Telehealth Innovations
Improving Access and Continuity of Care
At Maple Knoll Village

University of Cincinnati
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Welcome

• Provide an understanding about the various telehealth devices through a virtual observation inside a CCRC

• Demonstrate how telehealth is going from the college classrooms across a spectrum of settings involving older adults who participate in the testing, implementation and evaluation of telehealth services

• Discover necessary steps for implementation and organizational readiness for Telehealth application and/or expansion of services

• Learn of resident, family and physician response to use of telehealth and how it improves access to care
Maple Knoll Village

- Owned by Maple Knoll Communities, Inc.
- Continuing Care Retirement Community (CCRC)
- 140 Independent Living Villas
- 125 Independent Living Apartments
- 63 Assisted Living Apartments
- 145 Skilled Nursing Beds
The University of Cincinnati (UC) was founded in 1819 and offers students a balance of educational excellence and real-world experience. UC is a public research university with an enrollment of more than 42,000 students.
Through the creative leveraging of technology, UC College of Nursing will lead the transformation of health care in partnership with the people we serve.
CCRC Meets University

......a partnership is formed
Collaborative model of partnership between a CCRC and academic setting

Technological advancements in a patient’s home setting that is preparing the future workforce
The University of Cincinnati
Intraprofessional Innovation Smart House
At Maple Knoll Village

• Created to test and develop technology aimed at creating environments that promote self-care and independence
• Designed with the goal of enabling independence for older adults
• Serves as a location for experiential learning for students and volunteers in health care, engineering and other related areas; development of nationally recognized service models that leverage use of new technologies for health monitoring and injury prevention
• The “House” initiative will connect end users to MKC, an industry leader in post-acute and home and community-based services, and to UC experts in gerontological nursing, geriatric medicine, robotics, telehealth, sensor technology and human factors.
In Ohio, the number of adults age 85 and over will nearly **triple** over the next 30 years to 650,000 in 2050.

More than **70 percent** of Americans over the age of 65 will need long-term care services at some point in their lives and the cost of institutional care is currently $75,000 to $100,000 per year and rising.

Telehealth will allow for cost effective solutions for maintaining the independence of the rapidly growing aging population and providing access to care.
“I commend you for your efforts to improve the quality of education and healthcare and expand opportunities for all Ohioans. By allowing University of Cincinnati nursing, engineering and medical students to partner in learning with Maple Knoll Village, you are providing opportunities for Ohio’s Leaders.”

-Sherrod Brown
United States Senator
FLO-BOT

- InTouch Remote Presence Robot
- Patient assessment
- Specialist “treat” from remote locations
- Quicker intervention
- Fewer trips to ER
- Better care at a lower cost
• Flo-Bot is currently “living” in Maple Knoll’s Therapy unit
• Flo-Bot is visiting residents with the assistance of staff and the Maple Knoll Medical Director
FLO-BOT

Let’s Take a Look at Flo-Bot Moving Through Maple Knoll!
• Lower cost
• Patient education, monitoring, and remote communication
• Student workforce telehealth development
Meet V-go!
• Must have a need for this program
• Must have buy in from Administration and Medical Director
• Must have access to telehealth devices
Telehealth Program Challenges and Solutions

- Lack of Funding For Telehealth Devices
  For example: Flo-Bot and Sensor Systems
  – Partnered with The University of Cincinnati
Telehealth Program Challenges and Solutions

• Education
  – Must educate staff and physicians on need
  • Early notification of program and transparent goals and guidelines
  • Familiarize staff with new technology through training sessions
  • Flo-bot presence on floors
  • Connection to real world use
Telehealth Program Challenges and Solutions

• Time
  – First few months will require additional time of staff and physicians
    • Learning new technology
    • Allotting time for training
    • Finding staff time to assist with telehealth rounds and removing devices from secure locations
Wi-fi Connection

- Must have high speed connection that is compatible to devices
  - Can move within barriers
  - Make sure telehealth device system is compatible to your internet. For example Flo-bot uses Windows X-P not Microsoft
  - The more devices you have on the system the larger your band width must be
  - Power outages
Remote Access
– Physicians and staff using programs must have secure connections off site
– Must provide access to medical records off site
Telehealth Program Challenges and Solutions

• IT Support
  – Must have IT Support 24 hours a day
    • Education to IT team on telehealth devices
    • Adaptation of new technology as it is introduced
    • IT must accommodate one standard that is intermanagable within multiple devices
Telehealth Program Challenges and Solutions

• Security
  – HIPPA Concerns
    • IT must secure perimeter of network
    • IT must confirm telehealth device is connected to secure wifi at all times
      – Option would be to provide a secure VPN connection
    • Educate staff
    • Require Confidentiality Forms
Telehealth Program Challenges and Solutions

• Lack of Staffing Support
  – Classroom meets CCRC
  • UC put project in their curriculum which equals student workforce
  • Real life training for future workforce
Telehealth Program Challenges and Solutions

- Resident and Family Involvement
  - Education and Introduction
  - Voluntary Participation to enroll
  - Notification in writing to all family and residents
“I consider myself tech savvy and I am excited to see how the new technology brought forth by UC will improve our health care.”

- Emmett White, Maple Knoll resident (93 years old)

“I’ve seen the automobile and aviation come into being and heck, when I was a kid, we used the neighbor’s new phone because our house didn’t have one yet. To see this, to see robots that assist and care for us, it’s truly amazing.”

- Simon Strong, Maple Knoll resident (92 years old)

“When can I sign up?! ”

- Don Johnson, Maple Knoll resident (77 years old)
Additional Items to Consider

- Set up a regular schedule for use of telehealth devices
- Must have a secure location to store robot and other devices
- Identify one person responsible for Telehealth Implementation on your campus
- If you are creating the program through a collaboration, identify a contact person
- Set up an emergency Telehealth Action Plan
  - Security Breach
  - Loss of power
WHERE ARE WE GOING?
Next Steps

• Create new technology, products and systems

• Lower hospital readmission rates

• Work with hospitals to connect patients with expert care

• Provide education on assisting older adults while leveraging technology for health monitoring and assistance

• Create opportunities to test products that can improve quality of life

• Expand telehealth into Independent and Assisted Living to help older adults age in place
QUESTIONS?
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