1

SPEAKERS

Dodd

Dodd Kattman, AIA, LEED AP
Principal
MKM architecture + design

Overseeing MKM's senior living and long-term care work, Dodd offers more than 30 years of senior living experience, dedicating his time to design, research, and publish topics that elevate the expectations of supportive environments for older adults. Dodd has given numerous conference presentations on long-term care and advocates for elderly populations, encouraging care providers and government agencies to adopt strategies that encourage seniors to live in connected, intergenerational communities.

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LEARNING OBJECTIVES
1
DESCRIBE RESEARCH CONNECTING HAPPINESS AND THE BUILT ENVIRONMENT TO DEFINE HOW WE CAN SUPPORT EMOTIONAL WELL-BEING FOR PATIENTS.
2
PRESENT RESEARCH ASSESSING THE IMPACT THE BUILT ENVIRONMENT HAS ON INFLUENCING RESIDENT SATISFACTION IN CARE ENVIRONMENTS.
3
OUTLINE COMPONENTS THAT HAVE TRADITIONALLY DEFINED RESIDENT SATISFACTION.
4
DISCUSS TOGETHER WHAT WE CAN DO TO CRAFT AND ENHANCE THE RESIDENT EXPERIENCE.
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INTRODUCTION
As the resident experience continues to serve as a valuable metric, there is a benefit for operators to better understand how the memories of these events are developed.
As market competition and revenue growth increasingly rely on the success of the resident experience, the design and operation of care facilities will benefit from a more strategic approach to understanding how the built environment shapes the patient's memory of unique events.
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FACILITATING HAPPINESS
The success of a care facility is impacted by how patients remember their experience within a physical space – an instinct that researchers see throughout the natural world.
"I believe that the community - in the fullest sense: a place and all its creatures - is the smallest unit of health and that to speak of the health of an isolated individual is a contradiction in terms."
— Wendell Berry
Health is Membership
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FACILITATING HAPPINESS
PATIENT SATISFACTION is a measure of the extent to which a patient is content with the experience they received from their healthcare episode.
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FACILITATING HAPPINESS
Happiness a complicated. We often struggle to explain what makes us happy because we struggle to separate our experiences and our memories.
"I don't believe there is an inspiring answer to the question 'What is the purpose of life? Yet by drawing on ancient wisdom and modern science, we can find compelling answers to the questions of purpose within life. Happiness is not something you can find, acquire or achieve directly. You must get the conditions right, and then wait."
— Johnathan Haidt, The Happiness Hypothesis: Finding Modern Truth in Ancient Wisdom (2006).
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FACILITATING HAPPINESS
Happiness is a complicated thing and is perceived in two very distinct ways - through **experience** (happiness while in the act of doing) and **memory** (happiness through the act of remembering).
OUR MEMORY
SOURCE: Daniel Kahneman, Thinking, Fast and Slow (New York, Farrar, Strauss, and Giroux, 2011), p377-390.
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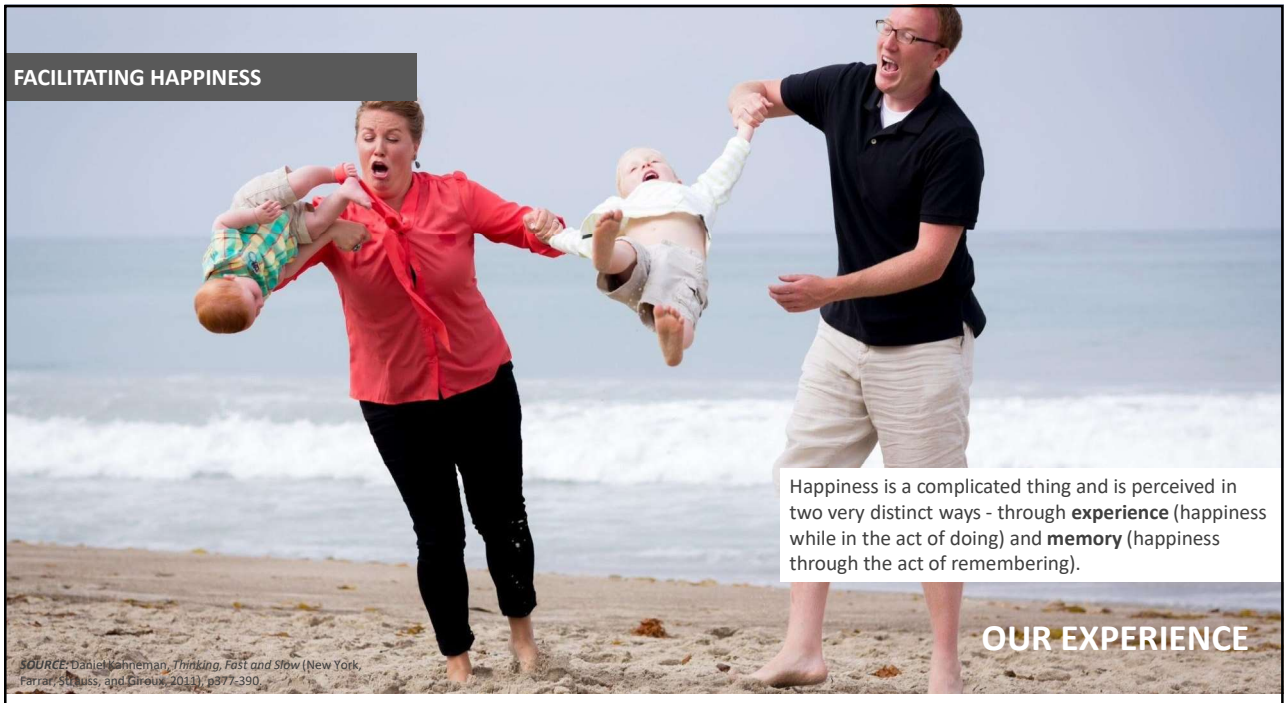
FACILITATING HAPPINESS



Happiness is a complicated thing and is perceived in two very distinct ways - through **experience** (happiness while in the act of doing) and **memory** (happiness through the act of remembering).

OUR EXPERIENCE

SOURCE: Daniel Kahneman, *Thinking, Fast and Slow* (New York, Farrar, Straus, and Giroux, 2011), p377-390

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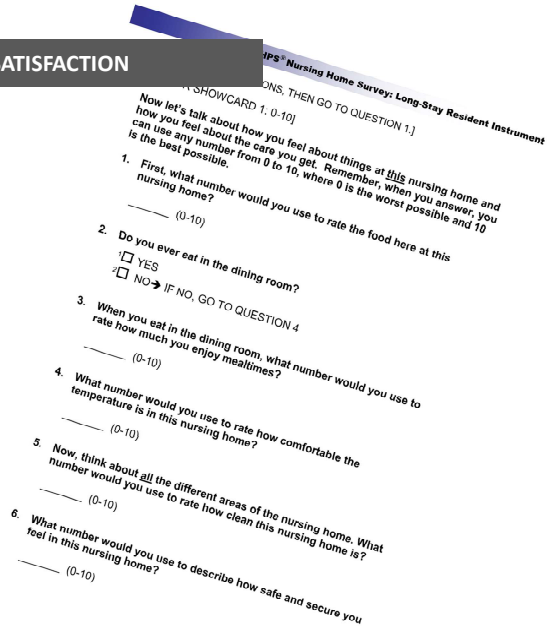
MEASURING SATISFACTION



Nursing Home Survey: Long-Stay Resident Instrument

...SHOWCARD 1, 0-10]

Now let's talk about how you feel about things at this nursing home and how you feel about the care you get. Remember, when you answer, you can use any number from 0 to 10, where 0 is the worst possible and 10 is the best possible.

1. First, what number would you use to rate the food here at this nursing home?
   ____ (0-10)
2. Do you ever eat in the dining room?
   1☐ YES
   2☐ NO → IF NO, GO TO QUESTION 4
3. When you eat in the dining room, what number would you use to rate how much you enjoy mealtimes?
   ____ (0-10)
4. What number would you use to rate how comfortable the temperature is in this nursing home?
   ____ (0-10)
5. Now, think about all the different areas of the nursing home. What number would you use to rate how clean this nursing home is?
   ____ (0-10)
6. What number would you use to describe how safe and secure you feel in this nursing home?
   ____ (0-10)

CAHPS (nursing home long-stay resident survey) has created a foundation for how many of us understand the concept of the patient experience.

