Like most aspiring internists, I went into my internal medicine training excited to become an expert in diagnosing and treating disease. Over time, with the help of scores of patients and their families, I came to relish treating the person with the disease.

“Mr. Fisher” crossed my mind again today. He is one of those patients who sticks in your soul, so he comes to mind often. What happened to him should never happen to anyone, especially in a well-resourced country as the United States. The good news is that that nation’s healthcare system is starting to be more proactive about understanding all the drivers of health and disease, allowing us to prevent our patients from a death like his.

Mr. Fisher was a 60-year-old man who presented to the Charity Hospital emergency department with acute chest pain. The EKG revealed a pattern consistent with acute myocardial infarction and we launched a treatment protocol. On this visit, just like on his many, many others, before any needle penetrated his skin or other treatment ensued, an upper-level resident or nurse would recognize him and produce an old EKG that confirmed the same pattern as a chronic left bundle branch block. Mr. Fisher would avoid unnecessary treatment, be offered a meal instead, and then sent home in the morning light.

On one occasion, he presented to another hospital with the same complaint of chest pain. His history of a left bundle was not known and so they reacted to his presentation and EKG as if he were having an MI and intervened per protocol. He was ruled out for MI but they kept looking for a medical diagnosis to explain the chest pain. That led them to doing an arterial blood gas when all he really wanted was someone to talk to. Unfortunately, that blood gas was taken from the radial artery in an arm with a congenital absence of the ulnar artery, and when the radial artery thrombosed, he developed a necrotic hand. He died of complications.

What I came to understand about Mr. Fisher was that he was coming to the ER because he was lonely. He wanted to be with people. To have a light meal. He would stay with us for a bit and then be discharged. Unfortunately, on discharge from the ER no one connected him to primary care, and since he was uninsured no home health or other services were available. He just went back to living on the margins of society, by himself. For me, it seems clear that though the proximate cause of Mr. Fisher’s death was iatrogenic, he may have died because he was lonely, an independent risk factor for premature death.¹

Like most aspiring internists, I went into my internal medicine training excited to become an expert in diagnosing and treating disease. Over time, with the help of scores of patients and their families, I came to relish treating the person with the disease. The more I understood their dreams, perspectives, and challenges, the more I learned to appreciate and value them as people and worked to accommodate my care plan to meet their expectations and context. I also became more certain that we have an obligation to contextualize our care because it matters not only for the art of medicine, but also for practicing quality, safe care.²

Understanding the context of someone’s health (i.e., social determinants of health), including an important context like loneliness, can happen through careful listening and asking questions during the course of the clinical relationship.³ Increasingly, however, the nation is moving to develop systematic assessments of the social determinant risk status of individuals. In all cases, the goal is to enable identification within the clinical environment of social factors that relate to health risk. Most healthcare systems engaged in this work consider it an essential first step toward fulfilling unmet social needs and improving health by linking people with social care and public health system resources.
Though there are many promising practices for identifying social risk, there is not yet a best practice or standard. Active areas of exploration include developing screening or survey tools for use in the clinical environment, leveraging secondary data sources and scraping clinical notes through natural language processing. While significant progress has been made to better assess social and environmental risk factors as a means of predicting and improving health outcomes, there remain many challenges with both primary and secondary screening mechanisms and the utility and reliability of the data they produce. There also remains important work to identify the best approach to systematically and proactively assessing social risk to develop a solid evidence base to guide future screening efforts.

Some professional societies are advocating for this to occur in the clinical setting by physicians and offer tool kits to support implementation of screening. A suite of screening tools have been deployed in the field and have varying levels of evidence to indicate their psychometric robustness. Innovations in the field have also led organizations to leverage big data across a wide range of sources and sectors to paint a detailed picture of social needs at the individual and the population level. These “secondary” social risk assessment approaches may help to alleviate the burden of primary screening. These approaches can also inform population-level interventions when the methodologic approach uses community level data like income, housing ownership and healthy food availability. Finally, there is a third pathway emerging to help identify social needs and support contextualization of care that leverages natural language processing to pull information from narrative notes and create risk profiles to target interventions to those most in need.

As social determinates of health screening proliferates, the healthcare system and others engaged in this work will need to consider and address challenges, such as: 1) screening goals; 2) scalability of assessment methods; 3) psychometric properties and the scientific basis of screening tools and approaches; 4) availability of social care system resources; and 5) opportunity to reduce respondent burden, including avoiding multiple entities asking the same person to “prove loneliness” several times. Strategies to understand and solve these challenges are well underway and achievable.

Being able to screen for social determinants of health like loneliness in an evidence-based, effective and efficient manner doesn’t mean that the healthcare system should. Though the healthcare system has a role to play in understanding and addressing the social determinants of health, expecting it to completely “own” the social determinants of health may lead to “medicalization” of the social determinants of health and is unlikely to lead to the long term, upstream change needed to prevent people from having individual impacts of the social determinants of health or to create a healthy community context.

As excited as I am about our national interest in a more systematic approach to understand how the social determinants of health are impacting our patients, I also believe we should take a cautious, evidence-based and intentional approach to ensure that using systematic screenings will improve the health and well-being of our patients in addition to improving health care outcomes. Social determinants, like the loneliness that Mr. Fisher faced, not only bring people to the health care system, but they can also exacerbate their health problems, and lead to their premature death. By being more deliberate in our identification of the social needs of our patients, we can help our patients get the right support and avoid disastrous outcomes.

References