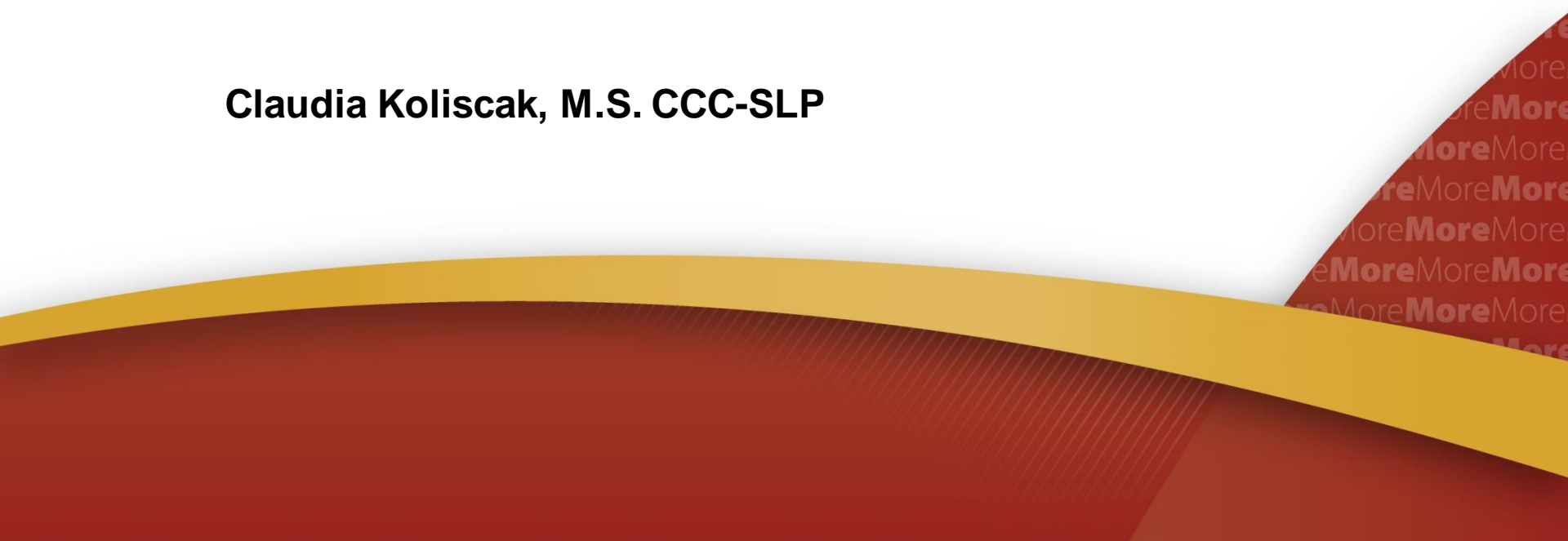




# Therapeutic Use of iPads for Stroke Patients

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# Therapeutic Use of iPads for Stroke Patients

- In the spring of 2017, new interest was raised in developing a program specifically for acute stroke patients that allows them access to therapeutic intervention, outside of regular therapy hours.
- This project offers higher-level stroke patients the ability to interact with an iPad containing various applications assigned by their speech, occupational, and physical therapist.
- The applications address cognitive, linguistic, and physical skill sets such as word finding, language comprehension, memory recall, cognitive processing, visual tracking, writing dexterity, and physical mental practice.

# Project Inspiration

Inactive and Alone: Physical Activity Within the First 14 Days of Acute Stroke Unit Care, published in March 2004 in the Journals of American Stroke Association by Julie Bernhardt, Helen Dewey, Amanda Thrift, Geoffrey Donnan

- A total of 64 acute stroke patients were observed (all within 14 days of stroke diagnosis).
- The researchers observed activity levels of acute stroke patients to assess the time patient's spent in activities, resting in bed, sitting out of bed or alone.
- Observations were conducted at 10 minute intervals between 8AM and 5PM.
- Results: >50% of patients day spent in bed, 28% sitting out of bed, 13% engaged in activities, **alone >60% of the time.**
- Patient immobility after a stroke could result in as many as 51% of deaths in the first 30 days after initial ischemic stroke.

# Project Inspiration ( cont'd)

- Results:
  - >50% of patients day spent in bed
  - 28% sitting out of bed
  - 13% engaged in activities
  - **alone >60% of the time**
- Patient immobility after a stroke could result in as many as 51% of deaths in the first 30 days after initial ischemic stroke.

# Purpose Project

- To increase periods of activity – both mental and physical during therapy after-hours (after 4PM)
- Incorporating use of applications via an iPad for therapeutic use
- Facilitate stimulation and promote therapeutic practice addressing stroke symptoms



# Grant Offerings

In the fall of 2017, a grant provided by the Augusta Health Foundation funded the following:

- Three iPad Pro's 12.9 inch, 32 GB
- Three anti-theft mounting stands
- Various applications loaded onto the iPad  
(ST, OT, PT specific)



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# Program Logistics

- Two iPads are used on PCU (shared with ICU) and one iPad is kept on Rehab/SNF.
- Each therapist (PT, OT, SLP) is encouraged to assign their patient an application on the iPad to address the patient's deficits.
- A staff member is responsible for adhering to the therapists application recommendations for the patient. This staff member will check out/in the iPad and set up the patient to interact with the iPad.
- Frequently, a member of the stroke team monitors the check in/check out sign up sheets to verify patients are receiving their recommended practice with the iPad based on therapist recommendations.

# Program Logistics (continued)

Upon discharge from the hospital, each patient completes a brief written survey, acknowledging practice with the iPad and whether they felt it was “helpful”, “not helpful” or “indifferent”.

# Therapy Applications

<b>Speech Therapy Apps</b>	<b>Occupational Therapy Apps</b>	<b>Physical Therapy Apps</b>
Constant Therapy	Cursive Words	Stronger After Stroke-eBook
Language Therapy Lite 4 in 1 Toolkit	Doodle Buddy	PT mental practice recordings
Number Therapy Lite	Labyrinth Puzzles: Maze-a-Maze	
Peak	Word Search Puzzles	
Solitaire	Pop Balloons	

# Outcomes for iPad intervention

- The iPads have been well utilized by patients at Augusta Health since the program went live.
- Survey results from patients have been overwhelmingly positive with the vast majority feeling as though the iPads were “helpful”.
- Many stroke survivors are pleased to address their deficits immediately following a stroke in a way that is practical, functional and during their down time.
- Families enjoy being able to assist loved ones in their rehabilitation by aiding use with the iPad.

# Thank you!

Augusta Health is proud of our iPad program and how receptive patients and families have been towards participating in the program.

Our goal is to broaden the use of this program so that more patients have access to it's benefits.

We hope that this program inspires other facilities to think “outside of the box” when it comes to stroke rehabilitation, especially when considering the movement towards tablet technology and the use of apps of facilitate stroke recovery.