

**The CPT Code of Hammurabai**  
**or**  
**the more things change...**

**Jamie Newman, M.D., MHA**

**Hospital Internal Medicine**

**Mayo Clinic Rochester**

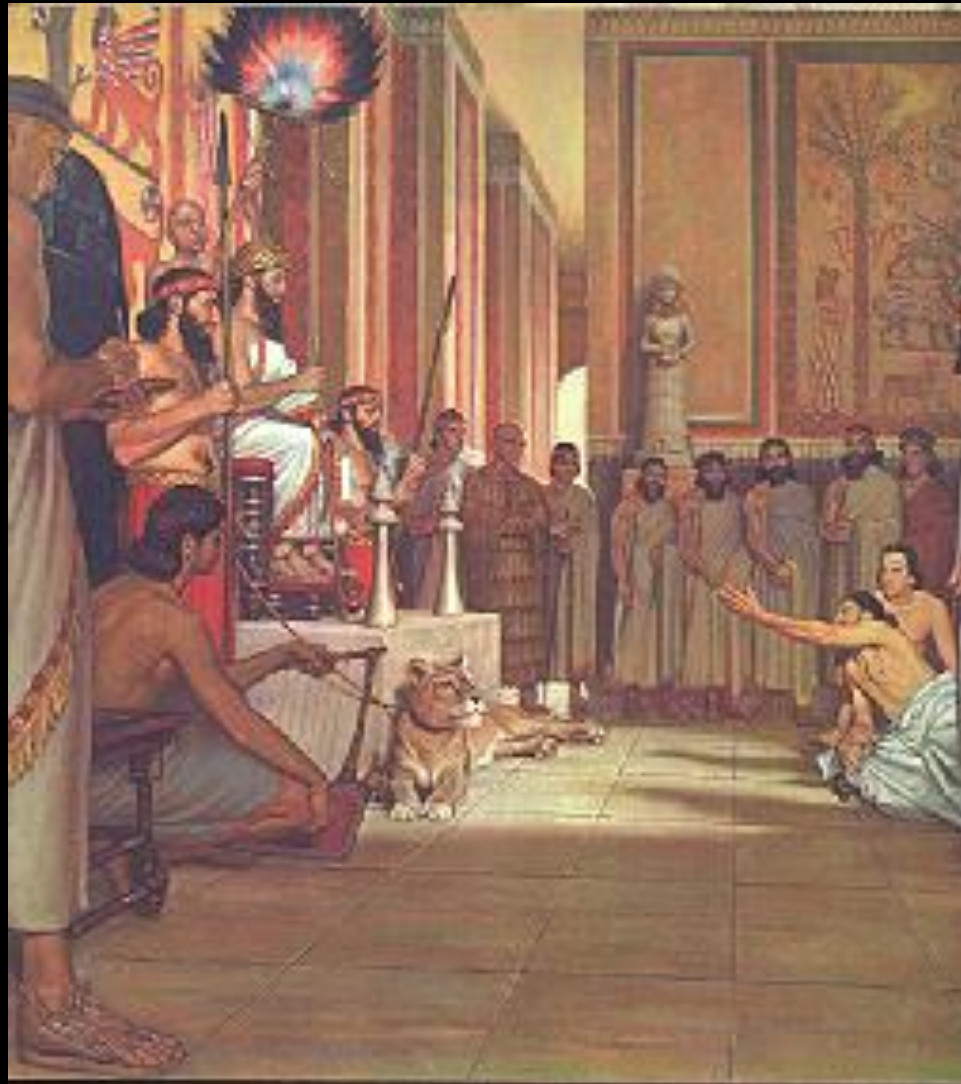
**@DrJamieNewman**

**Newman.James@Mayo.edu**

How the past informs the present

# The Code of Hammurabi

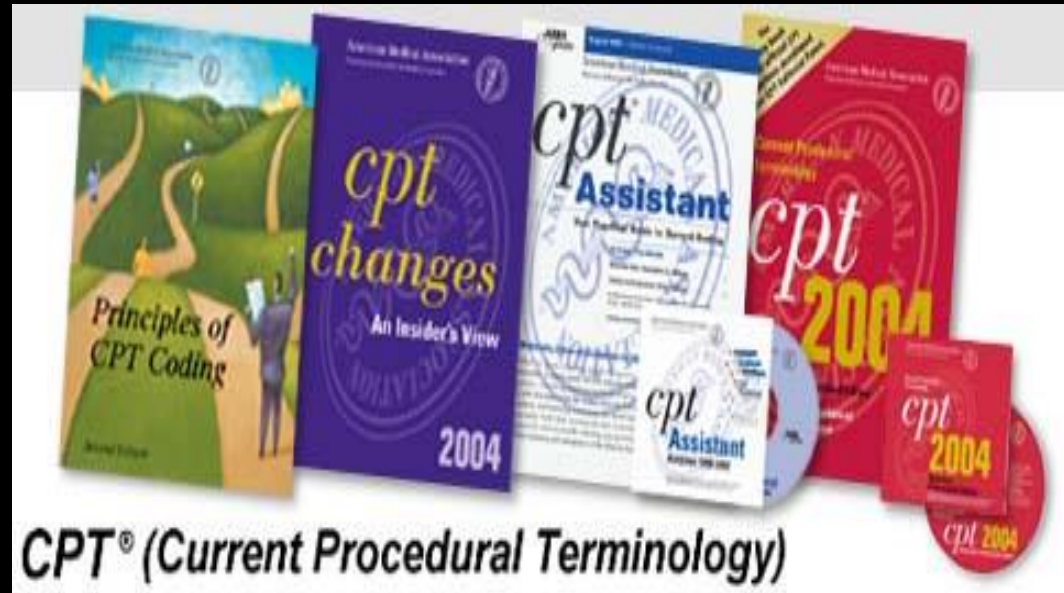
18<sup>th</sup> Century B.C.





## Code of Hammurabai

Handed down by  
Shamash God of Justice  
18th Century B.C.



**CPT® (Current Procedural Terminology)**

## Code of CPT

Handed down from AMA  
Twentieth Century A.D.

# Code of Hammurabai cont.

Fees and Punishment based on patients' caste

nobleman      freeman      slave

<b>Successful operations</b>	<b>Awelum</b>	<b>Mushkenum</b>	<b>Wardum</b>
Setting bone or mending sinew	5 shekels	3 shekels	2 shekels
General operation	10 shekels	5 shekels	2 shekels
Operation on eye	10 shekels	5 shekels	2 shekels
<b>Unsuccessful operations</b>			
Setting bone or mending sinew	—	—	—
General operation	loss of hand	—	slave for slave
Operation on eye	loss of hand	—	slave's price

A few comments about  
Malpractice...



