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Social Determinants of Health—Relevant History, A Call to Action, An Organization's Transformational Story, and What Can Employers Do?

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Relevant History of SDOH and a Call to Action

For decades, frontline health-care professionals have known of the downstream effects of SDOH. Working in a clinic or visiting patients in their homes told the story. Under- or unemployment, unsafe neighborhoods, failing schools, broken stairs, leaking roofs, peeling paint, empty refrigerators, mold and bugs, unfilled medication bottles, and unfit living conditions plague large sections of our population, dividing rich from poor, further disadvantaging minorities as the American Dream hangs tenuously in the balance. There is no question that disadvantage, discrimination, and poverty produce poor health, and that more and better health care, newer scanners, more procedures, and new medicines cannot change the outcome.

So how did we get here?

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The quest for health equity appears to have commenced in 1967 with the UK Whitehall study[1] that demonstrated a health gradient based on social status—higher SES predicts better health, lower SES predicts poorer health.

The 1985-1988 Whitehall II investigated the "...degree and causes of the social gradient in morbidity" and showed a similar inverse relationship between employment grade and health. It also demonstrated a difference in health risk behaviors by employment grade; a relationship between economic circumstances and adult height; the health effects of social circumstances at work (eg, monotonous work with low control and satisfaction); and how social supports or lack thereof, affect health.[2]

Margaret Heckler, Secretary of the US Department of Health and Human Services, convened a Task Force on Black and Minority Health in 1985 and submitted the first-ever consolidated American report on minority health. Although the overall health of Americans showed almost uniform improvement, a continuing disparity in the burden of death and illness was experienced by blacks and other minority Americans as compared to the nation's population as a whole, which she believed was "...an affront both to our ideals and to the ongoing genius of American medicine".[3]

In 1999, Michael Marmot and Richard Wilkinson published a book entitled "Social Determinants of Health" and presented the following supported by scientific evidence:

1. "Differences in health between population groups are due to characteristics in society, not differences in health care";
2. "When people change social and cultural environments, their disease risks change";
3. "The health gradient is not a function of poverty alone" (meaning poor health for the poor and good health for the rest), rather it is a "...problem *across the entire socioeconomic spectrum*—as one moves down the social hierarchy, life expectancy gets shorter and mortality rates are higher."
4. The health gradient can change (and change quickly) with interventions;
5. "The health gradient is not a matter of selection"—"...health does not determine social position, rather, social position determines health (pp. 87-88)."[4]

In 2005, Marmot led the World Health Organization (WHO) global Commission on SDOH (CSDH) and in the 2007 report, discussed the social gradient and the "...various ways in which material disadvantage combines with the effects of insecurity, anxiety, and lack of social integration to affect the health of those at progressively lower levels of socio-economic status." Studies using international comparative data showed the same associations of life expectancy and health along an economic gradient occurring both *within* populations in countries, as well as in populations *between* countries.[5]

In 2010, WHO provided a "Conceptual Framework for Action on the Social Determinants of Health", showing the complex interplay or "waterfall" of sorts, with "upstream" attributes producing "downstream" effects. "Upstream" determinants (governance, macroeconomic policies, social policies, public policies, and culture and societal values) affected social hierarchy (power, prestige, discrimination), which affect socioeconomic position (social class, gender, ethnicity, education, occupation, and income), which affect "downstream" or "intermediary factors" finally leading to the "impact on equity in health and well-being."[6] This Framework provided a foundational focus on governance and social and public policies as critical to changing the health of populations by promoting health equity.

