Eskaton Partners with Stack Care

PURPOSE: Create adaptive living environments throughout Eskaton by replacing current lighting with a smart sensing, responsive lighting platform.

OJECTIVES:

✓ Improve overall resident well being: sleep quality, safety & mood

✓ Create seamless staff and resident usability

✓ Improve apartment adaptability for both staff and residents

Pilot Study at Eskaton Monroe Lodge:

2016/2017 Pilot Test:

20 Total apartments with STACK lighting by Fall 2017. 10 additional apts were selected in 2017.

$ Funding provided by SMUD. 3rd party primarily interested in the cost-savings of LED lighting

Location of pilot in Eskaton's largest independent living community

2016 Initial Pilot Findings:

✓ 22% Reduction in time needed to fall asleep

✓ 27% Reduction in daytime drowsiness

✓ 45% Improvement in energy levels

✓ 72% Improvement in daytime activity levels

✓ 91% reported significant improvements in lighting

✓ 100% reported high satisfaction with lighting

✓ 100% reported feeling safe in their home

✓ 18% reported increased feelings of independence

✓ *Follow-up pilot at EML to launch early fall 2017. Will use same measurement tools at pre and post test*

Lessons Learned:

✓ Account for pilot delays due to product availability and infrastructure compatibility
✓ Better understanding of infrastructure needs to support Stack lighting

✓ Initial findings support the holistic benefits of circadian lighting
✓ Next steps:
- Need to test STACK Care app
- Apply to different levels of care

Follow-up Studies:

2017 Pilot Test at Eskaton Village Roseville:

8 — Total assisted living apartments installing Stack in Fall 2017

$ — Funding provided by Eskaton. Cost to be determined for pilot.

🏠 — Location of pilot in assisted living community

Study Explorations:

✔ Test STACK care app
- Usability of dashboard
- Accuracy of data
- Integration into current work flow

✔ Better understand how residents living in assisted living adapt to SMART lighting

✔ Learn the benefits of circadian rhythm
- Sleep quality using sleep sensors
- Fall reduction using RL data currently tracking falls within Eskaton
- Energy levels using qualitative data

✔ Compare energy consumption with other non-Stack lighting apartments

Resident Testimonials:

"The lights made a huge difference, there was a lot more light in my apartment. Now when I wake up in the morning, you are so happy to have the bright light. At night, the lights gets dimmer, making you sleepy, a subtle reminder to go to bed."

-Hazel, Eskaton Monroe Lodge Resident