STACK CARE

AI driven spatial awareness, mapping, data science, and notifications in multiple environments

The UK Senior Demographic

- Our 2015 population had…"*more than three million people aged over 80 years old. By 2030, this figure is projected to almost double, and by 2050 reach eight million*" [1]

- "*25 years from now, one in every four in Britain will be 65+. Ready or not, the "silver tsunami" is coming, and it is coming fast*" [2]

- "*Interventions…have significant potential to affect health in old age*" [3]

- "*Technology is likely to play an increasingly important role in providing health and care support… This may include the mainstreaming of technology-enabled care services, for example home health monitoring tools*" [3]

[1]: https://www.england.nhs.uk/blog/catherine-thompson/
[2]: https://servicedapartmentnews.com/features/get-ready-for-the-silver-tsunami/
[3]: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/816458/future-of-an-ageing-population.pdf

Quality Care At Home

- *"UK found to be most established market for telemedicine among five EU countries"* [4]

- New technologies are making **Quality Care At Home** possible for more people:

  ➡ **Remote patient monitoring**
  ➡ **Primary-care visits via Telehealth**
  ➡ **Passive monitoring technology**

- Enables skilled nursing-facility services at home

- Quicker release from hospital

[4]: https://www.pharmaceutical-technology.com/dashboards/surveys-dashboards/uk-found-to-be-most-established-market-for-telemedicine-among-five-eu-countries/

What if…

… you can see that Mrs. Jones may be suffering from a UTI before she does…

… you can prevent Mr. Lee from laying on the floor for hours after a fall…

… you can see that the temperature is too high for Mrs. Marin's safety…

… you can see that Mr. Amar isn't sleeping at night…

… you can detect the early signs of cognitive decline for Mrs. Roberts…

… you can know if Mrs. Roy exits her apartment during the night…

A Few Numbers*

- "Lie time," or the duration of time spent alone helpless after a fall, is a direct predictor of the likelihood of recovery after falls

- For those who received help within <u>one hour,</u> rate for mortality or injury is considerably decreased (to just 12%)

- 82% of falls occur at night or early in the morning

- Poor sleep leads to 30 to 40 % increased risk of subsequent falls

- Frequent urination, increased thirst and hunger are number one symptoms of diabetes; and a typical indicator for UTIs

