

IEs in Healthcare Management Engineering

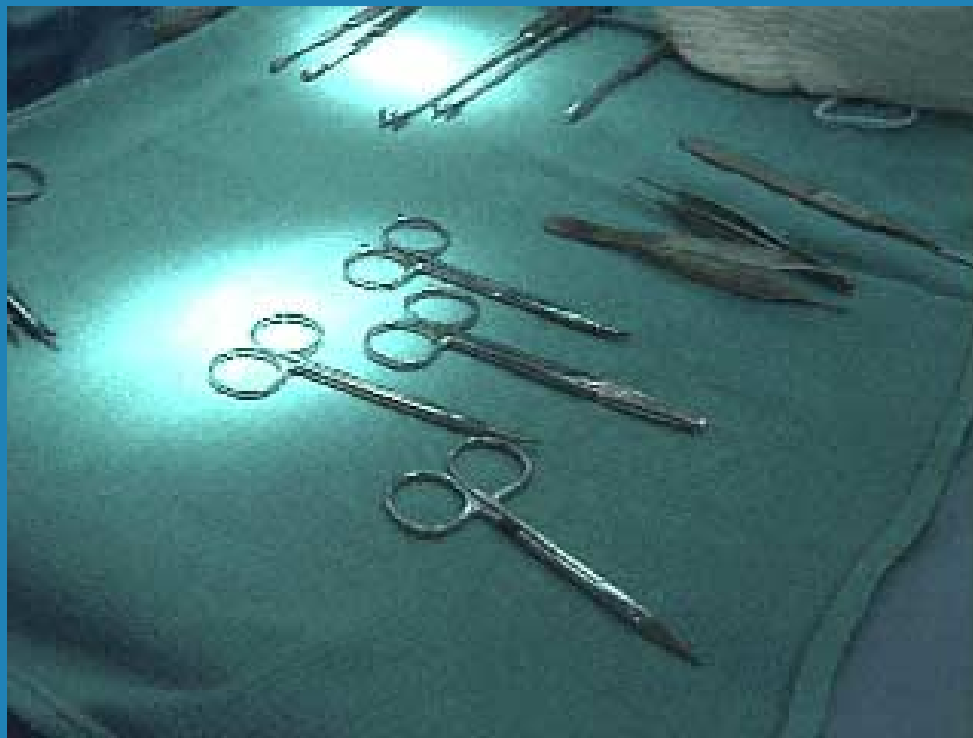
**University of Alabama at
Birmingham Hospital**



**Lee Kate Justice
Heather Manning**

1911

* Frank Gilbreth - surgical tray layout





1952

- ✱ **AHA established its committee on Methods Improvement**
 - ❖ **Lillian Gilbreth**
 - ❖ **Ruth Kuehn**
 - ❖ **Harold Smalley**
- ✱ **1st full-time management engineer was employed jointly by the Cleveland Clinic & St. Luke's Hospital**



1967

- * **The 1st Management Engineering Program in Alabama was established at UAB**



1977

- * **2nd Management Engineering Program in Alabama was established at BMC.**
- * **3rd Management Engineering Program in Alabama was established in Mobile.**

UAB Hospital

- * **Located in downtown Birmingham, AL**
- * **Non-profit teaching center**
- * **5100 FTEs**
- * **760 operational beds (licensed for over 900 beds)**

ME Backgrounds

- * **Education: BIE, BISE, MBA**
- * **Professional Affiliations: IIE (SHS), HIMSS**
- * **Professional Recognition: FHIMSS, Senior Member, Board of Directors**
- * **Professional Registration: PE**

ME Responsibilities/ Projects

- * **Cost Accounting System**
- * **Productivity Enhancement Program**
- * **Facility Planning**
- * **Process Improvement**
- * **Database Development**

Cost Accounting System

- * **Determines hospital cost of a procedure or service**
- * **Responsible for:**
 - ❖ **Variable Labor Standards**
 - ❖ **Variable Supply Costs**
 - ❖ **Job Code Splits**



Productivity Enhancement Program

- * Develop and revise existing labor standards**
- * Determine variable and fixed activities**
- * Calculate thresholds**
- * Establish staffing levels**
- * Develop model (Excel, Access)**
- * Monitor productivity continuously**

Facility Planning

- * **Liaison with Planning department**
- * **Collect and evaluate data**
- * **Assist in layout design**
- * **Develop simulation models (MedModel)**



Process Improvement

- * **Observe and evaluate current process:**
 - ❖ **Flow Charting**
 - ❖ **Interviewing Staff/Managers**
 - ❖ **Statistical Analysis**
- * **Determine improvement possibilities**
- * **Provide recommendations**
- * **Act as a facilitator on PI teams**



Database Development

- * **Provides organization within the department**
- * **Reduces paperwork**
- * **Generates reports**

Questions