Our current understanding of SDOH in relation to health inequity is captured in this WHO extended definition:

> SDoH are "the conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life."
>
> Connecting the dots to the upstream causes of downstream poor health...
>
> These forces are shaped by the distribution of money, power, and resources at global, national, and local levels, which are themselves influenced by policy choices.
>
> And finally, connecting social determinants to unequal opportunities for health:
>
> SDoH are mostly responsible for health inequities which are the unfair and avoidable differences in health status seen within and between countries.[7]

One would have hoped that our nation's call to action that began in 1985 was heard and resulted in a health equity sea change. A 2019 analysis of 25 years of CDC and Behavioral Risk Factor Surveillance System data from 1993 to 2017, however, suggests otherwise. "There has been a clear lack of progress on health equity during the past 25 years in the United States." The authors conclude that "to achieve widely-shared goals of improving health equity requires greater effort from public health policy makers, along with their partners in medicine and the sectors that contribute to the social determinants of health."[8]

From late 2016 to 2018, as lead author of a PHA white paper entitled "Social Determinants of Health—Talking Action," we included a working group colleague's quote in the preface:

> Once you study and consider the far-reaching effects of social determinants of health, you can't not do something.[9]

The updated statement:

Once you know the scientific evidence on SDOH and the power they wield, forcing good people to live in deprivation and suffering, leading to immeasurable wasted human potential forever lost to our collective wealth, we can't not make the necessary changes in our society and our discriminatory practices and policies to bring about health equity.

This call to action is not intended to disparage the ground-breaking work that is already occurring. Across the United States and globally, there are countless individual organizations, multisector pilots, and partnerships leading the way. But this work is too big, too important, and too critical to be left to the few intrepid warriors struggling to make a difference. Instead, it requires all of us across all sectors of the society to be willing to confront and change conscious and unconscious biases that argue for the status quo and to work tirelessly today for results that may take decades or generations to appear, knowing that this work will result in a healthier and more equitable society.

One Organization's Transformational Journey in Health Equity

I (Marcella Wilson) left my job as CEO of a managed health-care corporation to become CEO of a 100-year-old not-for-profit charity in Detroit. The goal of the organization was to advocate for and connect clients to eligible social services such as housing, food, and other necessities of life. We had a strong headwind and many challenges to overcome: Besides having only 600 employees to serve 10 000 clients, we faced the demise of the autoindustry, a corrupt city government, and a profound recession.

As the new leader, I became a "secret shopper" to educate myself on how our organization and community partner organizations functioned. Armed with a phone, unlimited minutes, and a Detroit phone book, and pretending to be a single mother new to the Detroit area, with 3 children in need of food and other supports, I attempted to secure services for my family. The experience was both appalling and disheartening. After 2 solid days of calling, I was unable to secure a single supportive service, and not one call was ever returned. The message was clear—I did not matter—being poor devalued me in society's eyes and rendered me powerless. Even the organization I now led failed to provide meaningful support or direction.

This eye-opening experience led me to set a goal of changing the nation's understanding of poverty—moving from a character flaw to treatable condition using evidence-based standards of care. In working with clients and our employees, poverty was reconceptualized as a toxic environmental exposure, no different from polluted water, lead paint, or black mold. This paradigm shift freed up case workers to "treat" poverty without making a value judgment as to whether the individual, family, or community "deserved it." Rather, it became the expectation that the necessary resources *must* be brought to bear to control the toxic exposure and lessen the damage to the individuals and their environment. In effect, the interventions were "treating the condition of poverty," requiring employees and partner organizations to provide clients with resources they needed.

Based on the new paradigm, clients were approached in a new way. No longer did case workers ask, "Why are you here?" instead asking, "Would you like help coordinating all the services you are eligible for?" Imagine the difference in a person's reaction to the 2 questions. The first dares the individual to plead a case as to why he or she should be helped, the second communicates the availability of services he or she is eligible to receive, removing the shame and stigma related to asking for help.

To identify the relevant social determinants in our clients and measure improvement based on interventions, case workers screened willing and interested clients using the Arizona Self Sufficiency Matrix[10] and an internally created Coordinating All Resources Effectively (CARE) Plan.[11] The Arizona Self Sufficiency Matrix is a multidomain tool that identifies social determinants related to an individual's current status with a focus on 18 key domains of social, physical, emotional, and financial health. The Likert-type scale scored domains prioritize areas for participant goals preparation. The CARE Plan represents an opportunity for clients to directly understand their current circumstances without invoking self-blame and provides participants with a "map" that not only identifies all available resources for improved health and self-sufficiency but also charts a course based on a set of personalized, prioritized goals, action steps and timeline to transition from poverty.

