# The Rockefeller University Hospital and The Heilbrunn Family Center for Research Nursing present

The Beatrice Renfield Lectureship in Research Nursing

Tuesday, March 22, 2022 | 6:00 PM - 7:00 PM ET

# **Nancy Poultney Ellicott**

John Hopkins School of Nursing 1903

Founding Superintendent, Rockefeller Institute Hospital 1909-1938



# Nancy P. Ellicott

1903-5 Johns Hopkins Typhoid research noted by Drs. Welch and Osler **1905-7 Superintendent of Nurses at the Church** Home and Infirmary **1908 Acting Superintendent of the Church Home** and Infirmary **1909-38 First Superintendent of the Rockefeller Institute Hospital** World War I, assisted Alexis Carrel in the War Demonstration Hospital at the Rockefeller Hospital **1926 awarded Medal of Honor from France** 

https://medicalarchives.jhmi.edu:8443/papers/ellicott.html

# WOMAN TO HEAD HOSPITAL.

Miss Nancy P. Ellicott to be Superintendent of New Rockefeller Institution.

MALTIMORE, Md., Oct. 29.—Miss Nancy P. Elliott, sister-in-law of Francis White, a well-known Baltimore citizen, will go to New York on Sunday to become Superintendent of the new Rockefeller Hospital.

New York Times, 1909

Miss Elliott was for two years Superintendent of Nurses at the Church Home and Infirmary, Baltimore. She resigned over a clash of authority with the Superintendent, but when that official also resigned a short time later, was nominated to succeed him. A number of the Directors were opposed to the apointment of a woman to so responsible a position. but backed by Dr. William H. Welch of Johns Hopkins and Dr. William Osler, who chanced to be in Baltimore at the time she was given the position. However, the opposition was too strong for her, and last August she resigned, tired, she said, of fighting men.

**New York Times 1909** 

# Nancy P. Ellicott

1903-5 Johns HopkinsTyphoid research noted by Drs. Welch and Osler

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1908 Acting Superintendent of the Church Home and Infirmary

**1909-38 First Superintendent of the Rockefeller Institute Hospital** 

World War I, assisted Alexis Carrel in the War Demonstration Hospital at the Rockefeller Hospital 1926 awarded Medal of Honor from France

First woman in Baltimore to own and operate an automobile

https://medicalarchives.jhmi.edu:8443/papers/ellicott.html

Nancy Poultney Ellicott on the **New Rockefeller University Hospital** (Johns Hopkins Nurses Alumnae Magazine 9:209, 1910) "...[N]ursing must be of the very highest type. Records must be most carefully and accurately kept, symptoms observed and recorded, reports intelligently and faithfully made, for a lapse in vigilance, or a specimen lost in a moment of heedlessness, might render worthless the labor of many weeks."

Nancy Poultney Ellicott on the New Rockefeller University Hospital (Johns Hopkins Nurses Alumnae Magazine 9:209, 1910)

"The nurses worked 12 hours shifts 7 am-7 pm and 7 pm-7 am. The day nurses worked 7 days per week...No full days off on weekends were ever given to a day nurse."

"For their 72 hour work week the nurses were paid \$80 a month and were given room, board and laundry." Nancy Poultney Ellicott on the New Rockefeller University Hospital (Johns Hopkins Nurses Alumnae Magazine 9:209, 1910)

"The nurses had to be in by 10 pm unless they had special permission to be out until midnight to attend the theater. To go to the big gates on York Avenue without hat and gloves was frowned on."

# The Rockefeller Institute Hospital

Soiled Linen Conveyor



### An Actually Useful Article.

A typical scene enacted any morning in any Hospital shows the nurse removing the soiled linen from the beds, along with the towels. Usually she throws these in a heap on the floor, where they remain until the room is put in order. Usually they are soiled (sometimes offensively infected) but she nevertheless gathers them up in her arms and carries them to the laundry.

This Procedure is Uncleanly. It is also Time-Wasteful.

