Innovation 4 an Aging Population: Race, Tech-Equity, and Building Age Friendly Cities and Livable Communities w/ our Nation’s Most VP

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Areas of Expertise =
Community Driven Data
Big Data
Social and Structural Determinants of Health
Social and Spatial Epidemiology
We’ve been working in the area of Healthy Aging and Age-friendly cities for quite sometime.
The Social Determinants of Health

Definition: Argues that it is not just people's genes that determine their health or their bad choices it’s the conditions in which ppl are born, live, learn, work, play, pray, age, and die

Joia Crear-Perry, 2018
Lots of work has been done on the Social Determinants but far less work has been done on the Structural determinants that drive the social determinants
The Structural Determinants impact not only access to IRP for aging populations but also older populations' needs and unmet needs, and the effectiveness of related interventions.
Our Local Work Creating Age-Friendly Cities

Started when we lead the Racial and Social Equity Plan for the Downtown Oakland

And an important part of the equity work was thinking about how to create an age friendly communities in across the entire city
Key Questions

* How can tech solutions be used to build age-friendly cities with the most vulnerable populations?

* How do you create a plan for all aging services, that promotes equity among seniors? and creates new funding mechanisms for long term services and supports?

* How do you address social isolation with increasing aging population?

* How can you all work more effectively with stakeholders to build capacity, fill research gaps, and provide meaningful data to stimulate innovative local responses?

* How do you create a data dashboard to track different aspects? in terms of implementing the plan, creating livable communities, improving health and affordable health care, etc?

WHO 2020: Department of Aging and Life Course
The work focused on Eight Age-Friendly Domains for Livable Cities

Health & Wellness
Parks/Outside Spaces
Transportation
Social Participation
Employment
Civic Engagement
Volunteering
Housing
Community Information

COMMUNITY PRESENTATION & LISTENING SESSIONS

The demographics of Oakland are changing. Let's discuss how we can work together to make Oakland an Age-Friendly City — to make it a livable community for all ages. Your voice is important. Please join us!

Oakland Mayor’s Commission on Aging
What We Learned

$800 Hip’Air “smart” airbag belt for fall prevention

When it comes to Technology, lots of ppl have developed a bad habit of treating old folks like babies (ironic)

“Smart” companion connected to apple watch
Either we treat aging pop like babies or we don’t think about them at all…

We are leaving older adults out of the digital world

BBC
The generation that tech forgot

Get old, tune out: Is technology leaving the elderly in the dust?
We came here today to offer some tech-driven solutions that can help our State’s most VP build better:

1. Age-Friendly Cities/Communities (Rural etc.)
2. More Targeted Resources 4 Aging in Place
3. Diversify Power and Leadership
4. Transform popular media portrays
5. Change the Narrative
What we know
California is projected to age faster than the nation

The number of older ppl in California, those over 65, will double over the next 20 years 4.3M to 8M

THE FUTURE IS ... FLORIDA?
As more Californians reach retirement age, the Golden State will start to more closely resemble what Florida looks like now.

<table>
<thead>
<tr>
<th></th>
<th>Florida 2017</th>
<th>California 2030</th>
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<tbody>
<tr>
<td>Total population over 65</td>
<td>3.93 million</td>
<td>9.04 million</td>
</tr>
<tr>
<td>Percent of population over 65</td>
<td>19.3%</td>
<td>21%</td>
</tr>
<tr>
<td>Total population over 75</td>
<td>1.76 million</td>
<td>4.38 million</td>
</tr>
<tr>
<td>Percent of population over 75</td>
<td>8.7%</td>
<td>10%</td>
</tr>
<tr>
<td>Ratio of working-age population to seniors</td>
<td>3.1 to 1</td>
<td>2.9 to 1</td>
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Source: 2017 American Community Survey, Public Policy Institute of California

BAY AREA NEWS GROUP

Aging Report, 2019
80% of growing elder pop = forgotten middle

- 10% will be at the top income bracket who can afford their own care
- 10% for the bottom which qualify for MediCal
- but 80% of older individuals in the middle will not have any MediCal services
We know that this 80% of low-income older populations will need access to great community resources and social services.

Pew, 2018
We know that this 80% of low-income older adults currently face barriers in accessing IRP and these barriers vary significantly by Race, Class, Gender, Disability, LGBQT etc.

Pew, 2018
Why this Matters to you?
Two Reasons:

1. Decision makers currently lack crucial information on the health status and functioning of older people, their needs and unmet needs, and the effectiveness of related interventions.

2. And where data does exist, it is rarely collected in a form that allows comparisons or even comparisons over time in the same setting.
What we are facing:
Data Invisibility Gap

Secondary Data doesn’t tell the whole story

This lack of information is a major barrier to the development and evaluation of appropriate policy and programs on population aging.

Addressing these gaps is therefore another priority area of work.
In Other Words

What gets measured, gets done!

