

# Matching Health Services Supply to Demand

## Healthy City



### Climate Issue: Healthcare Emissions

- Healthcare is responsible for nearly 5% of total global greenhouse gas (GHGs) emissions
- Over half of U.S. healthcare services target 5% of the population with severe chronic diseases. Many of these are preventable or reversible
- Addressing the root causes of poor health and providing appropriate care can decrease demand for healthcare
- Decreasing the amount and intensity of care required across health systems can reduce the sector's impact on climate change.

### Providing Appropriate Care

Appropriate care ensures individual well-being and limits environmental impacts. Inappropriate care, however, is common in health systems across income levels.

- Inappropriate care includes both underuse and overuse of healthcare services
- Underuse of necessary services leaves patients vulnerable to avoidable disease
- Overuse not only harms patients, but wastes resources, contributing to pollution and its health impacts
- Appropriate care can be achieved by avoiding unnecessary care and preventing chronic disease to build long-term health. This can optimize resource use, reducing GHG emissions and fostering sustainability.

### Avoiding Unnecessary Medical Care

- Strategic coordination of patient care can limit unnecessary services that worsen health system environmental impacts
- Improving access to primary care can prevent costly, resource-intensive treatments for advanced diseases
- Clinicians can help patients weigh benefits and risks for different care solutions based on their personal values. This can reduce overdiagnosis and overmedicalization
- The science shows that 20% of elective procedures would be declined if patients had accessible medical information.

### Preventing Disease via Integrative Healthcare

- Integrative healthcare, which combines medical care with lifestyle interventions, can prevent chronic disease. This further decreases demands on the health system.
- Considering behavioral determinants of health can help practitioners target holistic solutions. This includes connecting residents to local community services
- Education campaigns and increased access to nature can strengthen the health of residents throughout cities
- Promoting healthy lifestyle choices like plant-forward diets and physical activity can also bolster residents' long-term health
- Preventing chronic disease maximizes residents' quality of life. It also ensures efficient use of healthcare personnel and resources, reducing healthcare GHG emissions.

### WHAT CAN CLINICIANS DO?

**STAY** updated on best practices and different care solutions

**IDENTIFY** the environmental impacts of different procedures to make informed treatment decisions where choices exist

**AVOID** unnecessary tests and procedures to optimize resource use and patient care

**EMBRACE** integrative healthcare to maximize individual health and system sustainability.

### WHAT CAN YOUR HEALTH SYSTEM DO?

**STRENGTHEN** primary care to prevent and manage chronic disease

**IMPLEMENT** shared access to electronic health records to minimize duplication of tests and treatments

**DEVELOP** clinical guidelines to promote best practices

**INTEGRATE** environmental performance into continuous quality improvement processes.

To find out more information on this fact sheet, contact **Dr Jodi Sherman** at [jodi.sherman@yale.edu](mailto:jodi.sherman@yale.edu). Fact sheet based off Sherman JD, McGain F, Lem M, Mortimer F, Jonas WB, MacNeill AJ. Net zero healthcare: a call for clinician action. *BMJ*. 2021 Sep 20;374:n1323. doi: [10.1136/bmj.n1323](https://doi.org/10.1136/bmj.n1323). PMID: [34544732](https://pubmed.ncbi.nlm.nih.gov/34544732/); PMID: [PMC8450779](https://pubmed.ncbi.nlm.nih.gov/PMC8450779/).