2003

2003

2003

2003

2003

  
**Gevrey-Chambertin**  
1<sup>er</sup> Cru - Les Champeneaux  
APPELLATION GEVREY-CHAMBERTIN 1<sup>er</sup> CRU CONTRÔLÉE  
MIS EN BOUTEILLE PAR  
**DOMAINE DENIS MORTET**  
UNION DES VITICULTEURS À GEVREY-CHAMBERTIN (CÔTE D'OR) FRANCE

  
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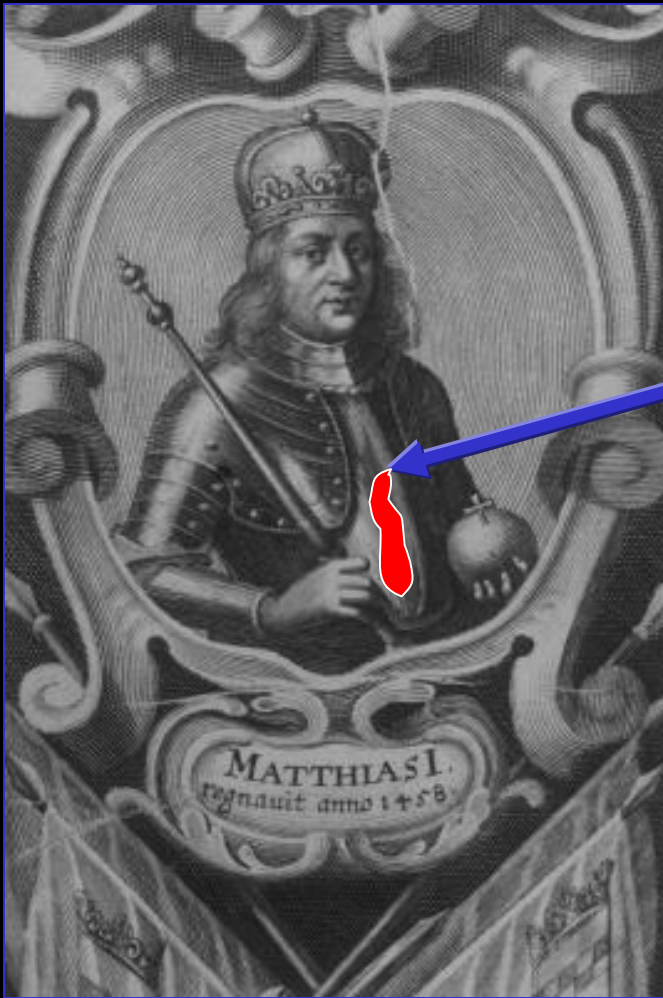
# The Visigothic Code

Spain 7th century



- If noble injured ...  
100 solidi fee
- If that noble dies physician handed over to the family to be dealt with as they pleased...  
slavery or death

# King Mathias of Hungary



- In 1464 King Mathias said whomever cured him of his arrow wound would be rewarded, but failure would be rewarded with death



# Malpractice in America

- 1840 's
- Duty,
- Breach of Duty,
- Causation
- Injury
- malpractice insurance
- contingent fees
- citizen juries
- Tort Law



# Florida and Malpractice

W.R. Palmer v. James M. Jackson, Jr, 1911

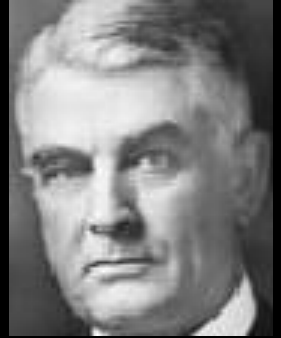
The earliest medical malpractice case in the State of Florida.

The defendant physician prevailed using a novel defense...  
statute of limitations had expired



# Dr William Mayo

Memorandum to surgeons and clinical section  
regarding letter writing July 1930



\*Do not prescribe for patients you have not seen,...such letter could be construed as practicing medicine by mail and might even lead to malpractice.

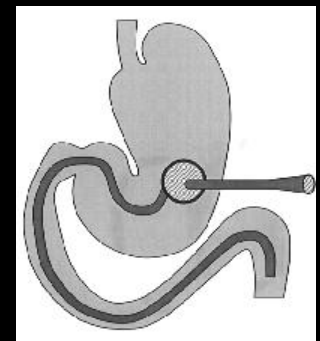
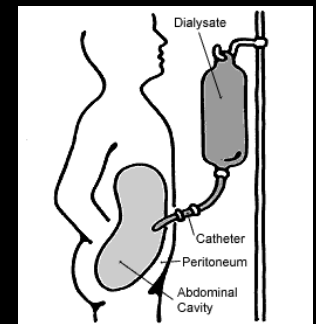
\*If you want to call a man a liar and a thief, do not write him...tell him in person, but make sure you can run faster than he can

# Malpractice as a Criminal Offense

Medicine , Death, and the Criminal Law

Annas GJ NEJM Aug. 24 1995

- Dr Gerald Einaugler used PD cath for Tube Feed.
- Inadvertent error was using tube for wrong purpose
- Willful negligence for delaying transfer for 10 hours lead to incarceration



# Documentation

## Hippocratic Clinical Cases

42 clinical case records,  
25 of which had fatal  
outcome





Primum Non Nocere

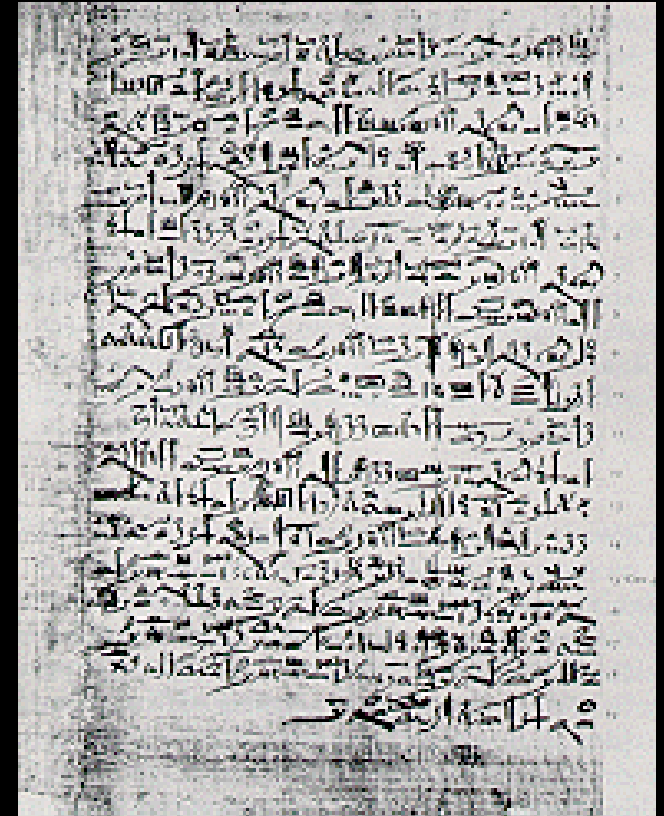
Sans Documenta

On the subject of  
documentation...

