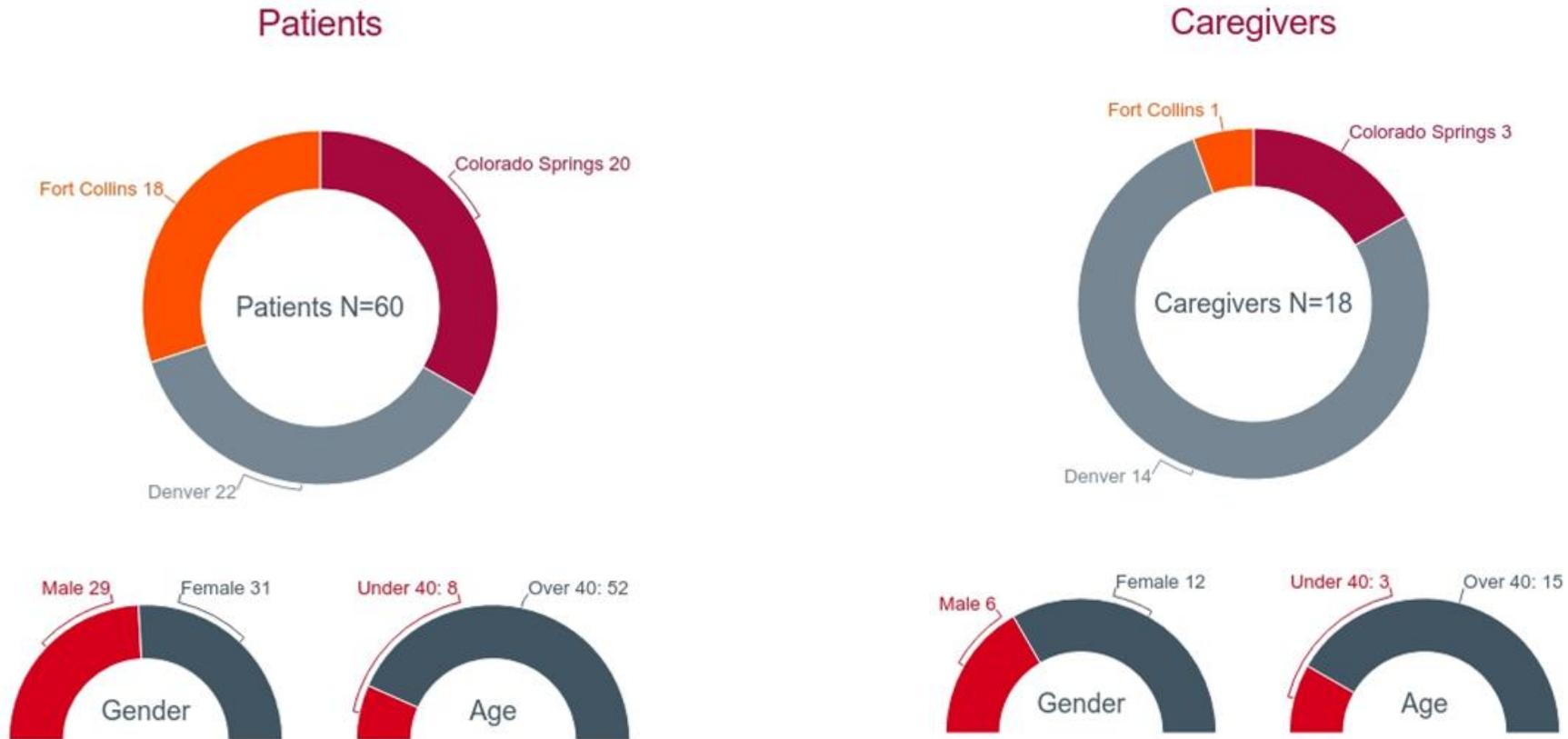


How can one technology help you live extraordinary?

# Virtual reality in outpatient infusion

A pilot for distraction and emotional response.