So we need to be more mindful and innovative about what we are measuring, for whom, and how we are measuring it.
We need to think about new ways to move beyond static data towards integrating CDD, RTD, LBD, DV with BD and Predictive analytics so that we DD and DM from the bottom-up
To Achieve this Goal:

What Role can Technology Play in Helping to Build a More Equitable and Inclusive Master Plan for Aging?
AARP found that 90% of Americans age 50+ regularly use smartphones to stay connected.

Pew, 2017; AARP, 2018
Check emails, get directions, browse, shop, get news, comedy, unwind etc… with more than half using their smartphones to play games and make purchases...

Tech is both fundamental for aging populations now… and more of what it will be in the future!

AARP, 2018
Challenge

How do we integrate LE and CV into existing planning processes to build age-friendly communities with populations who have been LOCKED OUT

Sustainability conversations
Shareable cities convo
Smart Cities Conversations
Socially Just Cities
We have not correctly identified the problem
AARP, CDPH, CDC, Census, HUD, EPA, and other cert/rating systems

HARDWARE
We’ve done a brilliant job of setting TOP DOWN ambitious goals for the design of systems

SOFTWARE
THE POWER OF PLACE what people care about and know to be happening on the ground

Challenge: 21st Century Health Data Revolution
How do you bridge the gap between official knowledge and local knowledge in ways that make data more valid, reliable, authentic and meaningful?
Missing Link = TECH-EQUITY

People Powered Placemaking

Real-time, two-way communication with communities with senior pop so they can participate in design solutions that meet their local needs

Bottom up innovation
CD from the ground-up
Discover the Power of Local Knowledge

Streetwyze is a mobile, mapping and SMS platform that collects real-time information about how people are experiencing cities and turns them into actionable analytics.

Addresses 2 Questions:

1. How can we have more inclusive community engagement processes
2. How can we use data to make better and more community-informed decisions? (Democratizing data, Decision making processes)
360 Degree Holistic View

- How walkable is my neighborhood?
- What issues do people care about in my community?
- How well is it served by public transit?
- Who provides child care I can trust?
- How safe is this street?
- Where do I go if there’s an emergency?
- Where can I buy affordable healthy food?
- A good doctor?
How does it work?
BEFORE STREETWYZE “GROUNDTRUTHING”
Built on work completed with PUEBLO, YU, OUSD, Local Ground, and other community partners

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AFTER STREETWYZE “GROUNDTRUTHING”

sample source: http://gis.hud.opendata.arcgis.com/datasets/595d3ad1a44d7aa5596d410c0033b_0

MacArthur MiniMart
Javonte D. says
This is not a grocery store….there are no fresh foods here…lots of liquor on the shelves and junk. They only have whole milk…no skim milk… 21 others give this post:
Updated: Feb, 14, 2016
AFTER STREETWYZE "GROUNDTRUTHING"
Streetwyze

Yelp for the People
Fitbit for neighborhoods
Waze for communities

- RTD
- CDD integrated with Big Data
- Predictive Analytics
- Early Warning System and Upstream solutions for the SDH for Aging Populations

**Who Are We?**

- **Race**
  - Boston: 23% White, 24% Black, 35% Latino, 44% Other

- **Poverty**
  - DVC: 23%, Black: 36%, Latino: 34%

**State of Health**

- Obesity: 27%
- Diabetes: 21%
- Heart Disease: 6%
- Hospitalizations: 15%

**Health disparities**

- **Stoke**
  - White, African American, American Indian/Alaskan Native

- **Cervical cancer**
  - White, Hispanic, Vermontese American

- **Prostate cancer**
  - White, African American

- **Adult-onset diabetes**
  - White, African American, Hispanic, American Indian/Alaskan Native

- **Infant mortality**
  - White, African American, Puerto Rican

- **HIV/AIDS (new infections)**
  - White, African American, Hispanic

Sources:
- [http://www.ruralhealthinfo.org/quickfacts/](http://www.ruralhealthinfo.org/quickfacts/)
- [http://www.cdc.gov/chronicdisease/](http://www.cdc.gov/chronicdisease/)
Our Success

A Few Examples of work across the SDoH
Back in the day...

Obama at SXSW: Tech Isn’t Just About the Next Cool Thing; It’s About Creating Opportunity

THE WHITE HOUSE
FRONTIERS CONFERENCE

Kalima Rose @kalimarose - 19h
@streetwyze presents county-populated data w/ public data for gmntruth #opendata @policylink

Streetwyze @streetwyze - 24h
@DJ44 and @AntwAkom speak about how local knowledge is the way of the future @WhiteHouse opendata

The White House - The Opportunity Project

JOIN US
It's building a new data commons that integrates the power of local knowledge + official knowledge
But makes of communities transparent, open, continent, smart, democratic, accountable, explainable for all.

THE WHITE HOUSE

Streetwyze,
Thank you for everything you are doing to make cities work for the 100% of our people. It’s people like you with an extraordinary mission that are going to make this work for our children and our children’s children.