# Edwin Smith Papyrus

1600 B.C.

48 cases of clinical surgery,  
each with a standard arrangement  
of information, examination  
findings, semiology, diagnosis,  
prognosis and treatment.



# Homer's Iliad from the archives of Oxyrhynchus



## Iliad War Wounds

<b>147 Total Wounds</b>	<b>77.6 % mortality</b>
<b>106 Spear wounds</b>	<b>80% mortality</b>
<b>17 sword thrusts</b>	<b>100% mortality</b>
<b>12 arrow wounds</b>	<b>42% mortality</b>
<b>12 sling wounds</b>	<b>66 2/3% mortality</b>

Of Fatal Cases- Head-31 Neck 13 Arm -10

Leg 11 Chest 67 Note none to abdomen

Froelich- Die Militarmedicin Homers 1879

# Mayo Clinic and the Dossier

- Henry Plummer, M.D., introduces the dossier concept of medical records, wherein all data, both inpatient and outpatient, about a specific patient are contained in a single file linked to a unique Mayo Clinic identification number and stored in a central repository.

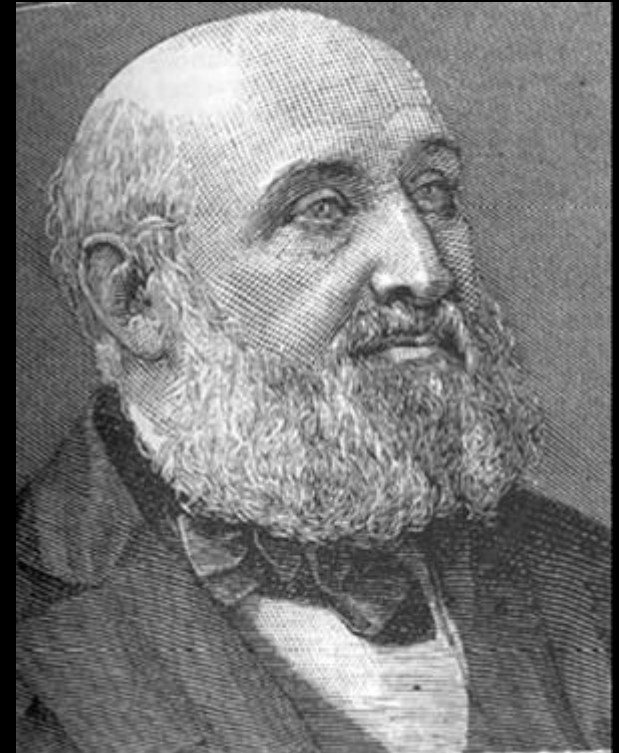
July 19, 1907 First Patient registration number assigned, 5000 registered by end of year. Some staff resistance to “red tape”



# William Farr (1807-1883)

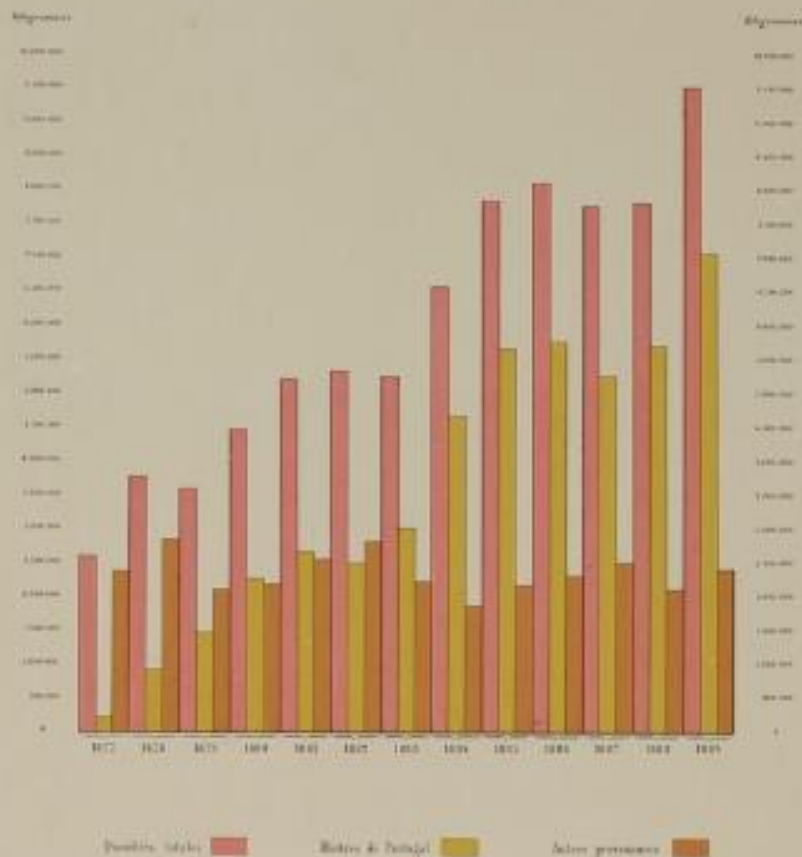
- General Register Office of England and Wales
- First Medical Statistician 1837

“Each disease has, in many instances, been denoted by three or four terms, and each term has been applied to as many different diseases: vague, inconvenient names have been employed, or complications have been registered instead of primary diseases.”