Rockefeller Hospital designed a means of expediting the collection of soiled linen and doing away with its disagreeable features.

The "R. I. H." Soiled Linen Conveyor.

A strong bag is suspended in a White Enameled Steel Frame which

is set on casters, rubber tired and so light that it can be moved with one finger, and noiselessly, from bed to bed or room to room. When filled, simply remove Bag and send Bag and all to the laundry.

Stand and Bag Complete \$12.00 Extra Bag \$1.50

SPECIAL PRICE FOR 30 DAYS Each - - \$9.00





Nancy Poultney Ellicott on the Low Pay In Nursing (Johns Hopkins Nurses Alumnae Magazine 10:178, 1911)

"There are a few well paying nursing positions but so pitiably few that the majority of nurses are about as apt to secure them as the ordinary citizen is to become president of the United States."



# **Rockefeller University Hospital 1910-2015**



**First American Research** Hospital **Discoveries and Innovations Nursing Practice** Tryparsimide for trypanosomiasis Yellow fever vaccine **DNA molecule of heredity** Methadone **Multidrug HIV therapy Genetics of Fibrolamellar Hepatocellular Carcinoma** 

# Florence Nightingale 1820-1910: Nurse Scientist





APRIL 1854 10 MARCH 1855.

Merrary J. Sty. B. Barbart Lee



The Arons of the blue; red, & black wedges are each measured from the centre as the common vertex.

The blue medges measured from the centre of the circle represent area for area the deaths from Promotille or Melogable Zymetic demans, the red medges measured from the centre the deaths from anomale. If the Mack medger measured from the centre the deaths from all other causes The black line across the red triangle in Nio? 1554 marks the boundary of the deaths from all other causes during the month.

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# **Nancy Poultney Ellicott**

John Hopkins School of Nursing 1903

Founding Superintendent, Rockefeller Institute Hospital 1909-1938





### The Birth of Research Nursing

The founders of the Rockefeller Hospital knew that successful clinical research would require the participation of expert nurses. Nancy P. Ellicott (1872-1944) was hired as Superintendent of Nurses in 1909, even before the hospital's official opening. She was a graduate of the Johns Hopkins Hospital School of Nursing—among the most rigorous schools at the time—and in the Rockefeller Hospital's first decades she recruited most of her staff from Hopkins. Nancy Ellicott's leadership set a high standard for the role of nurses in the new field of clinical research. The Rockefeller Hospital served as an important training ground for research nurses, and many women who worked under Nancy Ellicott early in their careers carried their expertise in nursing in a research setting to other medical institutions around the country.

Nancy Ellicott also constantly searched for new ways to redesign the many laborintensive tasks in nursing, maintain a germ-free environment, and tend to the comfort of patients. She invented a hamper on wheels for transporting dirty linens, thus freeing nurses from having to carry sheets in their arms and the associated risk of soiling their uniforms in the process. Instead of cumbersome and heavy freestanding screens that nurses had to take to and from patient beds to achieve privacy, she proposed the system of ceiling-mounted runners and pull curtains between beds. She also designed a trolley for food trays, heated by electric coils, and a washable canvas back rest that carried her name and was used to raise patients to a sitting position in their beds. In addition, Nancy Ellicott advocated the use of newly available hospital beds on wheels, which were much easier for nurses to move. These and others of her inventions were sold to many institutions by the Hospital Supply Company of New York as part of its Rockefeller collection.

Nancy Poultney Ellicott was educated at the Johns Hopkins Hospital School of Nursing (1900-1903). After two years in charge of Ward H in the Johns Hopkins Hospital she became superintendent of nurses at the Church Home and Infirmary in Baltimore (1905 to 1907); the next year she served as that institution's superintendent. In 1909 she was appointed superintendent of nursing at the Rockefeller Institute Hospital, where she remained until her retirement in 1938. For her work at the War Demonstration Hospital on the Rockefeller campus during World War I, she was awarded a Medal of Honor from the Minister of Hygiene of France (1926).