We held ourselves and our funded network of community services accountable to ensure client access to eligible services. The program, named Transition To Success, identified key evidence-based practices to treat and measure client response to the determinants related to the condition of poverty. In support of interventions, independent evaluations with parents in the Head Start Program demonstrated statistically significant improvement in 14 of 18 social determinant domains based on receipt of eligible support services. Although employees and leadership heard and witnessed many stories of lives changed, it was the development of data that had to occur to support a much larger vision—to change the way a nation understands poverty and what can be done to change it.[12]

To extend client reach and enhance interventions, we lobbied additional community organizations to work directly within the partnership—building extended care networks. Working together, we set collective goals and identified, documented, and tracked to assure consistency of purpose, process, and outcomes. Information was shared, communication loops closed, and clients' needs met—consistently and within an acceptable timeframe. When a client "fell through the cracks," these cases became learning opportunities to improve our care processes and identify faulty care transitions.

Although the work opened our eyes to become better at helping our low wage clients, we failed to apply this learning to our own workforce. Nearly 60% of our employees earned less than $20 an hour, and many were part-time using the same siloed system of care that our clients experienced.

One employee's request brought about the next phase of organizational transformation. The Christmas holidays and related client festivities were in full force with activities all supported by staff, donors, and corporate sponsors. While distributing turkeys to client families, a staff person whispered, "I need a turkey too." That single statement galvanized the next steps in organizational change, and "Human Resources" took on new meaning.

First, organizational culture was realigned with a focus on helping our own employees. We knew helping employees meant healthier employees—not only good for clients but also good for the business bottom line. The organization was repaid for its efforts with lower absenteeism and stronger employee engagement and loyalty. Using the same tools used with our clients, employees were encouraged to self-screen for social determinants, to identify their own priorities, and to build their own CARE Plan. Although self-screening was not mandatory, it was made available to every employee who chose to do so and was widely communicated and enculturated throughout the organization.

Next, based on direct input from employees and armed with a better understanding of how financial challenges affected employee's home and work lives, company policies were updated to remove barriers that decreased workforce productivity. Learning about the unreliable Detroit Bus System—and the toll it took on employees to secure and maintain employment— the organization understood the impact of a broken down vehicle. Being late for work was no longer a cause for a disciplinary action. Instead, tardiness and absenteeism became a starting point for meaningful dialogue regarding transportation and other economic challenges. Transportation issues were met head-on with putting in place opportunities for ride sharing, direct relationships with auto dealers, and connection to the local organization "Vehicles For Change" program (VehiclesForChange.org).

We recognized that many employees faced wage garnishment for child support, legal fees, student loans, and unpaid bills, which turned into an opportunity to offer financial literacy classes and assistance identifying resources to support the predictable decrease in take-home pay. Low financial literacy correlates with higher borrowing rates, mortgage delinquency, and home foreclosure. Young adults from 18 to 34 years with low financial literacy pay more in interest on credit

card debt, and higher penalty fees (than older adults), and are twice as likely to withdraw emergency funds from retirement accounts.[13]

Identification of and information on community programs and services were now communicated across the entire organization, not just to case managers who used the resources working with clients. Our services and events were extended to employees and their families at every viable juncture, from tutoring, after school programs, older adult supports, summer programs, sports, back to school events, and health fairs, whether the employee was full or part time.

When the organization changed to direct deposit, we learned that many employees were unbanked (defined as no one in a household with a checking or savings account). In 2017, 6.5% or 8.4 million US households were unbanked, and another 18.7% or 24.3 million US households were "underbanked" (defined as having an account at an insured institution but also obtaining financial products and services from an alternative financial system [AFS] within the last 12 months). Alternative financial systems include money orders, check cashing, payday or auto title loans, tax refund anticipation loans, and pawn shops which place employees at risk for high fees and potentially usury-level interest.[14] Unbanked and underbanked households tend to pay high costs for these transactions, losing up to 10% of their annual income to fees and interest. In addition, these households tend to have a lack of credit and savings, even for small emergencies.[15]

The response to unbanked employees was to bring the organization's bank representatives to work sites to meet with employees, address their fears and mistrust of banking based on documented historic discriminatory practices,[16] and broker reduced bank balances and fees as well as reduced money order rates for employees sending money to families. These changes allowed many employees to be in a mutually beneficial relationship with a bank, often for the first time.