### Quantités d'Huîtres introduites dans Paris de 1877 à 1899

*Tableau de vue pour les années 1877-1899*



### MOUVEMENT DES ABATTOIRS

Nombre par espèce et par abattoir, des animaux abattus pendant l'année 1899



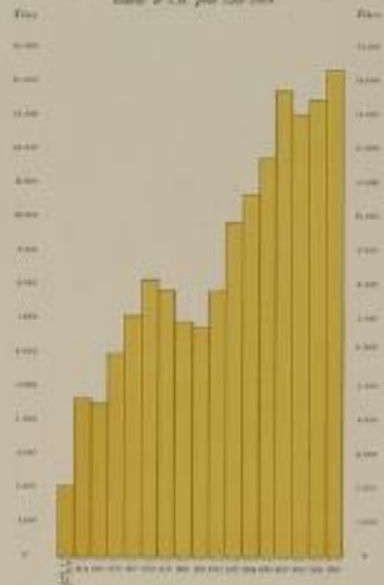
#### LÉGENDE

Le mouvement des abattoirs se traduit par le nombre de ces bêtes :  
 - Le nombre total, qui a le caractère de moyen, exprime le nombre total des animaux introduits pendant l'année, et leur répartition entre les quatre abattoirs.  
 - Quant au mouvement proprement dit, il se traduit par le nombre de bêtes abattues, et indique par sa grandeur le rapport de ce nombre au nombre de bêtes introduites pendant l'année.  
 Source : Rapport sur les abattoirs de Paris en 1899 (page 77 et suivantes).



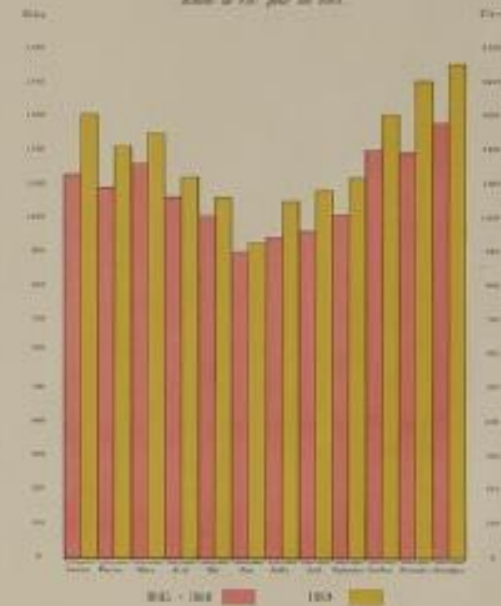
#### Nombre annuel des abattoirs de Grenelle, Anse et Mairie à l'abattoir de Villejuif, du mois d'Avril 1872 au 21 Décembre 1893

*Tableau de vue pour ces bêtes*



#### Nombre moyen mensuel des abattoirs de Grenelle, Anse et Mairie à l'abattoir de Villejuif de 1885 à 1894, comparés aux nombres correspondants de 1893

*Tableau de vue pour ces bêtes*



# W61.33 Pecked by a Chicken







That is an  
Udder lie!

W55.21

**BITTEN BY A COW**

**I DON'T ALWAYS GET  
SUCKED INTO A JET ENGINE**



**BUT WHEN I DO, I USE  
ICD-10 CODE: V97.33XD**

# True Fact?

- Bitten by a tiger T26.78XV
- Armadillo Exposure A33.43YZ
- Struck by and Orca- W56.22XA
- Contact with a Macaw W61.19XS
- Pedestrian on roller skates injured in a collision with three-wheeled motor vehicle V02.91XA
- Drowning and submersion due to jumping from burning kayak V90.26XS
- Somnolence due to conference attendance  
*ZZZ.ZZZ.ZZZ*

# Red's not real...

- Bitten by a tiger T26.78XV
- Armadillo Exposure A33.43YZ
- Struck by and Orca- W56.22XA
- Contact with a Macaw W61.19XS
- Pedestrian on roller skates injured in a collision with three-wheeled motor vehicle V02.91XA
- Drowning and submersion due to jumping from burning kayak V90.26XS
- Somnolence due to conference attendance ZZZ.ZZZ.ZZZ

# ICD-10 find your code..

**CMS.gov**

Centers for Medicare & Medicaid Services

 Share  Help  Print  Close Window

## ICD-10 Code Lookup

Enter a Code or keyword to conduct your search for ICD-10 Codes. After searching, select an ICD-10 Code link from the results table to populate the corresponding text box and close the pop-up window.

Enter ICD-10 description keyword(s):

Search

<https://www.cms.gov/medicare-coverage-database/staticpages/icd-10-code-lookup.aspx?>

# Yup, these codes are real

## ICD-10 Code Lookup

Enter a Code or keyword to conduct your search for ICD-10 Codes. After searching, select an ICD-10 Code link in the corresponding text box and close the pop-up window.

**Enter ICD-10 description keyword(s):**

ICD-10 CODE	ICD-10 CODE DESCRIPTION
<a href="#">W61.32XA</a>	Struck by chicken, initial encounter
<a href="#">W61.32XD</a>	Struck by chicken, subsequent encounter
<a href="#">W61.32XS</a>	Struck by chicken, sequela
<a href="#">W61.33XA</a>	Pecked by chicken, initial encounter
<a href="#">W61.33XD</a>	Pecked by chicken, subsequent encounter
<a href="#">W61.33XS</a>	Pecked by chicken, sequela
<a href="#">W61.39XA</a>	Other contact with chicken, initial encounter
<a href="#">W61.39XD</a>	Other contact with chicken, subsequent encounter
<a href="#">W61.39XS</a>	Other contact with chicken, sequela
<a href="#">Y92.72</a>	Chicken coop as the place of occurrence of the external cause

# On Admissions

# Historical Perspective

London 1536

**T**he hve way to the  
Spyttell hous.



**T**Copland and the pogter.

**T**he bo so hath lust, o; Wylleau his thyr ft  
And Wyl fynd, no better way no; shyft  
Come this hve way, here to seke some rest  
fo; it is ozdepynd for eche vntulyf gest.

Forsoth yea/we do all suche  
folke in take  
That do aske lodgyng for our  
lordes sake  
And in dede it is our  
custome and vse  
Somtyme to take in/and  
some to refuse.