# Health Equity Among Older adults:

# **Leveraging Strengths**

Sarah L. Szanton PhD RN FAAN

Dean and Patricia M Davidson Endowed Professor Johns Hopkins School of Nursing sarah.szanton@jhu.edu



# Why isn't an Equality lens Enough?





- Lobbyist
- Nursing school
- Migrant workers
- Adults experiencing
  homelessness
- Adults considered homebound
- Back to school for PhD and faculty → leadership





Frieden, AJPH 2010





**CAPABLE origins** Row Homes in Baltimore, Maryland



# Mrs. B's Story











# **Her Steps**





- Treating the whole person
- Modifying the environment
- Best fit



# **Functional Limitations are Costly**



## Adults with High Needs Have Higher Health Care Spending and Out-of-Pocket Costs



Note: Noninstitutionalized civilian population age 18 and older.

Data: 2009–2011 Medical Expenditure Panel Survey (MEPS). Analysis by C. A. Salzberg, Johns Hopkins University.





# Older Adults Drive Population Outcomes





# **CAPABLE: Key Aspects**





# **CAPABLE Program Components**





# **CAPABLE Approach**



- Increased physical function
- Reduced depression
- Fewer hospitalization and nursing home admissions



# Mrs. R's Goal

Prepare meals more easily without shortness of breath and pain.




### **CAPABLE Home Modifications**



The handy worker lowers the cabinets so Mrs. R can reach items and organize her spices using less energy.



### **CAPABLE Home Modifications**



2 A reacher gives Mrs. R better control when picking up items.



### **CAPABLE Home Modifications**





The handy worker installs an above stove mirror so Mrs. R can see the food in pots and pans while seated.



# **CAPABLE Goal Achieved**

Mrs. R is able to prepare meals more easily without shortness of breath and pain.





### **Staircase Before and After Home Modification**

#### **Before**







### **RESULTS from CMMI funding:** Improvements in ADL and IADL Limitations





#### Improvements in Depressive Symptoms and Home Hazards

#### **RESULTS from CMMI funding**

#### **DEPRESSIVE SYMPTOMS**

**HOME HAZARDS** 





#### **RCT: Five Month Reduction in ADL and IADL Difficulty**



Research

JAMA Internal Medicale Togetan Internal Medication Effect of a Biobehavioral Environmental Approach on Disability Among Low-Income Older Adults A Randomized Clinical Trial

#### Szanton et al JAMA Internal Medicine, 2019

Sarah L. Szanton, PhD; Qian-Li Xue, PhD; Bruce Left, MD; Jack Guralnik, MD, PhD; Jannifer L. Wolff, PhD; Elizabeth K. Tanner, PhD; Cynthia Boyd, MD, MPH; Roland J. Thorpe Jr, PhD; David Bishai, PhD; Laura N. Girlin, PhD



### Five<sup>®</sup> Month Reduction in ADL and IADL Difficulty



\*Adjusted for sex, race, baseline values of outcome measure, and baseline differences between the two groups



*Note.* Michigan Trinity study measured both changes in ADL and IADL, however, the change in IADL has not been officially reported; The vertical axis stands for the reduced counts/scores of ADL and IADL limitations across studies; The horizontal axis stands for group membership, study names, and study design.

> Szanton et al, JAGS, 2021

MODELS OF GERIATRIC CARE, QUALITY IMPROVEMENT, AND PROGRAM DISSEMINATION

DOI: 10.1111/jgs.17383

Journal of the American Geriatrics Society

#### CAPABLE program improves disability in multiple randomized trials

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# **CAPABLE Saves Medicare >20k Per Person**

	HOSPITALIZATION		ED VISIT		MEDICARE EXPEND	
	Per quarter, per 1,000 patients	95% CI	Per quarter, per 1,000 patients	95% CI	Per quarter, per patient	95% CI
CAPABLE (over a 2-year period)	3	-36, 42	-26	-69, 17	-2,765**	-4,963, -567

