# A Qualitative Investigation of the Impact of the SARS-CoV-2 Pandemic on Goal Attainment Scaling in a Clinical Research Setting

Sue Nesto<sup>1</sup>, Justin Stanley<sup>1</sup>, Susan E Howlett<sup>1, 2, 3</sup>, Chere Chapman<sup>1</sup>

<sup>1</sup>Ardea Outcomes, Halifax, NS, Canada <sup>2</sup> Department of Pharmacology, Dalhousie University, Halifax, NS. Canada <sup>3</sup>Geriatric Medicine Research Unit, Nova Scotia Health Authority, Halifax, NS, Canada

# Background

Goal Attainment Scaling (GAS) quantifies the effect of interventions on individuals' personal goals.

Goals that are meaningful to individual patients are set by GAS interviewers (clinicians and academics experienced in clinical research/trials) in collaboration with patients and/or their caregivers.

The SARS-CoV-2 pandemic presented a major challenge to health care worldwide.

We investigated how the SARS-CoV-2 pandemic affected the use and implementation of GAS in clinical & research settings.

### Methods

Eleven GAS interviewers in Canada, the US, the UK, and Australia with current and/or past experience working with patients and caregivers to identify goals and build scales to measure goal attainment as an outcome were interviewed using a semi-structured approach.

They described how the pandemic affected GAS use in clinical/research settings.

Interviews were recorded and transcribed; themes were identified and coded in NVivo 12.

## Results



The clinician/academic was introduced to GAS:

year ago – n=3 (27%)
years ago – n=4 (36%)
years or more – n= 4 (36%)

Results		
Characteristic		Participants (N=11)
Sex	Female, n (%)	5 (45%)
	Male, n (%)	6 (55%)
Expertise	Clinician, n (%)	7 (64%)
	Academic, n (%)	4 (36%)
Years in Profession	Mean [Range]	25.5 [7-40 years]
Conducts Clinical Research	Yes, n (%)	10 (91%)
Conducts Clinical Trials	Yes, n (%)	8 (73%)

Most GAS interviews were moved to a virtual environment during the pandemic (9/11), and one academic started research during the pandemic.

Nine clinicians/academics stated they were more open to technology due to the pandemic.

Most GAS interviewers (8/11) emphasized at least one positive impact of the pandemic, such as:

- Patients were more readily available as they did not need to travel.
- Since interviewers did not have to travel, patient recruitment could be expanded into greater/remote areas.
- The ability to recruit and retain more participants.
- The ability to collect data more quickly.

"We provide a regional service over a radius of about 100, 150 miles. And yeah, if you have to go out and see somebody each time, then spend all morning, all day sometimes, travelling there and back and doing the assessment, you've seen one patient in a day."

### Results

Virtual appointments provided advantages such as:

- Accessibility
- Ability to participate in global studies
- Ability to continue clinical research/trials where many others stopped
- Providing more information (visual) than a phone call
- Realizing that face-to-face encounters are not always necessary
- A more peaceful environment "...than in the structure of a clinic where you're busy and there's lots of pressure."

### Overall, GAS interviewers identified a few negative impacts:

- Pandemic stress affected the mental energy that is needed for goal setting
- Patients and clinicians experienced "screen fatigue"
- The face-to-face process was more complex due to technology and not having the time/resources to apply scales for the GAS process
- Video conferencing can be a challenge for older patients
- Technical issues (unable to connect, no sound/video) with the virtual platform

"...having to wear masks every time you interview somebody or talk to somebody, it's quite constricting to your conversation."

Goal setting sometimes needed to be modified/reduced as a virtual appointment was shorter than an in-person visit. Many clinicians/academics didn't have the time or resources to perform (NRC IRAP). GAS during such a challenging time.

Some goals required modification since going to the gym and/or shops was not possible during the pandemic restrictions.

### Results

"Thankfully, actually I can't think of an example where someone has backtracked. I feel like the impact from goal setting has been lasting actually for the patients, especially that were in the feasibility study."

"And now I've been able to participate in other studies,...There were huge downsides to the pandemic, but there's a few upsides."

### Discussion & Conclusion

Despite the challenges of the SARS-CoV-2 pandemic for health care, most GAS interviewers identified positive impacts of the pandemic and found that the impacts were largely positive for using GAS in clinical/research settings.

The ability to deploy GAS virtually points to its potential value as a patient-centered outcome in hybrid and decentralized trial designs.

# Acknowledgements & References

We would like to thank the clinicians and academics who participated for their insights.

This research was partially funded by the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP).

Kiresuk TJ, Sherman RE. Goal attainment scaling: A general method for evaluating comprehensive community mental health programs. Community Ment Health J. 1968;4(6):443-453. doi:10.1007/BF01530764.