## Accepted

- Old people
- Poore women in childbed
- Men sore wounded by great Vyolence
- Eaten with pokes and pestylence
- Honest foulks in great poverty
- Maimed soudyours

## Denied

- Mylchers
- Hedge Creepers
- Vagabonds

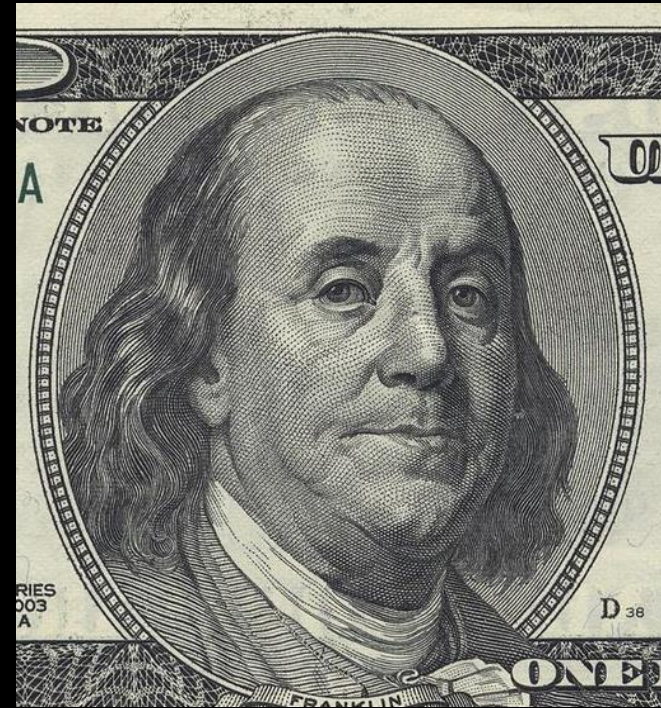
### **The hye way to the Spyttell hous.**



**Copland and the pogter.**

**W**e ho so hath lust, or wyll leaue his chyft  
And wyll fynd, no better way no; shyft  
Come this hye way, here to seke some rest  
For it is ordeyned for eche vntulyf gest.

# The Pennsylvania Hospital 1752



Rules and Regulations- Credentialing, admission guidelines and of course, fund raising

# Utilization Data

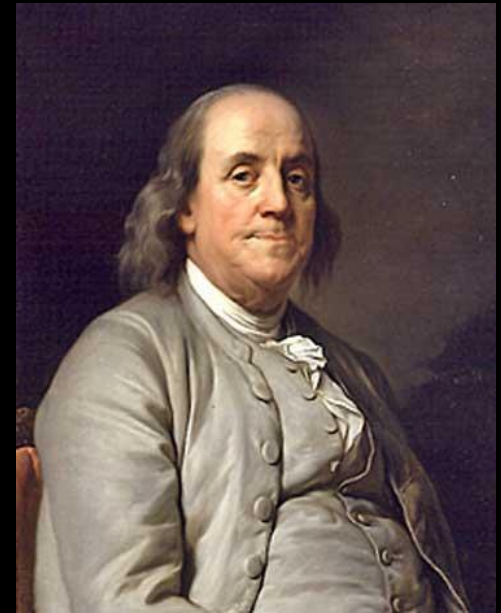
*ABSTRACT of Cases admitted into the Pennsylvania Hospital, from the Eleventh of the Second Month, 1752, to the Twenty-seventh of the Fourth Month, 1754.*

	Admitted.	Cured.	Relieved.	Irregular Behav. your.	Incurable.	Taken away by their Friends.	Dead.	Remaining
<b>A</b> GUES	1							
Cancer,	1							
Colliquative Purgings,	1	1						
Consumption,	1							
Contusion,	1	1						
Cough, of long standing,	1	1						
Dropsies,	1	4				1	1	
Empyema,	1	1						
Eyes disordered,	1	1						
Falling Sickness,	1	1	1					
Fever,	1	1						
Fistula in <i>Ano</i> ,	1	1						
<i>in Perinae</i> ,	1	1						
Flux,	1	1	1		1	1	1	
Gutta Serena,	1	1						
Hair Lip,	1	1		1		1		1
Hypochondriac Melancholy,	1	1	1	1		1		1
Hypopyon,	1	1						
Lanacy,	1	1		1	1	1		1
Mortification,	1	1		1	1	1		1
Protophas <i>Ani</i> ,	1	1						
<i>Uteri</i> ,	1	1						
Palsy,	1	1						
of the Bladder,	1	1			1	1	1	1
Rheumatism and Sciatica,	6	4	1		1	1	1	1
Scurvick and Scrophulous Diseases,	9	6	1	1	1	1	1	1
Ulcers, with Caries, &c.	17	11	4	1	1	1	1	1
Vertigo,	1	1						
Uterine Disorder,	1	1						
Wen,	1	1						
Wounded,	1	1						
In all,	117	60	21	5	7	10	10	16

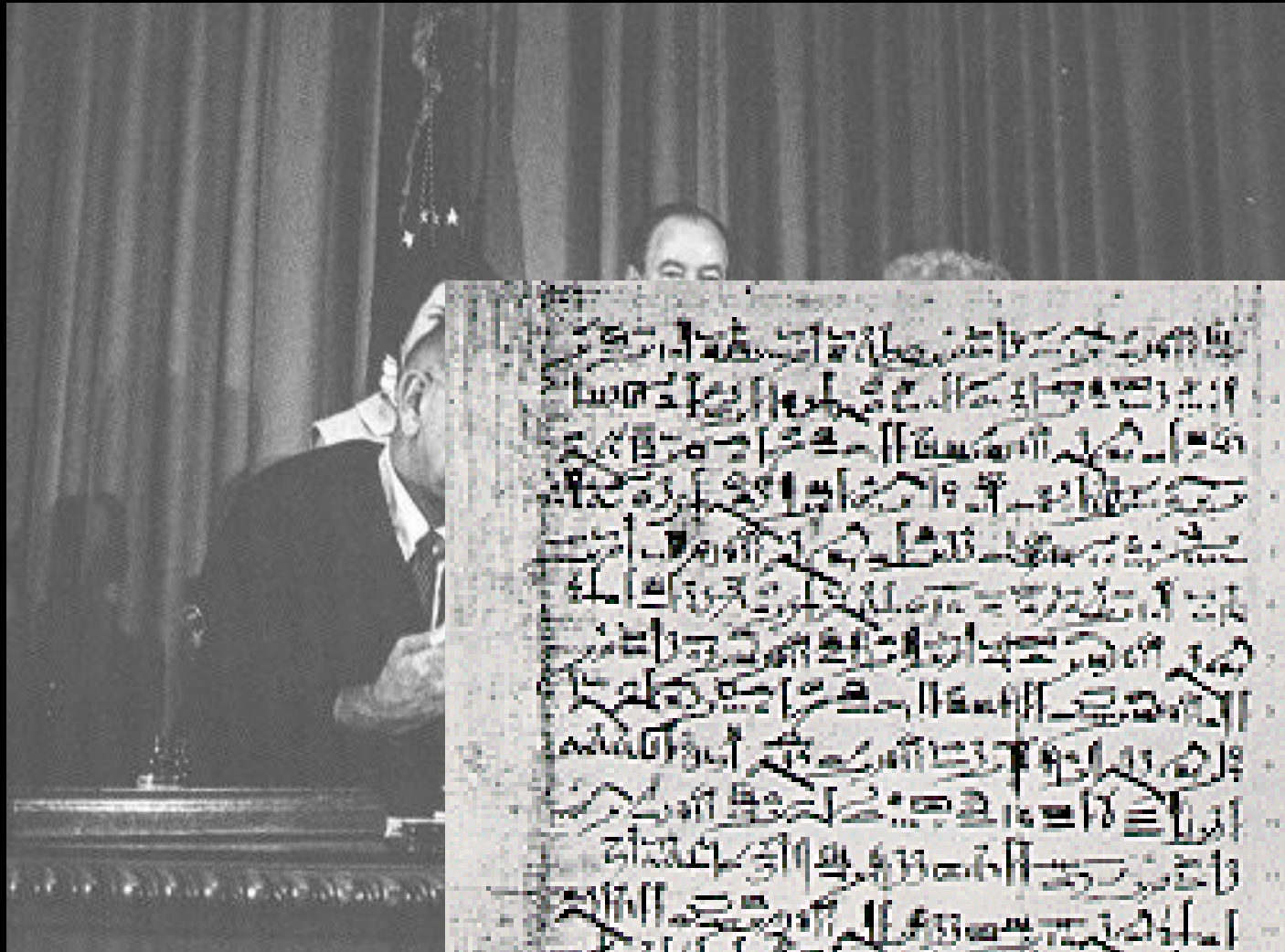
Admitted  
 Cured  
 Relieved  
 Irreg.  
 Behaviour  
 Incurable  
 Taken by  
 family  
 Dead

