

How 1 hospital added 48K plants and improved community health

September 30, 2020

Answers to questions we did not get to during the webinar

Did the project utilize pollinator plants or was the focus more on local plants with effective drainage and erosion prevention capabilities? Or all of the above?

The project utilized plants, shrubs, and trees native to the Chesapeake Bay Watershed. The emphasis on native to assure longevity and to offer protection and food to native wildlife. We absolutely used pollinators.

Is there a website link for the green and wellness team?

There is not. Plisko Sustainable Solutions, LLC has worked with many green teams, in the healthcare industry and in other industries. If you are interested in learning more about how to create or work with green teams, click [HERE](#).

Great presentation! In your outreach on the health benefits of being outdoors, and focus on a health institution's leadership, have you shared the information with policymakers? Either in a specific bill support or simply educational capacity? (spoiler alert: I'm asking because my work involves engaging health professionals to be visible climate leaders!)

We shared a presentation by ParksRX. This organization teaches how providers can actually prescribe outdoor activity to improve health. We are still waiting to garner support for ParksRX. We made numerous presentations to our Leadership Team, Community Advisory Board, and MedStar Health Corporate Sustainability Committee. www.parksrx.org

From Arbor Day Foundation: The Arbor Day Foundation itself does not perform advocacy work, but many of our partners do. An example is the Sustainable Urban Forests Coalition, of which the Arbor Day Foundation is a member. SUFC has an advocacy platform with 5 goals, including: "GOAL 1: Advance understanding of and increase support for the public health benefits of urban and community forestry." You can learn more on that here: <https://sufc.org/advocacy/>. Our hope is that through the Tree Campus Healthcare program, we can use our network and platform to amplify and share the research others are conducting on the connections between trees and health, and that earning the recognition gives individual health institutions the platform to do this as well in their own communities. You are welcome to follow up with Tree Campus Healthcare Program Manager Logan Donahoo to discuss further (ldonahoo@arborday.org).

Thank you for sharing this amazing project. Question for Joan, based on your previous work, what additional sustainability efforts are easiest for healthcare facilities to implement?

There are many efforts for healthcare facilities to employ. Many facilities start with energy conservation projects as there is often the most cost savings there, as well as reduced carbon emissions that correlate to improved health outcomes. Waste prevention, including food waste reduction, and supply chain considerations also present cost, environmental, and health savings. Green cleaning and cleaning for reducing healthcare associated infections is both timely and imperative. Plisko Sustainable Solutions, LLC has worked in the healthcare sustainability industry for over fifteen years and is happy to chat with you directly about your needs. joan@pliskosolutions.com

Is the hospital planning on studying the effects of the green space expansion on patient recovery times?

We do not have plans to do so at this time, our efforts are rather delayed due to Covid. Related to this, there is a relatively recent article in the American Journal of Critical Care entitled *Impact of Nurses Taking Daily Work Breaks in a Hospital Garden on Burnout* that looks at the impact of green spaces on nurses.

On the topic of green space, clearly it is beneficial. Have there been comparisons on the type of green space in terms of best benefits? I know trees help with canopy shade, but on the other hand for example in Texas during Harvey our native prairie drought resistant breeds have such a lengthy root system it mitigated soil erosion, whereas trees were easily uprooted. Thoughts on what types green spaces are preferred?

We definitely have different climates and soil conditions but for our project, we used plants, shrubs, and trees native to the Chesapeake Bay Watershed. The soil conditions on our property are rather compact with a lot of clay. My advice would be to go with native species to your area.

Additionally, connect with experts in your region - whether it be the Extension Agency of your state university or local non-profits, local experts can help guide the process.

From Arbor Day Foundation: The short answer is “it depends on your local climate,” when it comes to selecting the right plants and trees. When it comes to the type of green space, this study compared five types of green land cover (forest, shrub, grass, agriculture, and urban vegetation), and forest (trees) were had the strongest association with lowered per capita Medicare spending at the community level – so, there is some evidence that trees vs other types of green space yield greater health benefits on a long term scale. <https://www.sciencedaily.com/releases/2019/04/190401115858.htm>

Which entity/department/person/green team is tasked with looking after the gardens within the hospital?

As the hospital Sustainability Officer and project lead, I work with our maintenance vendor to assure the proper care for the gardens are maintained as planned. Our Facilities department budgets for the maintenance contract and steps in to help with watering when necessary, at my request.

Do you recommend a good website for local and fed grants?

Depends on your location. If within the Maryland/Delaware/Virginia area, I recommend the Chesapeake Bay Trust as well as your state’s division of the Department of Natural Resource.

The Arbor Day Foundation works with a network of state urban and community forestry coordinators within each state’s forestry entity. These are a good place to start when it comes to looking for urban forestry-related grant opportunities in your state. There is a directory of state contacts and websites here: <https://www.arborday.org/programs/treecityusa/forestryCoordinators.cfm>

I didn’t realize it was all grants - but I think maybe the panelists can answer my question on how they’d put the proposal together if it was going to be fully self-funded, vs grants. I would still think the business case makes sense, but wondering if there are other examples out there.

I would not have changed a thing with our proposal based on funding. The folks at Blue Water Baltimore most likely know of more examples. Happy to connect you to them if you’d like more information.

Joan Plisko wrote the first grant for the planning piece and was a consultant on the other grants. If you would like to talk with her directly, reach out: joan@pliskosolutions.com

From Arbor Day Foundation: One of my favorite collections of research and case-making examples is Vibrant Cities Lab: <https://www.vibrantcitieslab.com/human-health/>, which might be helpful. I’d encourage you to zero in on one or two specific benefits that a project will have when making a business case, like water quality as we saw in the presentation, or reducing staff burnout, or air quality. When it comes to air quality, there is some research going on in Louisville with a group of academic, community, and government partners that might be inspirational (in addition to all of the research that’s already out there): <https://greenheartlouisville.com/>.

Finally, here are some of my favorite research pieces/nuggets about the business case for trees:

- Access to trees is a social determinant of health – having 10 more trees on a city block is comparable to an annual increase in income of \$10,000 or being 7 years younger. <https://www.nature.com/articles/srep11610>
- A 1% increase in tree cover of a county's land is associated with an average annual Medicare expenditure savings of \$4.32 per person per year. <https://www.sciencedirect.com/science/article/pii/S161886671830534X>

Trees are a cost-effective public health intervention and a sound investment - a tree's value appreciates over time as it grows.

Fair on transformational vs transactional. That is an excellent point about water/trees are just one aspect of a carbon footprint and health effects a healthcare organization has on the community. Has it moved full leadership to embrace all aspects of scope 1, 2, and 3 emissions? Going fully carbon neutral? Has it (essentially) galvanized leadership and everyone to take those next steps?

The project as a whole, as well as pending projects, has propelled the leadership team and our associate population, to embrace our overall carbon footprint. Our hospital is one of 10 within Medstar Health and was opened in 1967. The overall building itself on the exterior is unchanged with the exception of new roofs. While a great deal of effort has occurred/is occurring to modernize the physical plant, through replacement and upgrades, we have much to do. This includes all new windows and the continuation of LED lighting internally and externally. MedStar Health can do more with solar and wind as well. As with most healthcare organizations, capital dollars are a struggle.

Potential projects on the horizon for MedStar Harbor hospital are a green roof, living shoreline, and solar panels with EV charging stations in the parking lots. Hospital leadership is absolutely galvanized about the projects and the contributions they make to the environment, health, and the community.