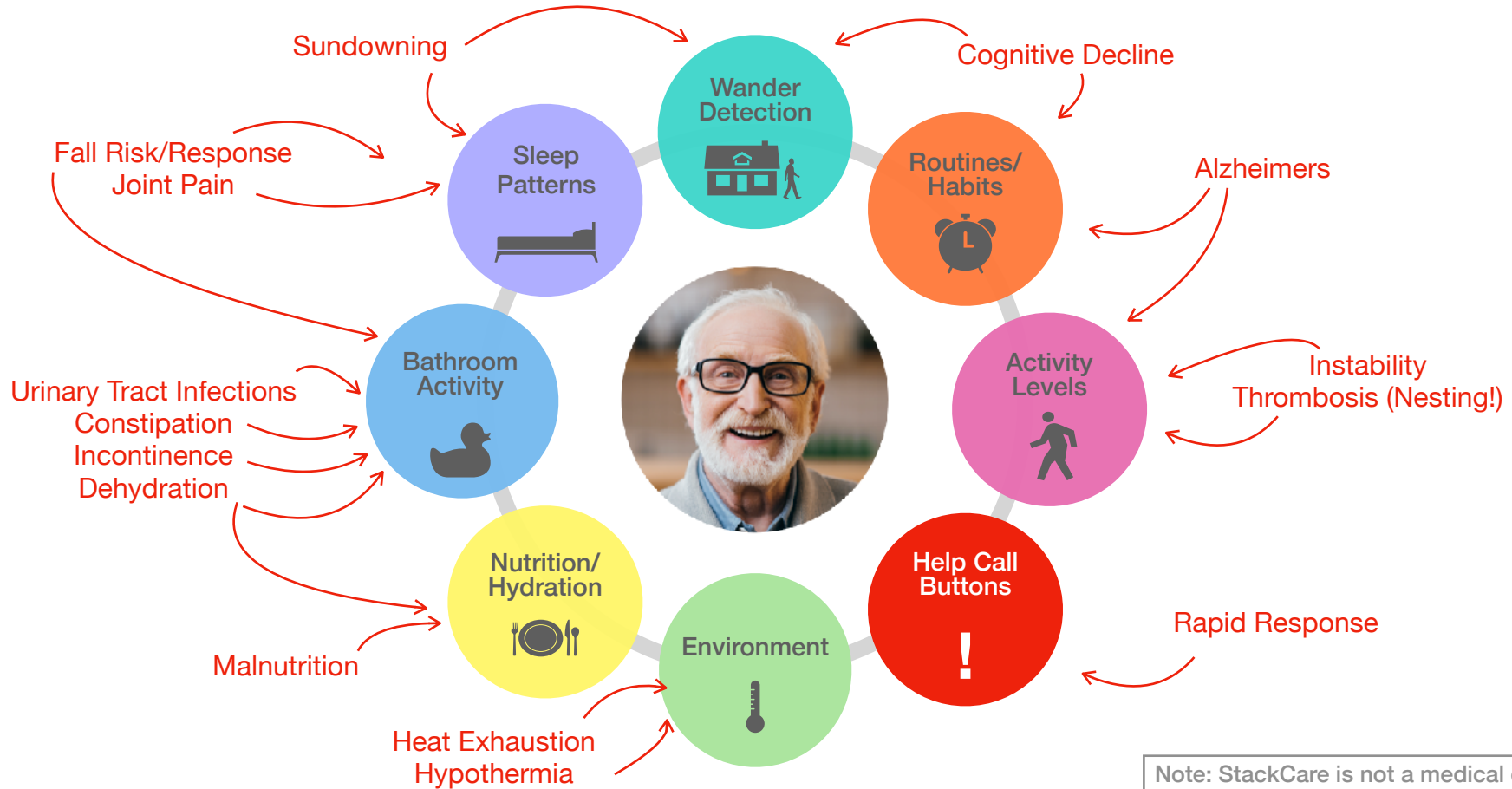- Only 14% of seniors wear their PERS pendant daily, and even fewer at night

So what is StackCare?

STACK CARE

- Passive monitoring system
- Small infrared motion sensors and data science analyze typical activity patterns
- Identifies unusual activity or behavior 24/7
- Alerts caregivers and family of issues
- Notifications sent via app and web portal
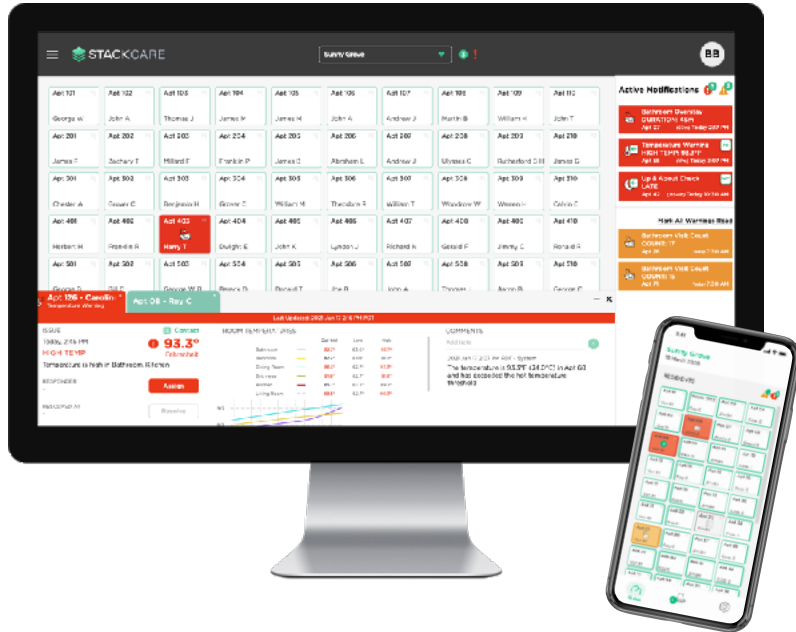- No cameras, no microphones, no wearables

With StackCare, residents are
never completely alone!