This experience has been defined as the sum of all interactions, shaped by an organization's culture, that influence patient perceptions across the continuum of care over many categories:

1. Communication & respect.
2. Cleanliness and quietness of the nursing home environment
3. Responsiveness of staff
4. Comfort, temperature & privacy
5. Food quality and dining experience
6. Safety & security
7. Overall rating of the experience

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HCAHPS is the first national, standardized, publicly reported information that allows consumers to make comparisons across hospitals.

Public reporting of these scores aims to inform consumer decisions, allow hospitals and providers to identify and focus on areas that require improvement, ensure public accountability, and close information gaps that our available technical process measures do not have the scope or coverage to fill. HCAHPS are now widely used not just by consumers, but by health plans, insurance companies, and employers, to evaluate physicians and to determine incentive compensation.

— Giordano LA, Elliott MN, Goldstein E, et al. Development, implementation, and public reporting of the HCAHPS survey. *Med Care Res Rev*. 2010;67(1):27-37.

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Eligible patients are contacted between 48 hours and 6 weeks post-discharge.

Hospitals may administer the survey themselves or utilize an approved survey vendor. The survey can be administered via several different methods, and the choice is up to each individual hospital: mail only, telephone only, mail with telephone follow-up, or interactive voice-response phone calls. Eligible patients are contacted between 48 hours and 6 weeks post-discharge, and they have 6 weeks following initial contact to complete the survey.

— Giordano LA, Elliott MN, Goldstein E, et al. Development, implementation, and public reporting of the HCAHPS survey. *Med Care Res Rev*. 2010;67(1):27-37.

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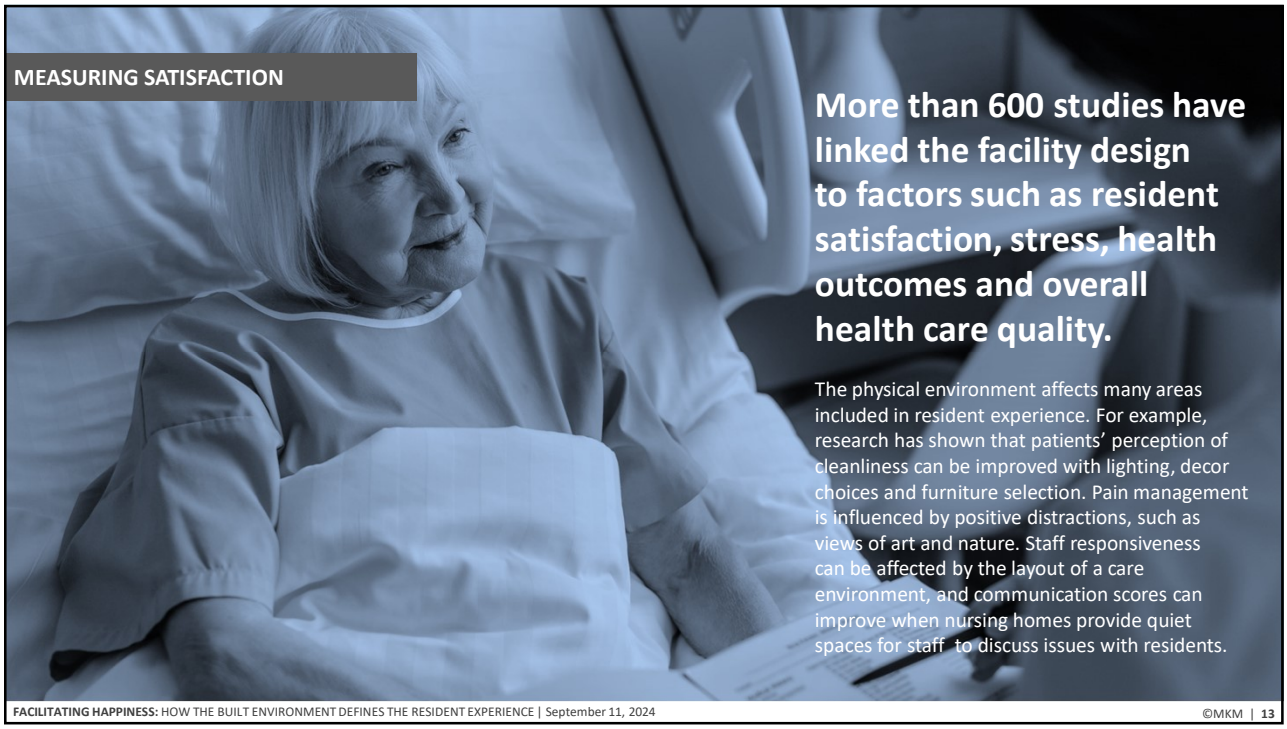
MEASURING SATISFACTION
More than 600 studies have linked the facility design to factors such as resident satisfaction, stress, health outcomes and overall health care quality.
The physical environment affects many areas included in resident experience. For example, research has shown that patients' perception of cleanliness can be improved with lighting, decor choices and furniture selection. Pain management is influenced by positive distractions, such as views of art and nature. Staff responsiveness can be affected by the layout of a care environment, and communication scores can improve when nursing homes provide quiet spaces for staff to discuss issues with residents.
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MEMORY VS. EXPERIENCE
When considering resident satisfaction, we need to appreciate that feedback is largely sourced from the remembering self.
EXPERIENCING SELF = RESIDENT
REMEMBERING SELF = SURVEY RESPONDENT
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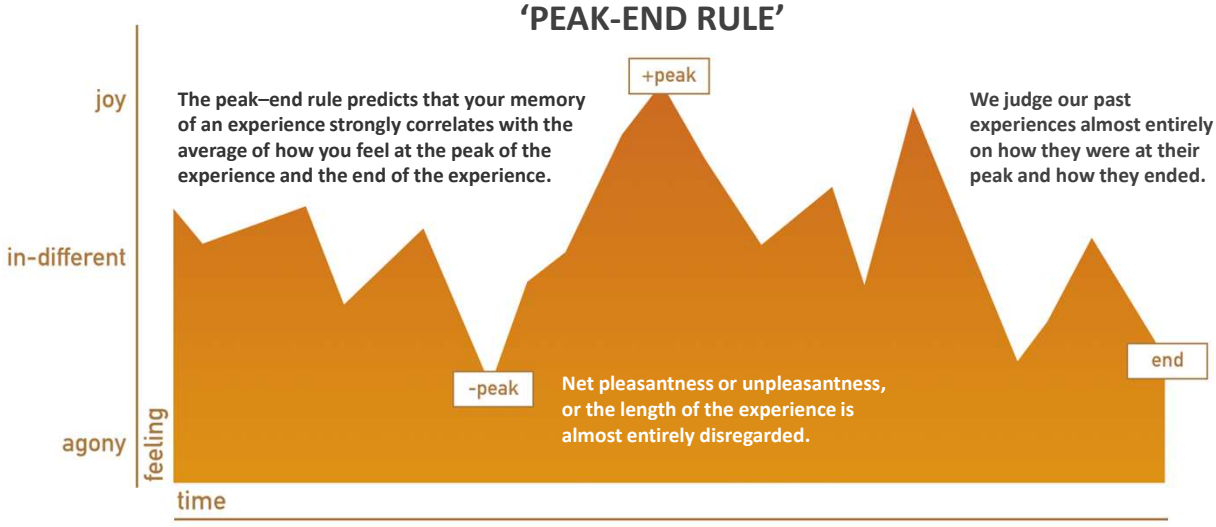
MEMORY VS. EXPERIENCE

‘PEAK-END RULE’



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MEMORY VS. EXPERIENCE

Why does the peak–end rule matter (to consumers) and how should it shape our understanding of facility design?

There are three reasons the peak–end rule is important to understand.

1. It reveals a systematic way you misremember.
2. It acknowledges that you’re under the influence all the time of people who craft experiences for you. We want to understand what others know about the peak–end rule so we know when we’re being influenced by it.
3. It exposes the gulf between our experiencing self and our remembering self, and it raises the question: who’s in charge?