MEDICARE INNOVATION

By Sarah Ruiz, Lynne Page Snyder, Christina Rotondo, Caitlin Cross-Barnet, Erin Murphy Colligan, and Katherine Giuriceo

Innovative Home Visit Models Associated With Reductions In Costs, Hospitalizations, And Emergency Department Use

#### \*\* p <0.05 From Ruiz, Health Affairs, 2017



Monthly Medicaid Cost for a Hypothetical Cohort of 1,000 People Per Service Type and Study Arm

Szanton et al 2017 JAGS





Program Satisfaction: CAPABLE v. Attention Group after Participation



Szanton et al JAMA Internal Medicine, 2019





After being stuck for two years

# **Health Concerns**

- Confused, over-medicated
- 30 minutes to walk to the bathroom
- Sat on commode all day as a chair

# **CAPABLE Solution**

- Meds schedule
- Chair along hall
- Chair at top of stairs
- Railing on both sides
- Bed risers
- Wider commode





Now able to hear and engage

# **Health Concerns**

- Asthma, DM, HTN, Arthritis
- Breathless
- Limited ADLs, couldn't walk up steps, or outside house

# **CAPABLE Solution**

- Connected with PCP for long-acting inhalers
- Switched from Aleve to Tylenol
- CAPABLE exercises
- Easier to take a bath  $\rightarrow$  decreased pain
- Super ear
- Railings, repaired linoleum floor



# If I had 10,000 tongues...

"If I had 10,000 tongues and they could all speak at the same time, I could not praise the CAPABLE program enough."





#### Why this works:

- Ensure the personenvironment fit
- Unleash people's motivation
- Honor their strengths and goals
- Provide resources to achieve those goals
- Build self-efficacy for new challenges



# Function: It's what we do

- Poor function is costly.
- It's what older adults care about
- It's virtually ignored in medical care
- It can be modified



# **45 Implementation Sites**





# **Drivers to Scale**

- Common sense and strong evidence
- Huge need among older adults in community
- Policy shift towards value (Maryland hospital waiver!)
- Policy shift towards social determinants
- Policy shift towards person-centered care

Szanton et al *Geriatric Nursing* 2022



# **Constrainers that keep it small**

- No clear path to approval and payment (unlike drug a drug which has FDA)
- Under appreciation of function as modifiable
- Housing AND health
- Wrong pocket problem for those not in value based arrangements
- Even with SDOH focus, minimal \$ for non-medical benefits



#### HUD – Older adult home modification program – and earlier HUD research

**Biden, 7/21/20:** "A pilot program now in 27 cities, in 16 states where a nurse, an occupational therapist and a handyman come to the home that's caring for an aging family member...It initially found that about \$3,000 in program costs yield more than \$20,000 in saving to the government from hospitalization for other reasons. Simple steps to save lives, save money, and provide critical peace of mind."

### PTAC Backs Model Aimed at Better Living for Seniors — CAPABLE intervention focuses on better "functional ability" for older adults with chronic conditions

by Shannon Firth, Washington Correspondent, MedPage Today June 17, 2019















# Growing a sustainable change

- Ground and seed Research environment and idea
- **Seedling** from maturation and NIH funding
- Getting bigger- philanthropy
- Tree Fiscal incentives aligned and policy environment right





# Your knowledge as a clinician can help you change policy



- Communication skills translate from patients to policy makers
- Work your ideas step by step and you can make change



### Lessons learned along the way

- If you want to be a rebel, excel in what matters to the people who measure your performance
- Build from insight -Common sense works
- Compelling stories





### **More Lessons**

It shouldn't have to pay for itself (double standard with procedures and pills) but it helps

Other markers of value can count (employee satisfaction, nurse retention, beneficiary satisfaction)

When you are trying to change practice or policy – who are you trying to change and what matters to them?



# **Power Mapping Exercise**





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