Health Informatics Specialization
Capstone Scenario

Background

You've recently been hired as a Senior Director of Informatics for a non-profit healthcare-delivery organization: ImprovingHealth. The leadership strongly believes that only 20% of health outcomes are determined by medical factors, and that social factors are responsible for 80% of health outcomes. As part of their desire to move towards a population health management strategy, ImprovingHealth had applied for funding from the Centers for Medicare and Medicaid Innovation (CMMI) to be part of the [Accountable Health Communities Model](). They knew that, if chosen, ImprovingHealth would be responsible for serving as a hub that bridges with other organizations to:

- Identify and partner with clinical delivery sites (e.g., physician practices, behavioral health providers, clinics, hospitals)
- Conduct systematic health-related social needs (HRSN) screenings of all beneficiaries
- Make referrals to community services that may be able to address the identified health-related social needs; and
- Coordinate and connect beneficiaries to community service providers through community service navigation

However, ImprovingHealth was not chosen as one of the pilot sites in either the assistance or alignment tracks. You can find a list of the 31 organizations that were chosen here. Despite this setback, there has still been a great amount of interest from leadership at ImprovingHealth to address the health-related social needs of their Medicare Beneficiaries. Six months ago, they mandated that each of their clinical delivery sites screen all Medicare Beneficiaries using the [HRSN screening tool.]() The hope from ImprovingHealth's leadership was that by screening these members, clinical staff would then be able to identify health-related social needs and connect the beneficiaries to appropriate resources both in the clinical and community setting.

Day 1 of Your New Job

You're very excited to start your new role as the Senior Director of Informatics. There have been some rumblings about low rates of completed screenings at the clinic sites. You're curious as to why this is.

	# of Medicare beneficiaries seen in past 6 months	# of health-related social needs screenings completed	Percent screened
Clinic A	100	12	12
Clinic B	240	2	<1
Clinic C	300	10	3
Clinic D	220	35	16

You plan to visit each of the clinical delivery sites to get a sense of how the screening for health-related social needs is taking place. To your dismay, during an initial site visit at Clinic A (1 of the participating clinics that is a part of ImprovingHealth), you see that the HRSN screening of beneficiaries is being done on paper. There is a large stack of paper forms at the office manager's front desk. At first glance, it appears that only one in every three eligible members is getting screened. One of the physicians reports having been trained briefly about the need for systematic screening of the Medicare beneficiaries, but he has forgotten the details so has just been avoiding the paper forms altogether. You're surprised that the clinic has asked only the physicians to perform the screening on paper when the screening can be administered by other staff members or as a pre-clinic questionnaire in an electronic format.

You peek in on one of the screening forms that was completed by a physician at Clinic A and have great cause for concern about the current process. On your way out of the clinic, you notice that an administrative assistant is manually entering in the results of previously completed screenings into an Excel file. She says she emails the Excel file every 2 months to the central ImprovingHealth offices that aggregate the results from each of the clinic sites.

You try speaking with one of the other physicians, who gets frustrated with you and exclaims, "Why do we have to do this anyway??? It's just been pushed down on us. I don't have time for it. We're a medical clinic. What do social factors have to do with health anyway??". She then storms off.

Site visits indicate a similar process at each of the other clinics. Your observation of the "As-Is" situation motivates you to aim for a "To-Be" system that would accomplish the goals of the Accountable Health Communities Model as well as to improve the workflow of the front-line staff. Sounds like you have your work cut out for you!

Capstone

Your mission is to identify the problem, explore some of the different causes that contributed to it, dig into the data, and then recommend a better approach. You will ultimately prepare an executive summary for the ImprovingHealth leadership that summarizes some of your key findings. As you explore the current state ("As-Is" system) you will propose an improved future state ("To-Be" system). Besides helping the ImprovingHealth leadership, your efforts in this Capstone will also serve as a concrete testimony to your new informatics skills, which you can share with future employers!

You will assemble your final package with a series of deliverables in the course of 4 Modules. You are always free to modify an earlier deliverable as your thinking evolves or as more information is provided to you.