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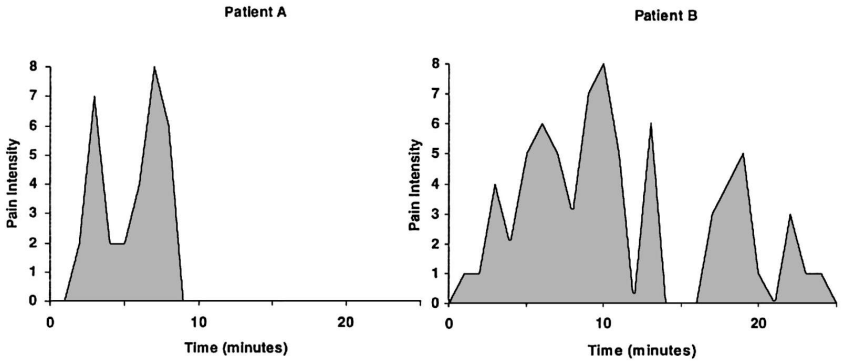
MEMORY VS. EXPERIENCE

TWO PATIENTS UNDERGO MEDICAL PROCEDURE



When doctors extended the colonoscopy for a few minutes but made those extra minutes just a little less painful, the patients remembered the entire colonoscopy as being less painful, even though the total pain they experienced was greater – leaving us to consider how the relevant nature of our experiential memory impacts our perception of quality care.

SOURCE: *A Perspective on Judgment and Choice: Mapping Bounded Rationality* by Daniel Kahneman (2003).

Getting a colonoscopy

The pain reports revealed three findings:

1. Psychologists could predict how much pain people remembered by averaging the peak pain and end pain while disregarding all other pain patients experienced.
2. Psychologists found no correlation between average pain, total pain, or even the duration of the experience. How long the procedure lasted didn't matter.
3. Because the duration of the experience doesn't matter, long colonoscopies could be remembered as less painful than short colonoscopies.

	Experience	Memory
Patient A	Less Pain	More Pain
Patient B	More Pain	Less Pain

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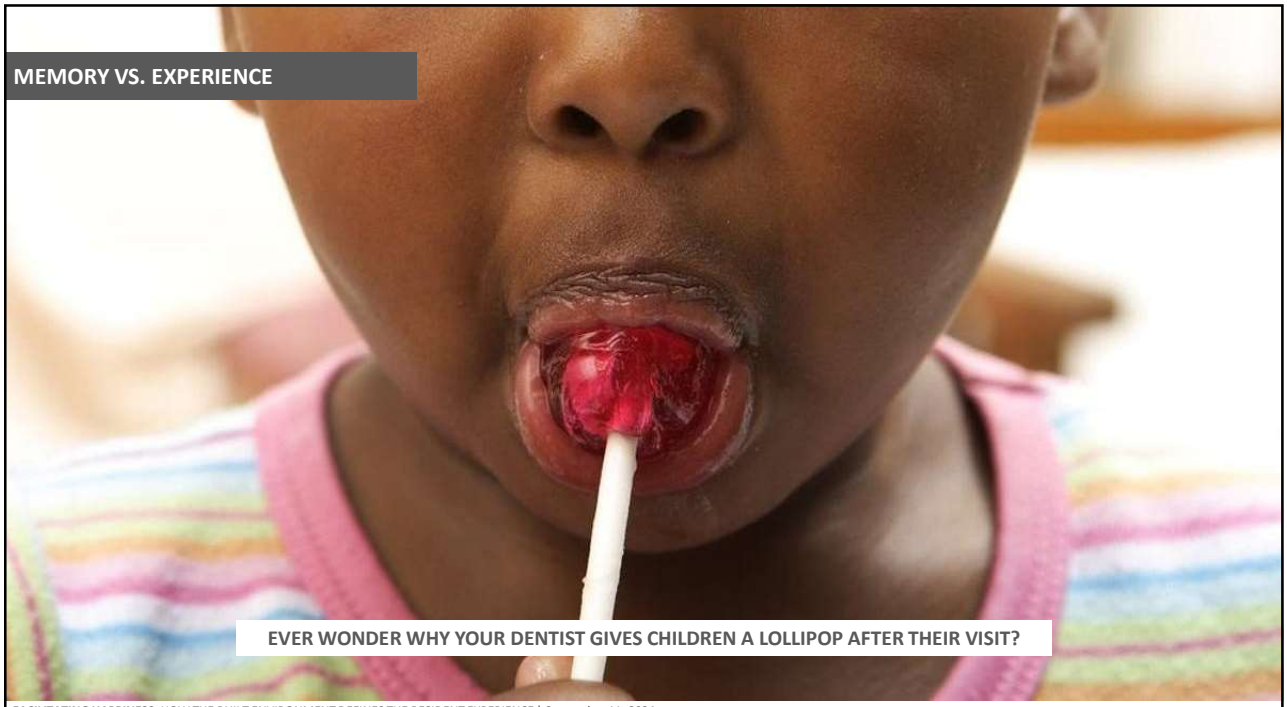
MEMORY VS. EXPERIENCE



EVER WONDER WHY YOUR DENTIST GIVES CHILDREN A LOLLIPOP AFTER THEIR VISIT?

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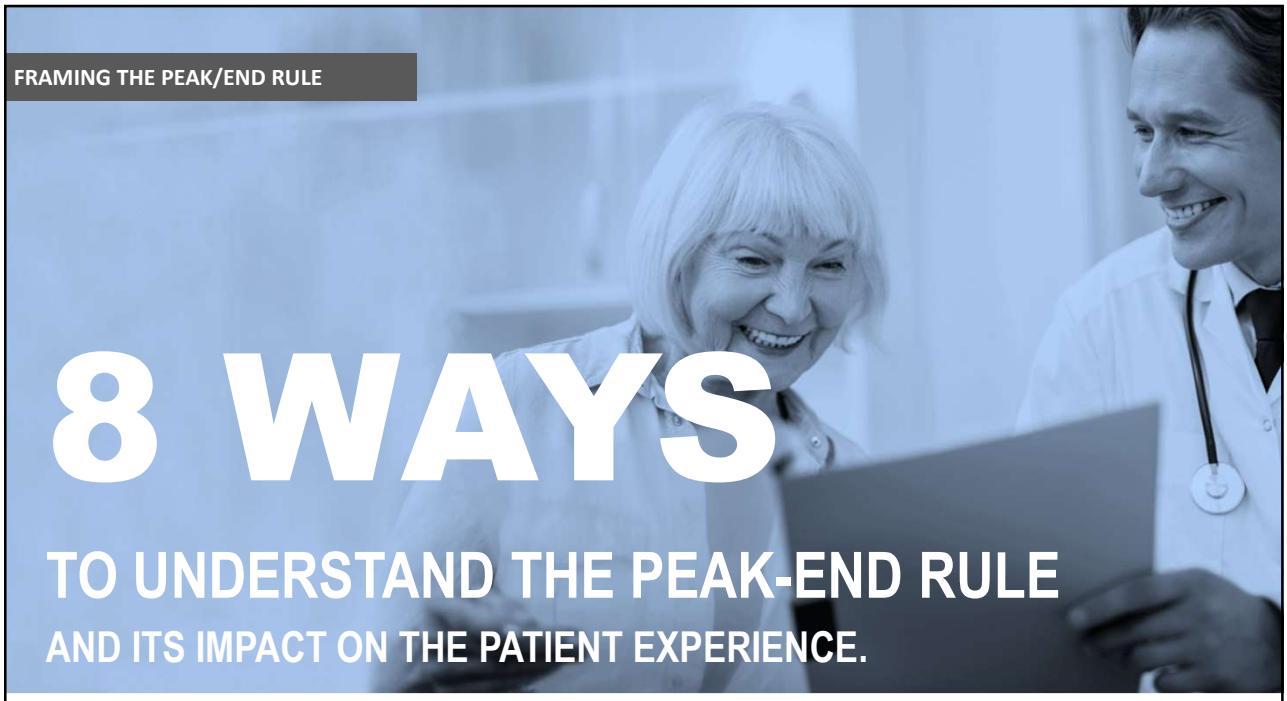
FRAMING THE PEAK/END RULE



8 WAYS

TO UNDERSTAND THE PEAK-END RULE

AND ITS IMPACT ON THE PATIENT EXPERIENCE.