# The Pennsylvania Hospital- Admit Criteria

- Patient must be deemed “curable”  
(except Lunatics)
- Must require the particular conveniences  
hospital (severity of illness)
- No infectious distempers (ie smallpox or itch) unless proper  
apartments available (isolation beds)
- Women may not bring their children
- Must be resident of the city
- Out of town patients- pre-approval by managers
- Security deposit to cover discharge costs or burial



# Washington D.C. 1965



# IPPS 2014

“Day is night, and night is day”



# The First IPPS

Inpatient Prospective Payment System

1983

- Established the DRG system

# Why New Requirements?

- Reduce long observation stays
  - Patients hate OBS
  - Abuse of OBS
    - Gaming the payment system
    - Avoiding readmission penalty
- Reduce one day inpatient stays
  - Deals with abuse especially in surgery
  - Audit focus



# Inpatient Is A Three Legged Stool (Until Januray 2015....)

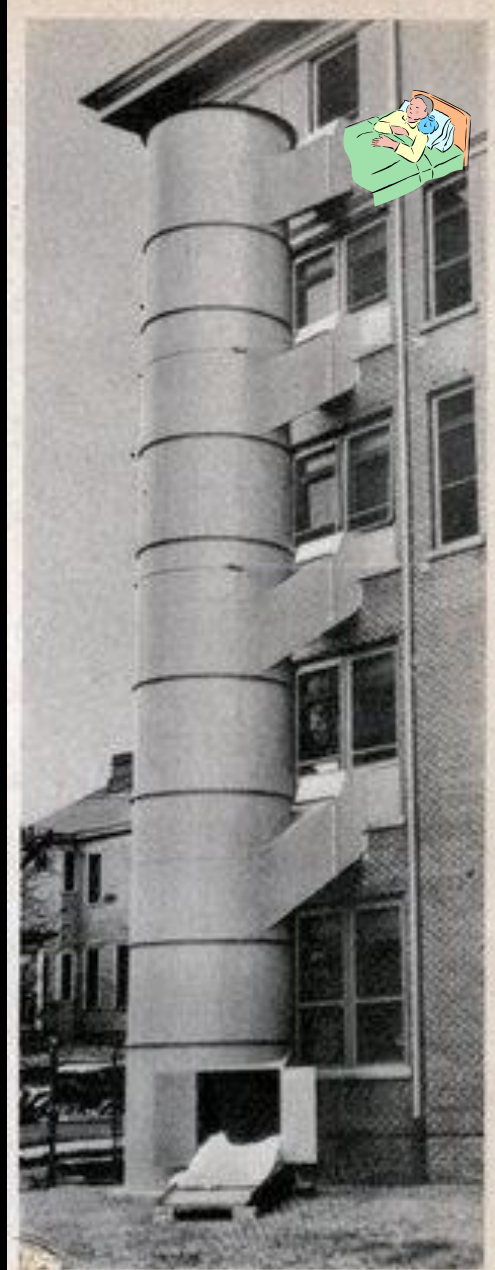
- Medical Necessity
- Admit Order
- Certification