USA
DJ Patil, U.S. Chief Data Scientist
More Recently...

"People closest to the problem are often the people closest to the solution." — @AntwiAkom on importance of designing Smart City initiatives with, for and by residents #smartcities18

12 Data Tools to Help Americans Climb the Economic Ladder
The White House’s "Opportunity Project" pushes the pursuit of social mobility "from information to action."

TANVI MISRA | @Tanvim | Mar 8, 2016 | 2 Comments

Urban resilience? There's an app for that
Barbara Grady
Thursday, March 31, 2016 - 2:00am
Google + Streetwyze + Aclima = Collaboration on Air Quality

The Community Becomes the Classroom
Aclima recently collaborated with Streetwyze and SF BUILD scholars to combine state-of-the-art sensing with on-the-ground experience.

Mapping Hot Spots and Cool Spots
Mapping the Geography of Homelessness in Oakland
A New Vision for Measuring Opportunity
Providing a new resource & framework for measuring opportunity

The Communities of Opportunity Index

Robust Housing Metrics & Real Time Data
Actionable data about the families experiencing housing insecurity and the quality of the housing markets in which they live

Evidence-Based Assessment Framework
An index derived from the evidence on the factors that work to support positive long-term outcomes for low- and moderate-income families

Open Source Platform for Residents & Other Users
A tool that captures the voices and perspectives of residents and helps “ground-truth” the metrics in the index

Community Engagement & Partnership Toolkit
Downloadable resources for Enterprise staff and our partners to interpret the data & engage community stakeholders to take action

Courtesy: Tiffany Manuel, KIS
SF Planning & Tenderloin: Anti-gentrification Mapping

GOALS
1. Preservation of affordable units
2. Production of affordable housing
3. Economic development solutions focus on keeping jobs, healthy food, businesses, artists, and nonprofits in the neighborhood.
4. Community planning
5. Homelessness
Conclusion
Key Gaps & Barriers

We have discovered across our work:

A lack of knowledge about # of resources for elder pops in communities
A lack of experiential data on quality of resources for elder populations
A lack of culturally and community responsive/elder appropriate services
A lack of Data around DEI, Dignity of Care/Respect, Race & Place with aging populations
A lack of Community-Driven Data that can be integrated w Big Data and predictive analytics beneath regulatory data sets on healthy aging and well-being

Pew, 2018
As a Result: Key Recommendations
1. Build Community Power

Communities that bear the brunt of health inequities must be at the forefront when creating data tools to advance health equity. Community knowledge is paramount to accurately understanding problems and crafting solutions that work. Intentional community partnerships and thoughtful design processes strengthen community capacity and can result in stronger advocacy and better data tools.

2. Address the Root Causes of Inequity

Online data tools for aging populations should acknowledge the root causes of inequities, which are not primarily individual behaviors but rather stem from structural inequities and systematic differences in the social, economic, and environmental resources and assets that affect health and well-being.

3. Lead With Your Equity Goal, Not the Data

The broader equity outcome—e.g., preventing displacement of older populations, building diverse healthy communities, or ending police violence—should drive the design of the tool rather than the data or technology. Be clear about the tool’s purpose, then provide data, maps, and analysis to help users achieve that goal.

4. Make Data Actionable & Culturally and Community Responsive

Ensure that your tool inspires and supports community actions toward policy and systems change. Offer viable solutions to improve material conditions that incorporate the experiences of marginalized people, including those for whom data may not be readily available.
Recommendations

5. Develop an Interactive Database & Disaggregate Data
Understanding how conditions and opportunities vary for different groups, including their histories and the policies affecting them, is critical to developing and advancing tailored equity solutions. Disaggregate data by race/ethnicity, gender, nativity, ancestry, income, and other factors to the extent possible.

6. Link CDD w/ BD and new Pop Health Data
Surveys and statistics are important staples of equity data tools, but different types of visualizations and qualitative data can help convey information that builds political will, supports community action, and provides a more comprehensive view of an equity issue.

7. Emphasize Assets (ABCD) and Opportunities
While uncovering disparities can be valuable for compelling action, it can have the unintentional effect of perpetuating inaccurate and negative stereotypes about communities. Data tools should also focus on community assets and strengths that can be b

8. Promote Research that addresses Current and Future needs of Older Populations
Make your tools as user friendly as possible by providing clear explanations of what the data shows, why it matters, and what users can do about it. Provide definitions of indicators and data sources.

9. Democratize Data & Create a Bottom-up Knowledge Network for Healthy Aging
Open access to public data is critical for fair representation and transparency, and to allow advocates access to the data they need. Ensure that the data and metadata are affordable and available to impacted communities to ensure long-term accountability.

10. Honor Indigenous Data Sovereignty
Sovereign tribal nations have the right to govern the collection, ownership, and application of data about indigenous nations and people. Data on or about indigenous people should be subject to the laws and governance of indigenous nations.
THANK YOU
GRACIAS
END