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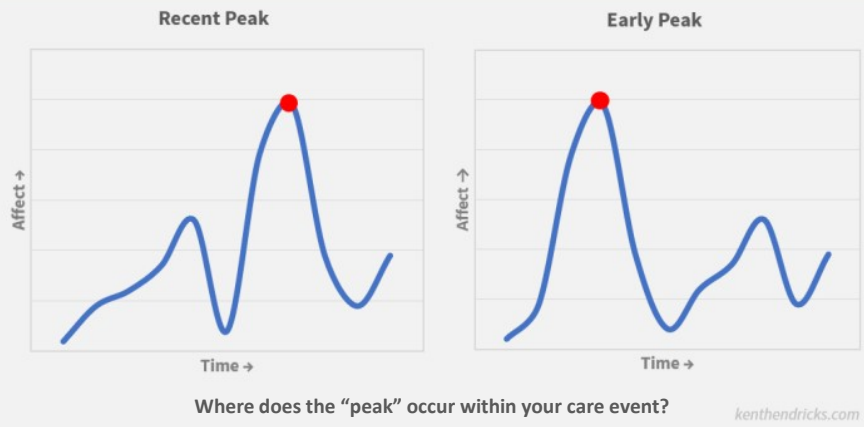
FRAMING THE PEAK/END RULE

1. The recency of the peak

A recent peak causes the peak to be a greater factor in your memory than an early peak.



1. THE RECENCY OF THE PEAK

Does the recency of the peak affect how much the peak influences your memory of an experience? Yes—but only a little. In a study conducted University of California, Berkeley, participants listened to a series of annoying sounds at 60 to 80 decibels. They indicated in real–time how unpleasant the sounds were on a scale of -10 (very unpleasant) to 0 (neutral) to 10 (pleasant). Then they rated how unpleasant the overall experience was. When comparing the real–time rankings to the overall rankings, they found that the recency of the peak mattered, but only a little. All other things being equal, a more recent peak has more impact on memory than an early peak, but only a little.

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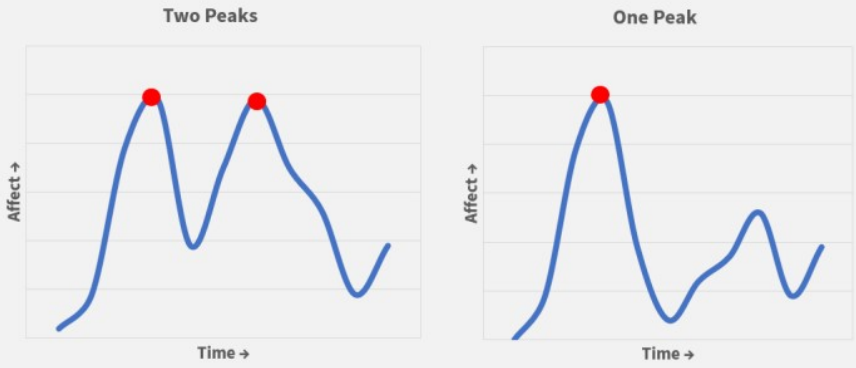
FRAMING THE PEAK/END RULE

2. The number of peaks

Adding a second, equal peak doesn't affect your memory.



Are you competing in providing multiple "peaks" with little ROI? kenthendricks.com

2. THE NUMBER OF THE PEAKS

What if there are two equal peaks? Does the peak–end effect get stronger or weaker? Researchers had some students hear the sound at its loudest only once. But for other students, they had them hear it twice, producing two equally negative experiences. Once again, when comparing the real–time rankings and the overall rankings, they found that a second peak didn't change the overall memory of the experience. All other things being equal, adding a second, equal peak doesn't change your memory.

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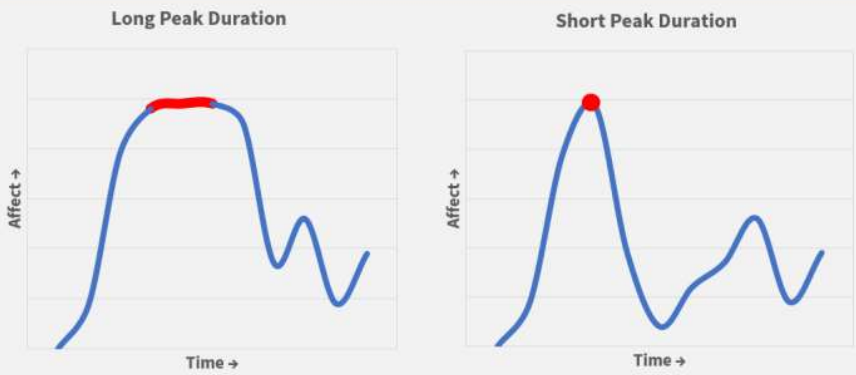
FRAMING THE PEAK/END RULE

3. The duration of the peak

A long peak causes the peak to be a greater factor in your memory than a short peak.



How long does the "peak" last? kenthendricks.com

3. THE DURATION OF THE PEAKS

Do peaks that last a long time have more effect than peaks that are short or instantaneous? Researchers found that when the most annoying sound lasted longer, it produced a slightly more negative memory of the entire experience.

Recall that people remember a short colonoscopy and a long colonoscopy as being equally uncomfortable so long as their peaks and ends are the same. However, while the duration of the overall experience doesn't matter, the duration of the peak does matter. All other things being equal, a long peak has slightly more influence over memory than a short peak.

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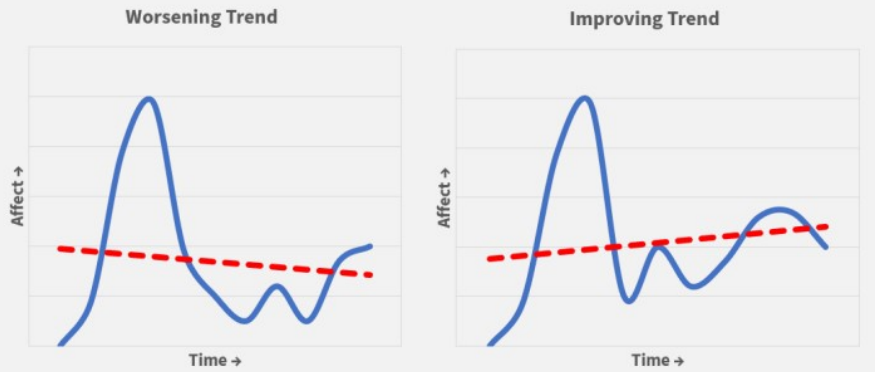
FRAMING THE PEAK/END RULE

4. The trend of the experience

An improving trend produces a better memory than a worsening trend.



What would be the trend of the total experience?

kenthendricks.com

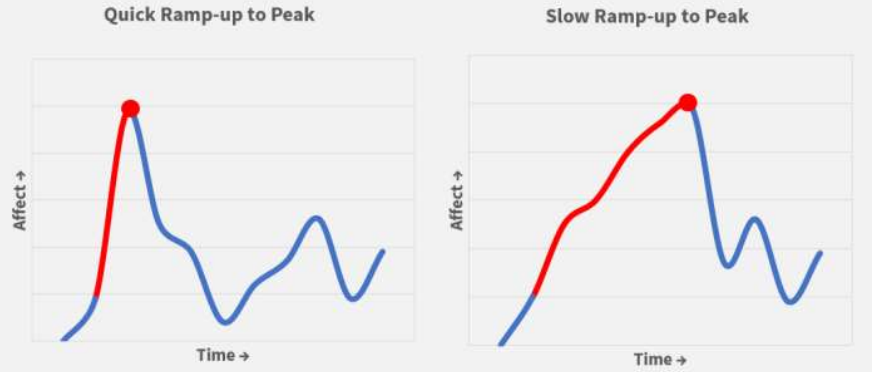
4. THE TREND OF THE EXPERIENCE

Whether the overall trend of an experience is getting better or worse affects how peaks and ends factor into overall memory. In a 1992 experiment, psychologists compared how people responded to experiences with the same peaks and ends. In one version, the overall trend was getting worse, while in the other version, the overall trend was getting better. People gave the worsening trend a 13% lower rating than its opposite. All other things being equal, an improving trend produces a better memory than a worsening trend.

FRAMING THE PEAK/END RULE

5. Rate of change approaching the peak

A quick ramp-up to the peak causes the peak to be a greater factor in your memory than a slow ramp-up to the peak.



How quick is the ramp-up to your peak? How could it be increased?