# Hospital Safety

# What is Safe?

Freedom from  
accidental  
or preventable injury

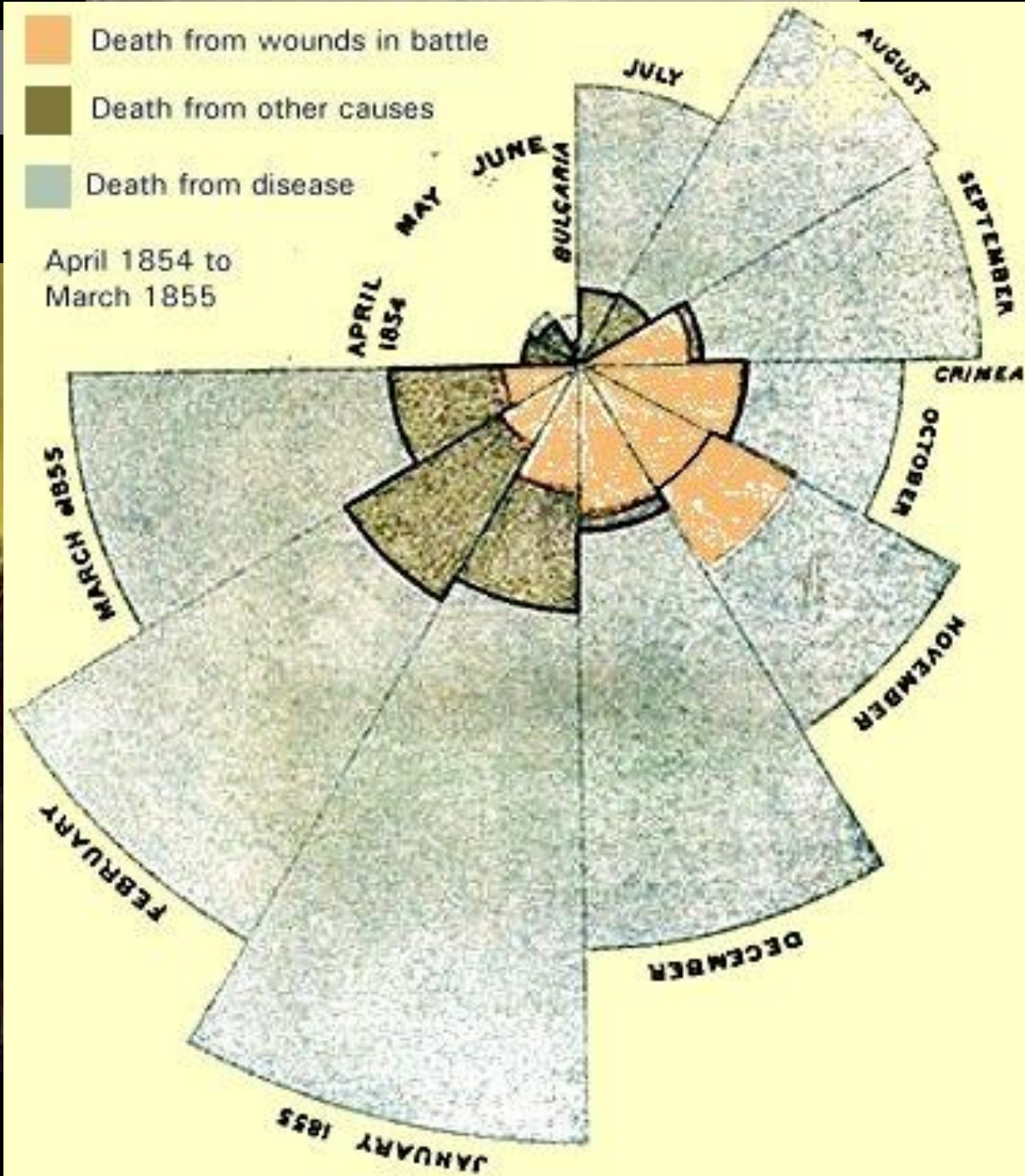


**Hospital Boasts Safety Chute**

The Piedmont Hospital in Atlanta, Ga., is equipped with a spiral chute by means of which bed-ridden patients can reach the ground quickly in the event of fire. On each floor of the hospital there is an entrance to the chute and in an emergency the patients are slid down it on a mattress.

- Death from wounds in battle
- Death from other causes
- Death from disease

April 1854 to  
March 1855





*The British Cavalry* *The French Cavalry*  
**BATTLE OF WATERLOO.**





What would you do if 30% of all your patients died?



FIGURE 70.—The Allgemeines Krankenhaus (general hospital), Vienna, affiliated with the University of Vienna Medical School.

Ignaz  
Semmelwies

1857







Die Aetiologie, der Begriff

und

2633

die Prophylaxis

des

**Kindbettfiebers.**

Von

**Ignaz Philipp Semmelweis,**

Dr. der Medicin und Chirurgie, Magister der Geburtshilfe, o. ö. Professor der theoretischen  
und practischen Geburtshilfe an der kön. ung. Universität zu Pest  
etc. etc.



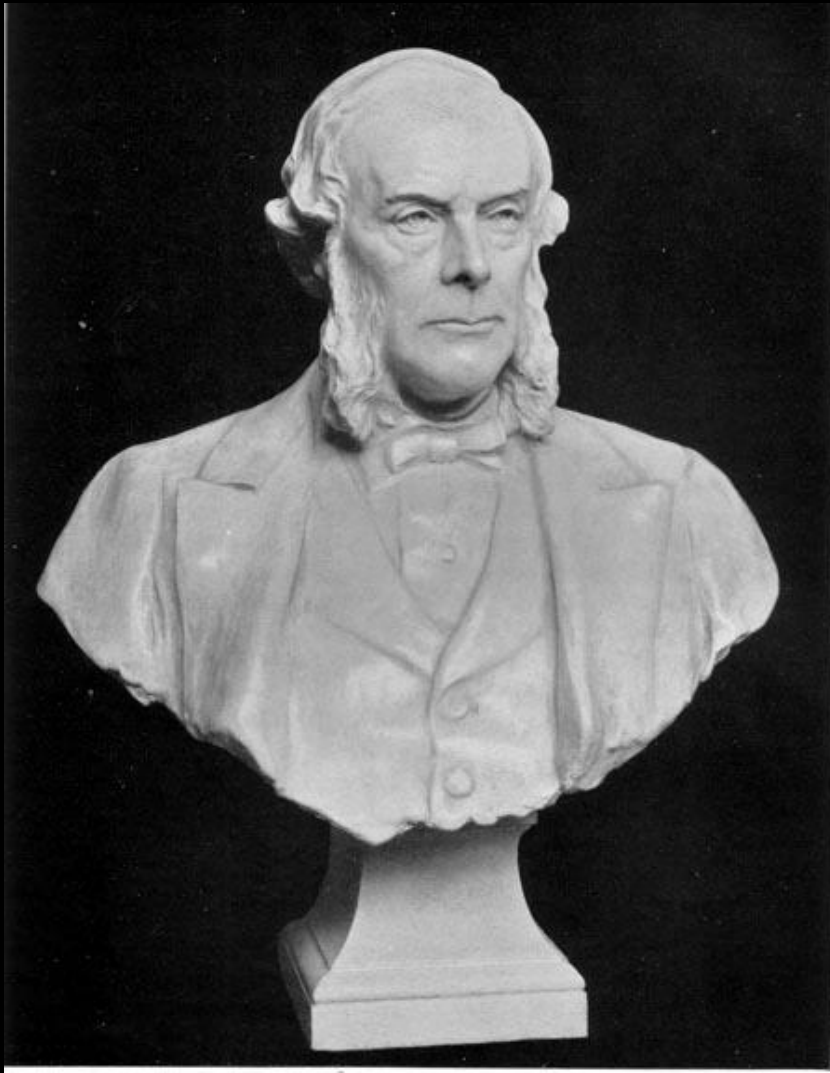
Pest, Wien und Leipzig.

