530 hours of academic coursework and clinical training (at AltaMed) needed to be eligible for the National Council Licensure Examination for Practical/Vocational Nurses. A first cohort of 15 participants was selected from an initial applicant pool of more than 100 AltaMed employees. AltaMed has committed to promoting at least 80% of successful graduates within 90 days of completing the program. An average LVN salary is approximately $41,000/year, compared to an average salary of approximately $35,000/year for MAs.

The Care Team Redesign Evaluation Team

*Dr. Jennifer Craft Morgan* is an Associate Professor in the Gerontology Institute at Georgia State University in Atlanta.
**Dr. Janette Dill** is an Assistant Professor in the Sociology Department at the University of Akron in Akron, Ohio.

**Dr. Emmeline Chuang** is an Assistant Professor in the Department of Health Policy and Management at the UCLA Fielding School of Public Health.

**Dr. Chivon Mingo** is an Assistant Professor in the Gerontology Institute and Affiliate Faculty in the School of Public Health Partnership for Urban Health Research at Georgia State University.

**Dr. Crystal Warren Williams** is an Assistant Project Director with the Gerontology Institute at Georgia State University, and she managed the Care Team Redesign Evaluation Project.