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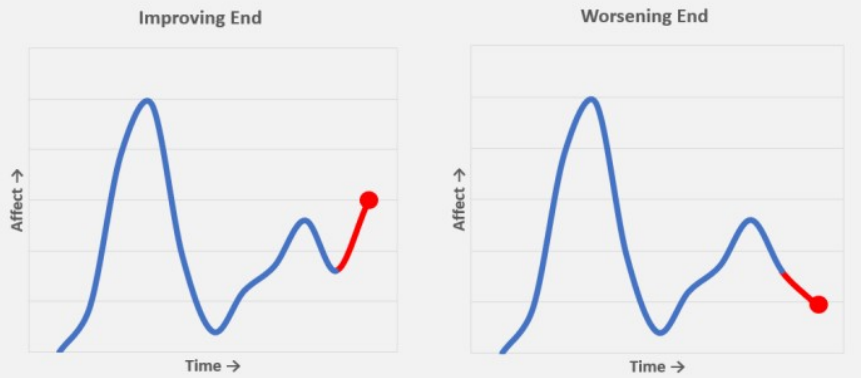
5. THE RATE OF CHANGE

Whether you get to the peak quickly or slowly affects how much the peak affects your overall memory. In a 1998 study, researchers found people remember an experience as more painful when the peak pain is reached quickly. And another study of advertising found that people liked television commercials more when they had a steep, quick ramp-up to the peak moment, rather than a slow increase. Third, in the study of annoying sounds, people gave a worse overall ranking when the volume went up quickly, compared to when the volume went up slowly to the same level. All other things being equal, a quick ramp-up to the peak causes the peak to be a greater factor in the memory of the experience.

FRAMING THE PEAK/END RULE

6. The trend at the end

An improving trend at the end improves the memory of the experience compared to a worsening trend at the end.



What is the experience of the end of your care event?

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6. THE ENDING TREND

We've already seen that an improving trend produces a better memory than a worsening trend. It turns out that the trend right at the end affects how much the ending is factored into the peak–end rule.

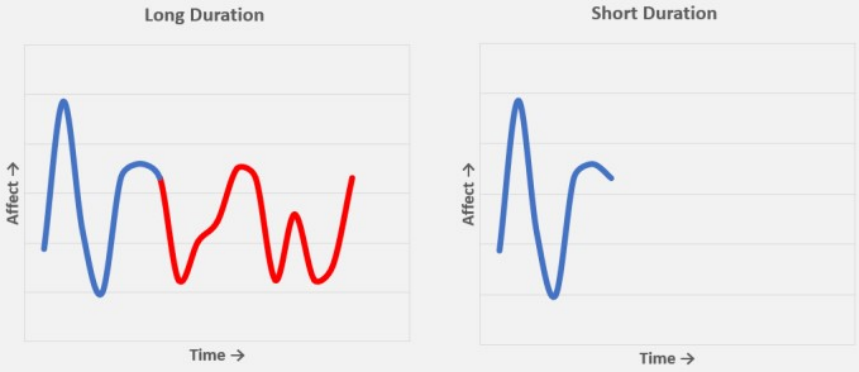
When the trend is improving at or near the end, people remember an experience more positively overall. A well-designed progress bar with an improving ending trend warps your experience of time and makes you think it loaded faster than it really did.

All other things being equal, an improving trend at the end improves the memory of the experience overall.

FRAMING THE PEAK/END RULE

7. The relative duration

In some cases, duration can affect memory— but only for negative experiences, and even then only slightly.



How does time (delays and expediency) impact your experience?

kenthendricks.com

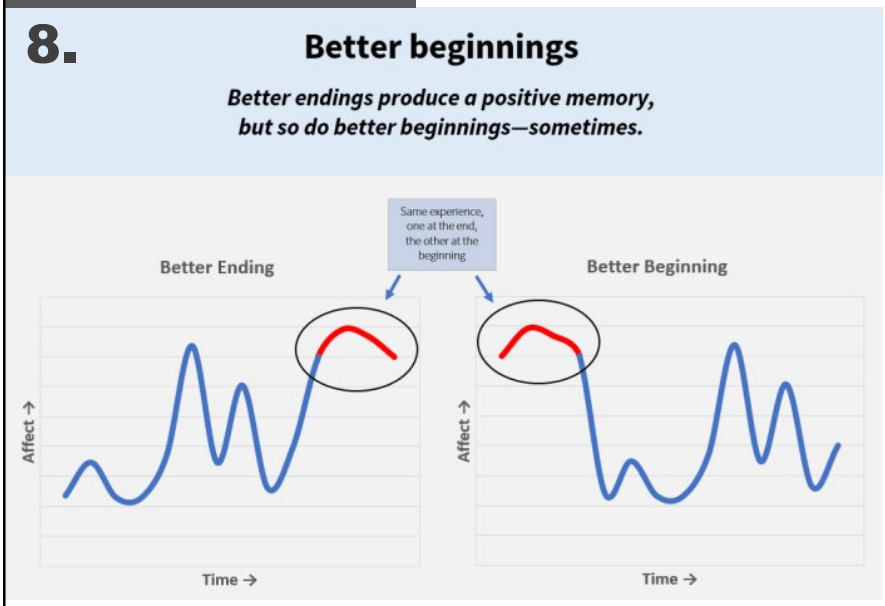
7. RELATIVE DURATION

We've already seen that duration doesn't matter—long colonoscopies and short colonoscopies produce memories of equal discomfort so long as they have the same peaks and ends. However, duration can sometimes make a difference in your overall memory when experiences have greater amounts of intensity.

In one experiment, researchers found that the 30-minute series of discomfort levels of 2-2-4-4-6-6 was evaluated as 2.8% worse than the 15-minute series of discomfort levels of 2-4-6.

All other things being equal, while the peak–end rule is still primarily responsible for the way an experience is remembered, the duration can matter in specific instances, even if only a little.

FRAMING THE PEAK/END RULE



8. BETTER BEGINNINGS

In a 2016 study from Stanford, researchers took a great experience at the end and slotted it in the middle. In one experiment, they watched 750 people run a fun-run-style obstacle course. After the race, they asked people how much fun they had on a scale of 1 to 10. They also asked people how much they liked or didn't like each obstacle on a scale of 1 to 5. As predicted by the peak–end rule, the obstacle at the end was a predictor of how people felt about the race as a whole. But here was the surprise: so did many of the other obstacles. In this race, the ending mattered, but not more than any other moment.

Better endings produce a positive memory, but so do better beginnings (sometimes).

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APPLYING THE PEAK/END RULE

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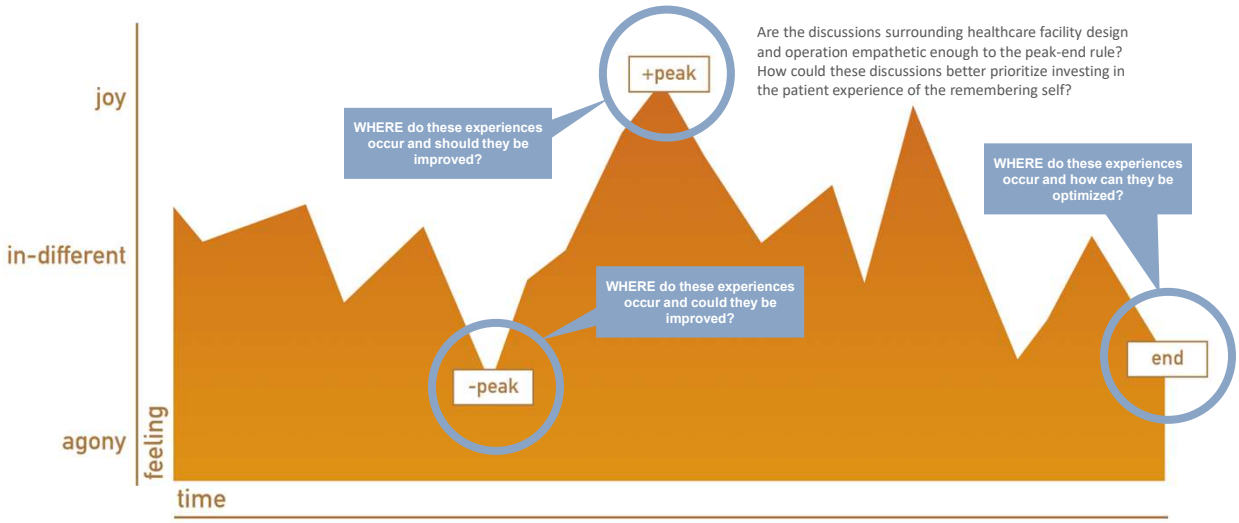
APPLYING THE PEAK/END RULE

‘PEAK-END RULE’



Are the discussions surrounding healthcare facility design and operation empathetic enough to the peak-end rule? How could these discussions better prioritize investing in the patient experience of the remembering self?