# Patients are at different points along their journey

”

*It's not good....I don't feel good [crying].*

*Female, 26 – Denver*

”

*There's always apprehension...but to be honest I've been looking forward [to my treatments] because it's working.*

*Male, 56 – Fort Collins*

”

*Here we go again.*

*Female, 64 – Fort Collins*

”

*I want to get through the day without being sick.*

*Male, 60s – Colorado Springs*

”

*...and then you sit here all day bored.*

*Female, 63 – Fort Collins*

”

*I don't like coming [takes anti-anxiety medication before every treatment].*

*Female, 57 – Denver*

”

*Cancer is....different. You don't have many people talk to you. My wife, she don't say much, she keeps to herself anymore.*

*Male, 63 – Denver*

”

*Beyond the physical toll, cancer is emotionally hard – especially to see others go through it with you. I'm depressed, I don't like how cancer affects my family and hurts the people around me.*

*Male, 50 – Denver*

# The outpatient infusion setting can be perceived as ‘captive.’

”

***Nobody likes being here. It's stressful and we're a captive audience. We'd rather be at home or doing something else.***

Female, Caregiver – Denver

”

***I hear all this stuff going on – beeping, people talking.***

Female, 58 – Denver

”

***They don't want to be here. They would rather be someplace else.***

Nurse Manager – Colorado Springs

”

***This isn't your favorite place to be.***

Female, 42 – Fort Collins

”

***There's so much noise with the beeping, coughing, phones ringing.***

RN – Denver

”

***Patients hear neighbors and observe providers – it's a stressful environment.***

Patient Care Tech – Colorado Springs

”

***Their current environment is terrible, cold and captive. They want to go elsewhere and be distracted.***

RN – Denver

# Despite those feelings, the UCHealth care team has established a bond with patients, and more importantly – TRUST.

”

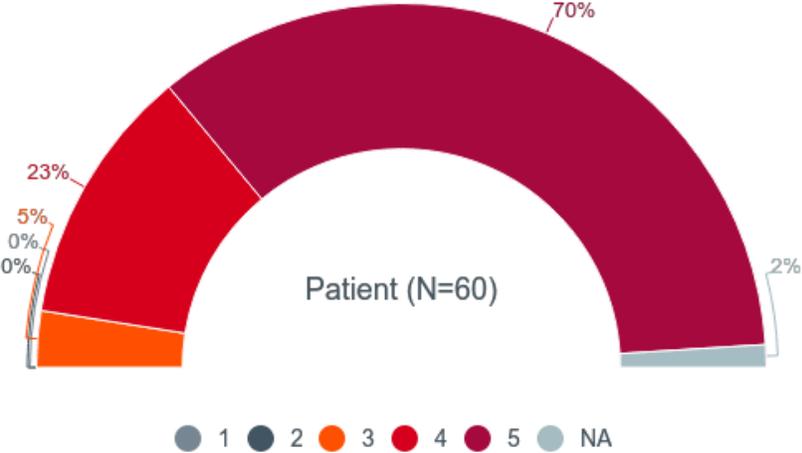
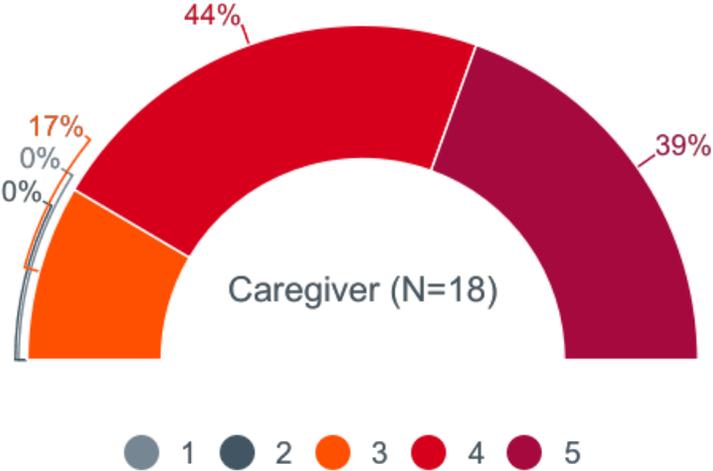
*I have had phenomenal care. I had my first diagnosis in Texas and had the exact opposite experience. My team has been amazing here...I don't have to ask or want for much from my care staff...everyone's willing to go the extra mile.*

Female, 42 – Fort Collins

”