Although the organization was unable to increase wages and benefits primarily due to restrictive funding, the new culture began to take hold as consistent communications about financial stability was offered to staff. A flexible work schedule to accommodate continuing education was instituted and a relationship with a nearby university led to reduced tuition fees. In exchange, the university's academic affairs frontline staff were trained and began offering social determinant screening and CARE planning to all students.

Although the organization had never before authorized payday advance loans, in the new culture, when an employee needed money to avoid predatory lending, he or she could request an advance for a car repair or an unexpected medical bill. Resorting to payday or auto title loans or pawnshop exchanges could start a vicious cycle of inability to pay off the loan the next month, resulting in usury-level interest payments and fees, and essentially trapping the employee into even deeper debt.

The awareness that many employees at all levels of the organization had no back-up savings and were living paycheck to paycheck with no one to turn to for unpredictable financial needs led to an organizational policy for employee pay advances—interest free, maximums defined by a percent of income, and to be repaid within 12 months through payroll deductions. Every employee requesting an advance was required to attend financial literacy courses to remain eligible for the program in the future. If the employee terminated employment, the outstanding debt was deducted from their final paycheck. During 10 years as the leader, not a single employee defaulted on a pay advance.

We often asked ourselves if we were making a difference, and clients and employees helped the organization stay the course. When a federal shutdown required us to furlough every employee 1 day a week for 4 weeks, over 85% of staff continued to report for duty as volunteers without pay. Jumar P, a previously homeless employee said it best, "They don't help you with poverty, they attack it with you!"

Ultimately though, anecdotes are not enough, and research and data must be integrated into an organizational strategy supported by adequate resources to provide the solid evidence that can change a nation's understanding and response to financial struggle.

To date, TTS has been evaluated in 5 independent studies in various sectors, including 2 in education, 1 in health care, and 2 in human service settings. Across the evaluations in 5 settings, statistically significant change occurred in an average of 11 of 18 social determinant areas. Increased client employment was seen consistently across all 5 independent evaluations, and improved client financial management was evident in 4 of 5 evaluations.[17]

Based on the updated paradigm that views poverty as a treatable condition, TTS offers a scalable, sustainable, measurable, evidence-based system of care accessible to health, human services, government, education, and faith-based organizations by offering:

- direct care workers training in the use of TTS® tools and processes to coordinate care across multiple delivery systems;
- administrator training to appropriately support direct care workers;
- an integrated digital platform that;
  - identifies client-specific services and supports and tracks referrals to insure participant access,
  - houses and reports on relevant client data which holds funded systems of care accountable for results, and
  - offers reimbursable pathways for Medicaid/Medicare providers.

In these ways, TTS is navigating a realistic path to improve health and economic outcomes for individuals, families, organizations, and communities.

SDOH—What Can Employers Do?

A healthy engaged workforce is required if an employer hopes to post a strong year-over-year bottom line. Small and mid-size employers may be especially challenged to offer employees some benefits needed to improve their personal financial status. But the stories and actions undertaken by a struggling not for profit organization functioning in one of the poorest and most depressed areas of the United States can teach us a great deal.

Here, based on practical lessons learned, we summarize some options for organizations to consider as they take on supporting employees experiencing financial instability and the various SDOH. Although not exhaustive, the list may provide organizations places to start as they move toward employee/family health equity:

1. **Promote leadership awareness of social determinants and health equity.**
   - First, seek to understand the underpinnings and downstream effects of SDOH, and then commit to making health equity a core value for leaders and employees. Understand what living at, or near the poverty level means for an individual and his/her family, and craft interventions to assist affected employees;
   - Identify the various social determinants that may be at play with employees and build a workforce with opportunities for career advancement and purposeful job engagement;

- Consider health and health equity in all corporate policies. Review corporate and employee policies annually to identify any policies that disadvantage one employee group over another; and
- Reach out and form employer-community partnerships to support development of communities at risk.