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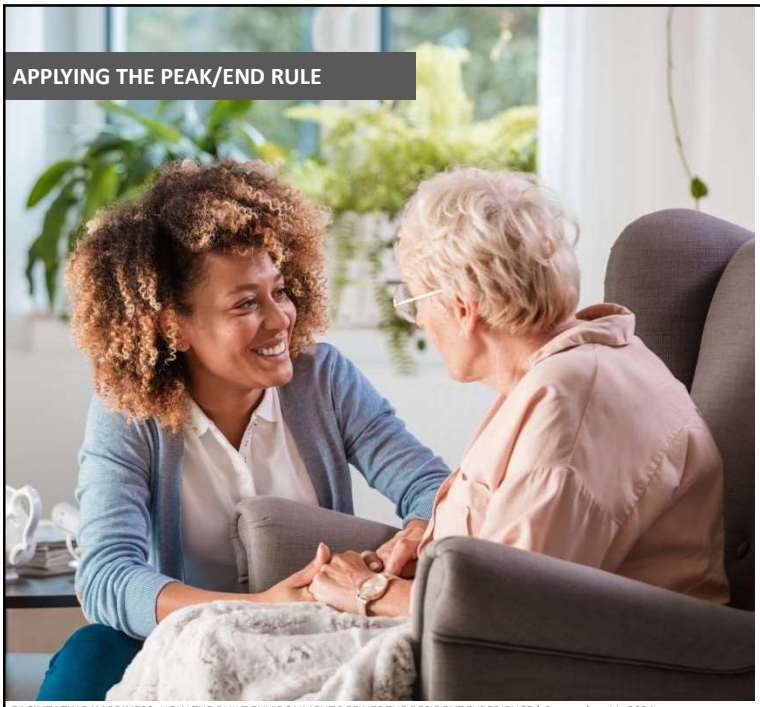
APPLYING THE PEAK/END RULE



One approach to applying the peak/end rule is to evaluate how patients perceive the environment.

Research on the health care physical environment has examined the effects of architecture, interior design, furniture placement, art, lighting, building materials, building systems, maintenance programs and other elements that affect the patient experience. However, in regard to the remembering self, specific attention should be given to the patient’s perception of three key themes: *cleanliness*, *comfort*, and *communication*.

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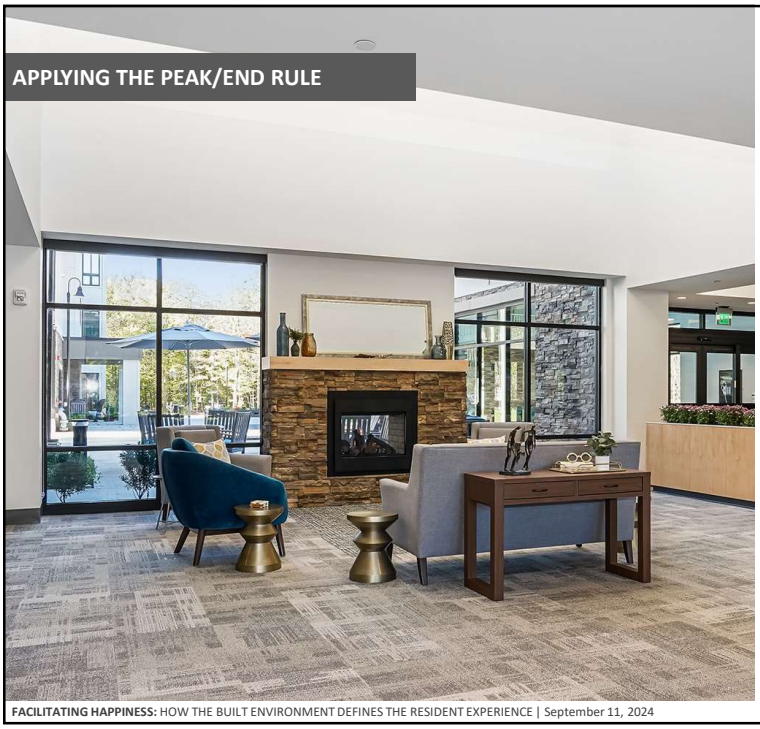

APPLYING THE PEAK/END RULE

Research has shown that patients' perception of cleanliness can be improved with lighting, decor choices and furniture selection.

- The perception of clutter—even when environments are clean—can lead to lower patient satisfaction scores.
- Bassett Healthcare in Cooperstown, New York, found that patients noticed an unused cabinet that was often put behind a patient's chair. This made the room feel smaller and more cluttered. When the cabinet was removed, patients reported that the room seemed cleaner.

Health Research & Educational Trust. (2016, March). *Improving Patient Experience Through the Health Care Physical Environment*. Chicago, IL: Health Research & Educational Trust.

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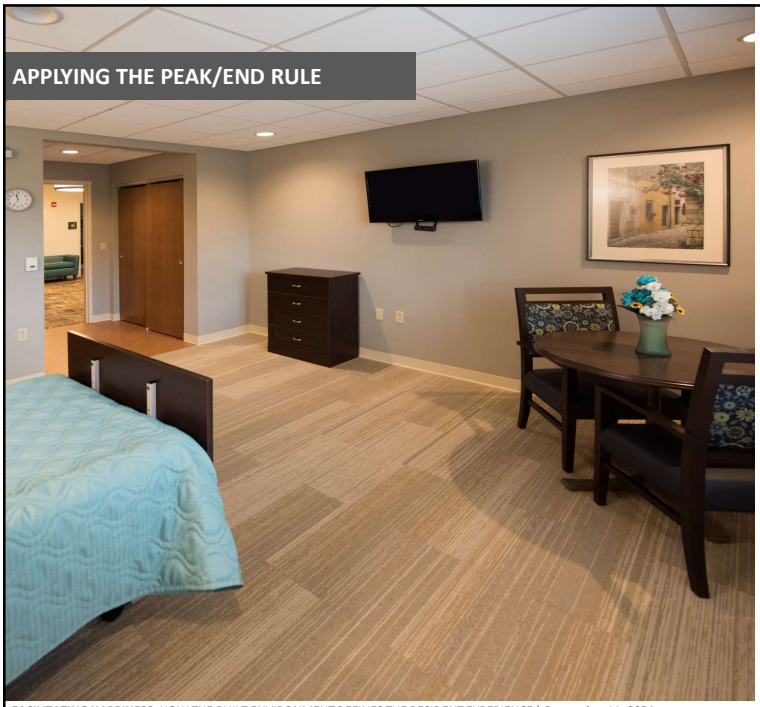

APPLYING THE PEAK/END RULE

Patients in more comfortable rooms rate staff (and even the food) and are more likely to recommend you to others.

- Residents who have a view of nature—or even a picture of a landscape scene—require fewer doses of pain medication.
- Proper wayfinding and signage in buildings, for example, can help residents navigate a new setting without adding stress.
- Giving residents bedside control of their room temperature, lighting and television can help, as can providing single-patient rooms to create a sense of privacy.
- Resident rooms large enough to host a private dining experience are ideal.

Health Research & Educational Trust. (2016, March). *Improving Patient Experience Through the Health Care Physical Environment*. Chicago, IL: Health Research & Educational Trust.

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APPLYING THE PEAK/END RULE

Communication between caregivers and patients is an important part of the patient experience.

- Quieter spaces lend themselves to better communication with caregivers. And single-patient rooms help provide a more private and intimate setting for communication on sensitive health care topics.
- Patients perceive higher level of communication when the location of the sink made it possible for the caregiver to maintain eye contact with the patient while washing hands.
- Studies have shown that introducing sound-absorbing materials can result in a patient's rating of the quality improved from 4.9 to 7.3.

Health Research & Educational Trust. (2016, March). *Improving Patient Experience Through the Health Care Physical Environment*. Chicago, IL: Health Research & Educational Trust.