*The staff makes you almost glad to be here.*

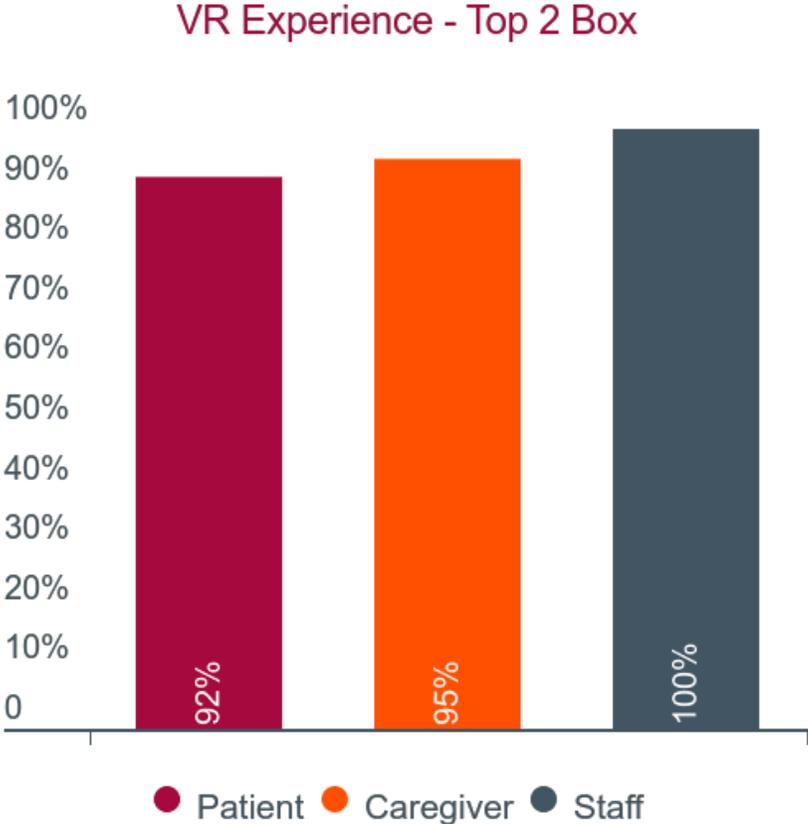
Male, 72 – Denver



On a scale of 1 to 5, with 1 being extremely negative and 5 being extremely positive, how would you rate your UCHealth experience?



# Overall experience with virtual reality



● Percent of Staff Willing to Offer VR to Patients



● Percent of Patients who would Use VR Again



● Percent of Caregivers who would Use VR Again

# Six overall themes were found

## Virtual reality:

- Gave patients something to look forward to
- Created an atmosphere where the concept of time disappeared
- Was not just a distraction, but an escape from their environment
- Was also an escape from their illness – even if for a brief moment
- Altered mood and, in some cases, reduced anxiety
- Gave patients the freedom to live extraordinary lives

”

*It changed my mood...because when I was talking, I was crying and now when I see it, I feel happy.*

Female, 26 – Denver

”

*You get something cool to go back and say ‘hey look what I did when I had chemo today’ instead of just ‘I had chemo today’.*

Male, 45 – Denver

”

*I want to travel and do things, but I can’t with my disease. Virtual reality immerses you, blocks everything else out. I felt free.*

Female, 23 – Colorado Springs

”

*Virtual reality separates you from the visual reminders/cues of a difficult environment. It helps reduce anxiety and bring comfort, and distracts you from delays. It’s outside of time.*

Nurse Manager – Colorado Springs

”

*This is incredible, it took me away for a minute...out of the element of this place and I didn’t think about my cancer or this place.*

Male, 50 – Denver

”

*Takes you out of this bubble and puts you into another bubble.*

Female, 42 – Fort Collins

# Patient story - Hannah

<https://youtu.be/62Bxlz3RKaI>

# Conclusion

If a careful and thoughtful plan is created to overcome functional and executional limitations, the results of this study show a tremendous benefit to offering virtual reality in the outpatient infusion setting, particularly on reducing discomfort and anxiety, providing a distraction mechanism during care and enhancing the overall patient experience.

This study solely examines outpatient infusion patients. However, there may be opportunities to explore the benefits of virtual reality with patients in other settings and environments and to measure the quantitative impact on reducing anxiety and improving overall patient wellbeing.