2. **Use available data to understand employee challenges and craft interventions.**
   - Identify cohorts within an employer population likely to experience challenges related to social determinants (for example, low wage workers, job categories, vulnerable zip codes, census tracts or neighborhoods etc);
   - Analyze employee health-care costs and utilization, refining data output by wage bands, and generation of birth (babyz boomers, Gen X, Y, Z);
   - Identify employee cohorts that lack evidence of basic preventive health services or a designated health-care provider;
   - Review pharmaceutical claims data for evidence of medication nonadherence and work with health-care insurers to offer lower cost medications or medication support for individuals unable to pay for medications; and
   - Review high cost and "rising risk" disease groups and high cost claimants to infer whether social issues may be a driver for some of the health outcomes.
3. **Train all employees on health equity**.
   - Add health equity to required annual diversity training and include information on health disparities and how they are related to race, culture, age and other attributes. Include information on implicit bias and microaggressions that can promote employee exclusion and "otherness" within a workforce leading to team dysfunction.
4. **Listen and learn about employee financial challenges**.
   - If your organization provides a Health Assessment, add questions about financial stability, housing instability, food insecurity, transportation and other social issues that may directly affect employee performance.
   - Consider starting formal and ongoing employee "listening sessions" to learn about employee social needs not being met.
   - Establish "a safe place" to share employee stories—both in person, in writing, and anonymously, to better understand the depth of employee challenges in your organization.
5. **Review employee pay schedules based on work location** – Assure the organization is paying a living wage commensurate with local costs of living. Review local average cost of housing, utilities, transportation costs to and from work, medical and food costs based on family size, as compared to wages.
6. **Review employee health care benefit offerings**.
   - Review employee benefit offerings to identify if any benefits tend to disadvantage one employee group over another (eg, low wage workers, gender, or sexual orientation) within the organization.
   - Offer health benefit plans that employees can and will use for physical and mental health care. If a high deductible health plan (HDHP) is offered, educate employees on and assure that individuals have the financial means to absorb the expected level of copays and deductibles. Consider offering flexible or health savings accounts for individuals choosing HDHPs to cover copays and deductibles.[18]
   - Consider adding paid time off for preventive health-care visits or visits to a health-care provider for employees with diagnosed medical conditions that require ongoing and frequent medical care.
   - Consider transportation vouchers for low-wage employees' ability to access to medical and mental health care.
7. **Help employees become financially literate and self-sufficient**.
   - Identify corporate partners or internal resources with the expertise and capacity to train employees on components of basic financial literacy (setting up bank accounts, avoiding AFSs and fees, writing checks, budgeting based on income etc.)
   - Consider helping employees set up and maintain "emergency savings accounts" to overcome unexpected challenges. Match funds up to a certain percentage if possible.
   - Consider setting up an organizational policy for employee pay advances to overcome unpredictable financial challenges.
   - Offer "generation sensitive" financial benefits (eg, millennials and student debt relief)
8. **Promote higher education attainment and additional skill building to help employees advance within the organization.**
   - Consider tuition or fee reimbursement or up-front partial payments to support employees with limited excess funds who wish to improve skills and educational attainment.
   - Frequently share employee advancement stories in company-wide communications and publicly celebrate successes.
   - Consider flexible work schedules to accommodate employee continuing education.
9. **Require more of EAP.**
   - Assure that EAP contractors consistently screen employees for social determinants which may be driving stress, illness or lower productivity.
   - Require EAP vendors to develop a set of referral resources for employees affected by identified SDOH.
   - Hold EAP contractors accountable for taking a comprehensive approach to identify and intervene on employee SDOH.
10. **Measure and evaluate progress on employee health equity annually**.
    - Add employee health equity measures19 based on available data to Key Performance Indicators (KPIs) to be tracked over time and reported at the highest levels of the organization.

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