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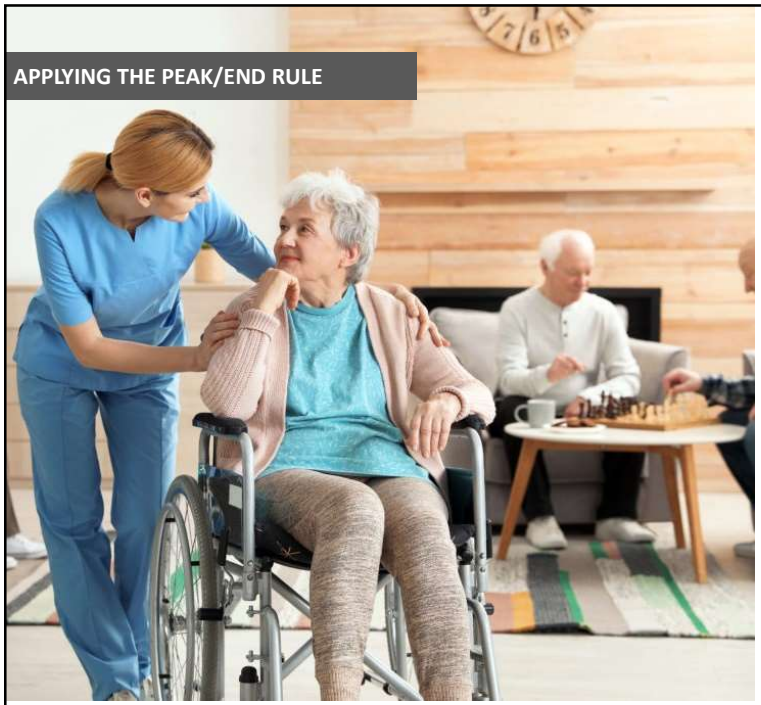
APPLYING THE PEAK/END RULE



Building design that enhances staff recruitment and retention.

We all understand that care team job satisfaction results in positive resident outcomes in assisted living and nursing care settings. Why then do buildings commonly focus exclusively on resident-centered design, often to the exclusion of supportive features that enhance staff efficiency and well-being. **What if care team members were the focus of person-centered care?**

Photo courtesy of West Michigan Hospice

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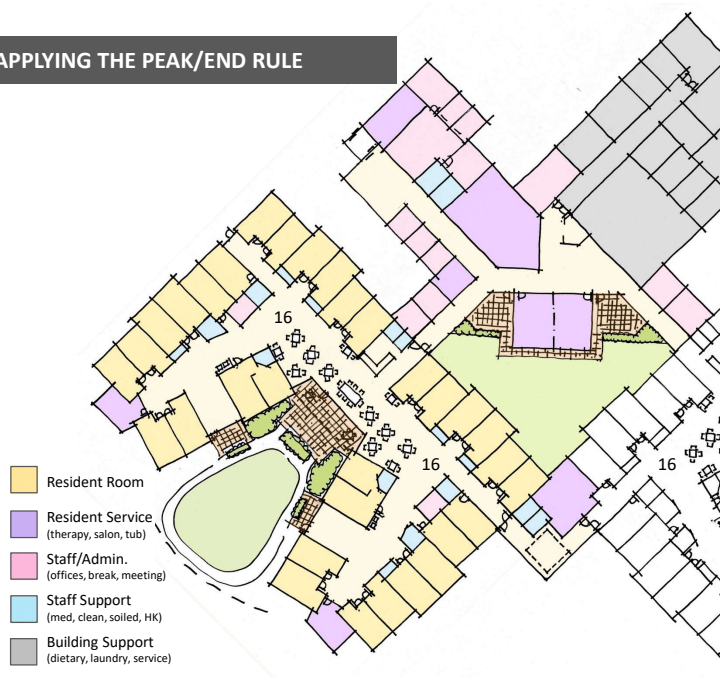
APPLYING THE PEAK/END RULE



Building design that enhances staff recruitment and retention.

1. Supplies that I need to do my work are convenient.
2. I have an appropriate space and time to take allowed breaks.
3. I have a convenient place to go to recharge when things don't go well.
4. I have convenient access to a convenient place to communicate confidentially with my team.
5. When I need help, I have convenient access to a patient lift.
6. Outside of the resident room I can immediately see if a resident requires assistance.
7. I know my co-workers.
8. Leadership appreciates me and acknowledges the work that I do.

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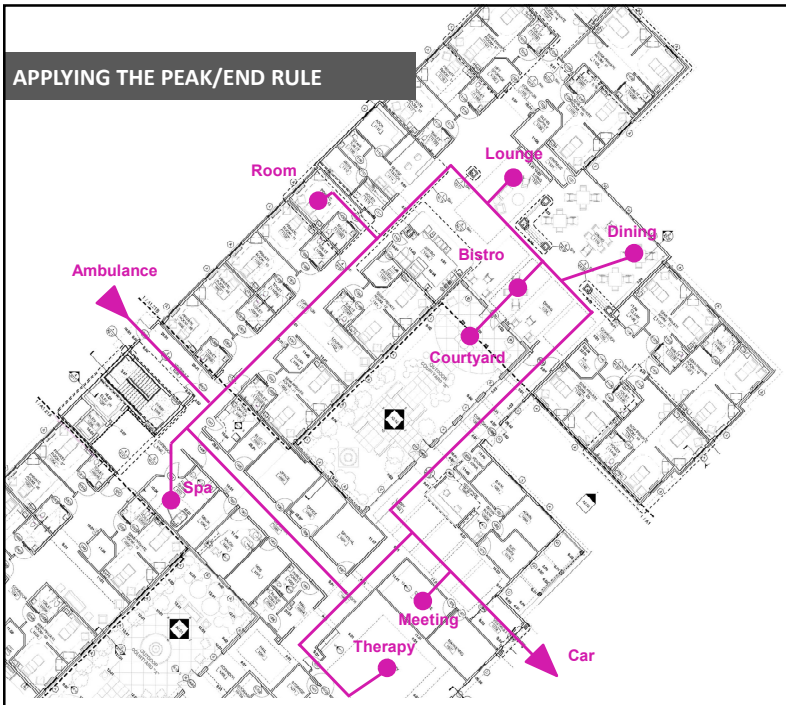
APPLYING THE PEAK/END RULE



Each facility can be audited to understand how the experience will be remembered by the patient.

- Can you define what physical locations host the ***peaks*** and ***valleys*** of the experience? How can these areas be improved?
- What physical spaces host the "***end***" of an experience? How can this journey be improved?
- What capital investment would yield the most impactful improvement in how the experience would be remembered by a patient?
- How does your on-line presence enhance this experience?

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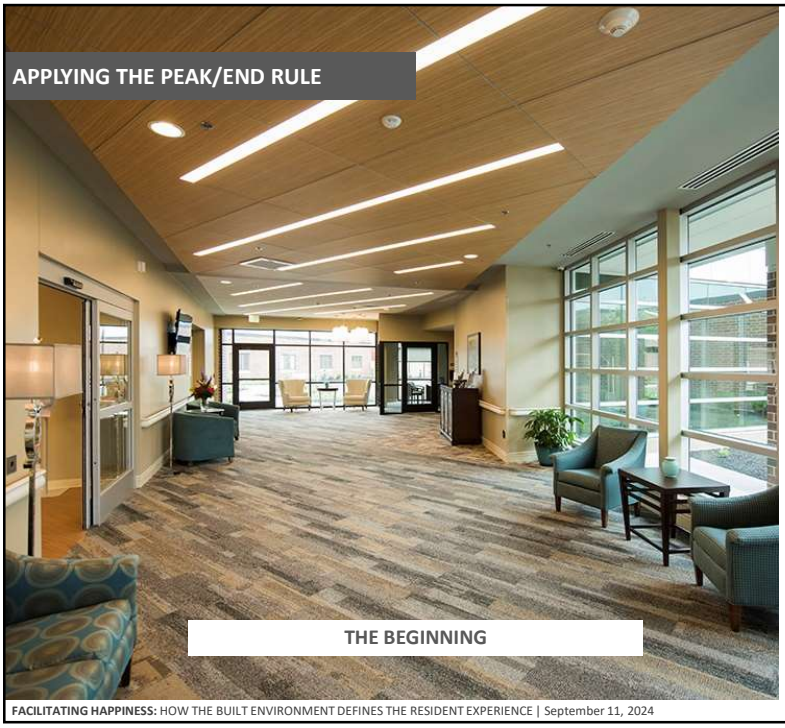
APPLYING THE PEAK/END RULE



THE BEGINNING

ARRIVAL

Consider a typical Nursing Home the arrival sequence largely needs to consider a consistent set of variables.