StackCare Considers Multiple Issues

Sundowning

Cognitive Decline

Wander Detection

Fall Risk/Response
Joint Pain

Sleep Patterns

Routines/Habits

Alzheimers

Urinary Tract Infections
Constipation
Incontinence
Dehydration

Bathroom Activity

Activity Levels

Instability
Thrombosis (Nesting!)

Malnutrition

Nutrition/Hydration

Environment

Help Call Buttons

Rapid Response

Heat Exhaustion
Hypothermia
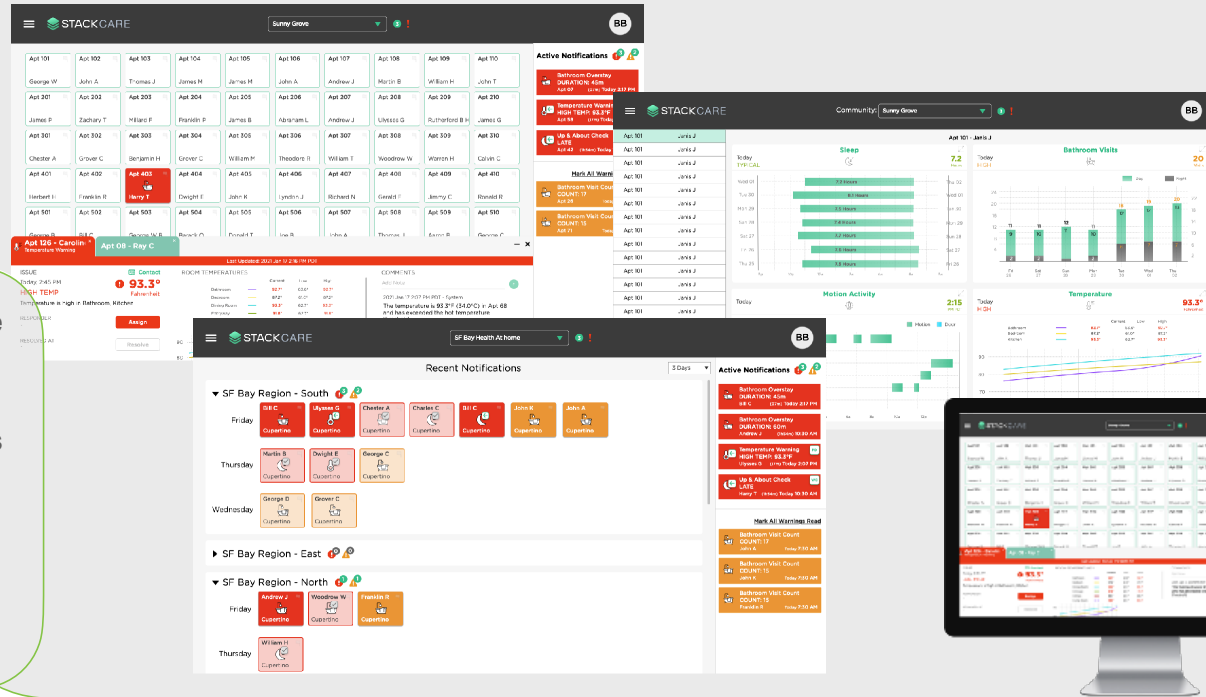
Note: StackCare is not a medical device

Notifications pushed to mobile app and desktop portal

Dashboards and Analytics For Professional Care

- Web App + Mobile
- Customizable
- Assignable events
- Recorded history
- Analytics
- Etc,

Workload

1. Use StackCare **reactively**: responding to notifications/alerts

   • Rapid response to issues that would otherwise be invisible

   • Records events and resolutions

2. Use StackCare **proactively**: selectively take advantage of all the data and actionable insights StackCare provides

   • Enhance senior's care plan

   • Intervene early to help seniors stay healthier for longer

   • Additional information for medical providers

STACK CARE

Thank You!