Tree Prescription: Recent Research on Urban Forests & Human Health

Climate Action Team Public Health Workgroup
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Rx: Health Inequities

West Oakland

Piedmont
Rx: Two Research Projects

GreenRx

Tree$ ROI

URBAN DESIGN 4 HEALTH

Kaiser Permanente
Division of Research | Northern California
Multiple Measures

- Asthma
- Attention Deficit Disorder
- Cardiovascular disease
- General health
- Mental / Emotional health
- Overweight / Obesity
- Physical activity
- Social cohesion
- Type 2 diabetes
The Findings

More neighborhood tree canopy cover was significantly associated with:

• Better General Health Score
• Less Overweight / Obesity
• Higher Social Cohesion
**GreenRx 10% More Tree Cover**

What health differences do we see?

<table>
<thead>
<tr>
<th>Adult Health Measure</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight/obese</td>
<td>-19%</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>-19%</td>
</tr>
<tr>
<td>Current asthma</td>
<td>-10%</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>-7%</td>
</tr>
<tr>
<td>General Health</td>
<td>+3%</td>
</tr>
<tr>
<td>Social Cohesion</td>
<td>+1%</td>
</tr>
</tbody>
</table>

Source: J Ulmer et al, *Multiple health benefits of urban tree canopy, Health & Place*

Thinking outside the...

Dr. Backman connects CHIS to Canopy data

Ray Tretheway hires DrPH

TBD: Health Economics Analysis

Not just p-values: Predictive Modeling

Big picture: Multiple Health Measures

Hi Res Data: CHIS & LIDAR

Big picture: Advisory Committee
Tree$ ROI: The Next Steps

Larger Region

Map showing CA counties with health care cost data and areas with LiDAR data.
Tree$ ROI: The Next Steps

Actual Health Care Costs

My message center
Email your doctor's office with routine questions securely and conveniently. You can also contact Member Services and our Web manager.

My coverage and costs
Get the facts about your plan and benefits, download forms, pay medical bills, and more in my coverage and costs.

Appointment center
Schedule appointments online, quickly and conveniently. View or cancel upcoming appointments or view past visits.

Pharmacy center
You can manage your prescriptions here, or learn about specific medications in our drug encyclopedia.

My medical record
View test results, immunizations, health reminders, and more in My medical record. Use Act for a Family Member to manage your family's health.

New members: Get started
Welcome! Use this handy to-do list to access our online health tools. Then take a Total Health Assessment to start.

My Health Manager
Tree$ ROI: The Next Steps

Health Care vs $ Tree Care $
Rx: New Research Paths

• Do the math: health care $$$ savings

• +++ ↑↑↑ QOL, creativity, and productivity $$$

• Include Wealth as a control factor – not just Income?

• How do we reach the doctors & nurse practitioners?

• Cross-sector research: pooling $ and ↑↑ innovation

• Cap & Trade investment = RESEARCH Goldmine
Rx: ...Beyond the Box again
Thank you!
Questions?

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