1. *First impression*. How does the resident arrive (ambulance, van, family member), where do they arrive.
2. *Wayfinding*. Visual wayfinding so you know where to go.
3. *Views*. Best view in the house... natural light.
4. *Access*. Special consideration should be given to easy access to wifi, everywhere.

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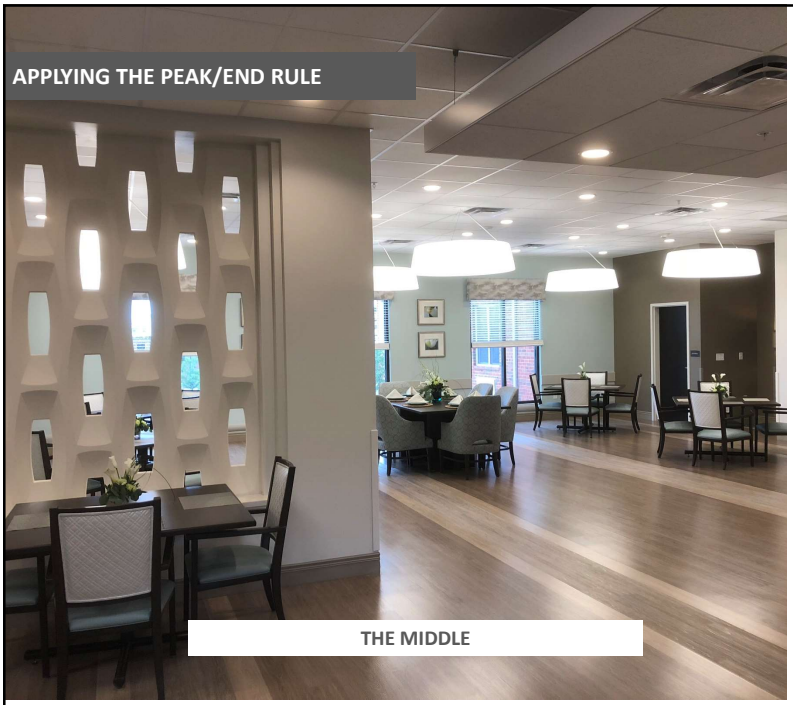
APPLYING THE PEAK/END RULE



THE MIDDLE

CARE EVENTS

And while the event maybe be unique to the experience, the way in which the facility can shape the memory leverages similar strategies:

1. *Social spaces*. Do I have a choice where I spend my time, and with whom?
2. *Duration*. Consider focusing slightly less on expediency and prioritize the full journey of the patient.
3. *Provide tools*. Offer coping tools that clearly illustrate your empathy of the care event experience.
4. Dining options. Who do I dine with? Do I have options?

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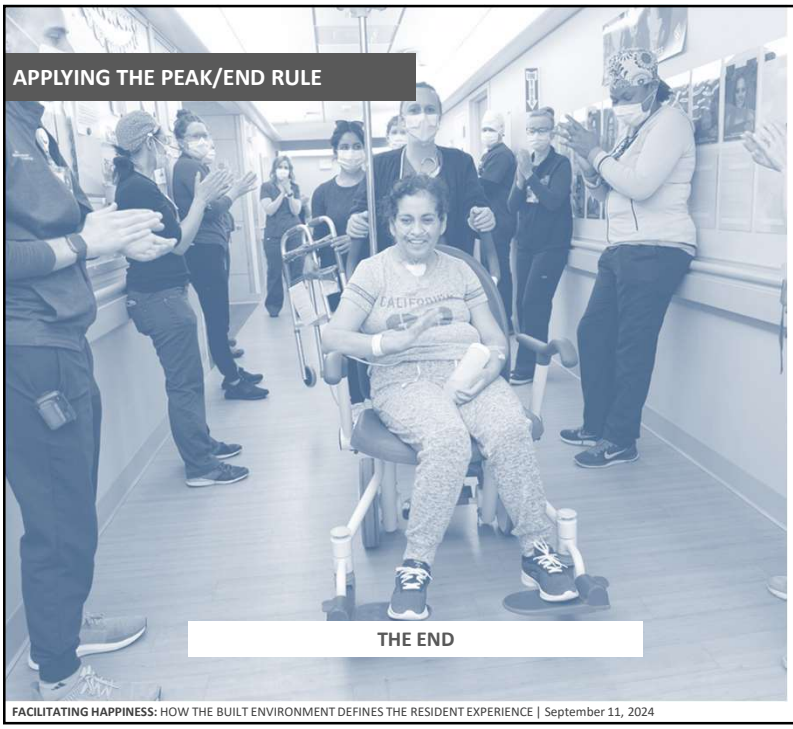
APPLYING THE PEAK/END RULE



DEPARTURE

Consider a heightened appreciation for the patient's departure experience and invest in ways to make it as pleasant as possible.

1. *Unique Discharge*. Provide a unique experience that is intentional to their needs (separate exit canopy, well lit, nurse escort to car/curb, etc.).
2. *Customized Resources.* Provide clear resources (information, tools, etc.) that are customized to their post-care experience.
3. *Remove clutter*: Remove all clutter and clinical equipment from path connecting patient room and discharge point.

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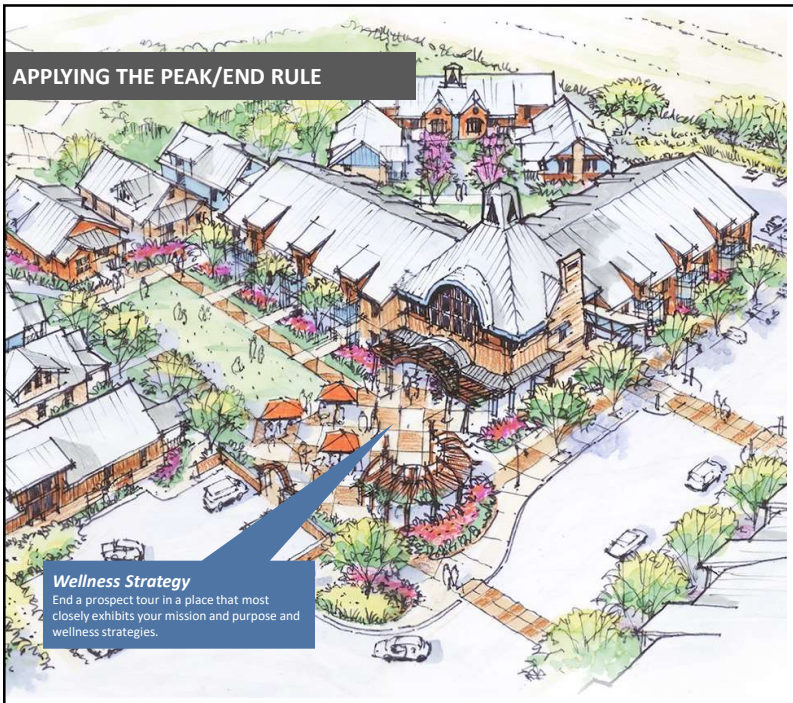
APPLYING THE PEAK/END RULE



Each facility can be audited to understand how the experience will be remembered by the resident prospect and family.

- Can you define what physical locations host the ***peaks*** and ***valleys*** of the experience? How can these areas be improved?
- What physical spaces host the "***end***" of an experience? How can this journey be improved?
- What capital investment would yield the most impactful improvement in how the experience would be remembered by a patient?
- How does your on-line presence enhance this experience, or duplicate it?

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As providers continue to look to improve satisfaction, some consideration should go to:

1. Appreciating the reality that patient satisfaction (as defines by time-delayed surveys) often has less to do with tangible experiences and more to do with cognitive memory.
2. Understanding how staff can assist in identifying locations for peak events in effort to understand how they might be improved.
3. Defining ROI in ways that appreciate the physical environment's impact on the peak-end rule.
4. Exploring how the built environment can become more supportive of the resident experience.

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