C. A. Hartleben's Verlags-Expedition.

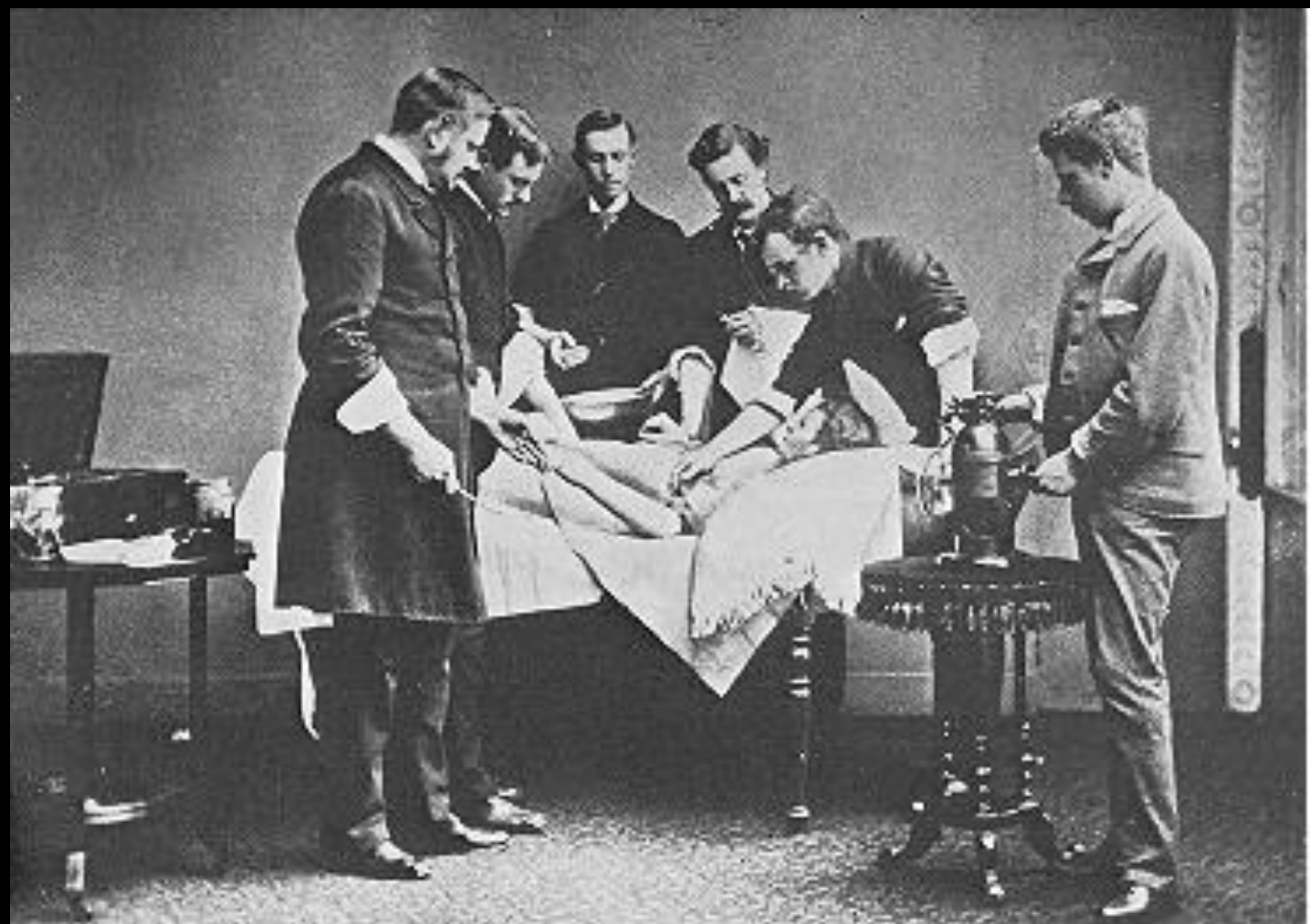
1861.

# Ignaz Semmelweis 1818-1865





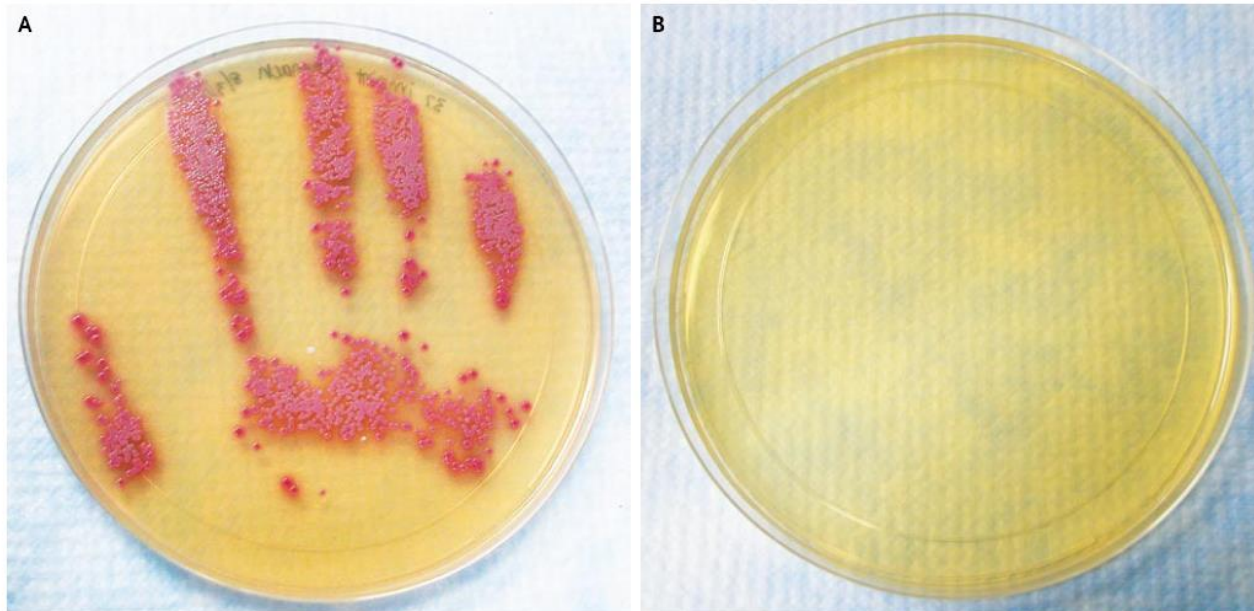
**Joseph Lord Lister (1827-1912),**





**Carbolie Acid Sprayer, 1882**

## The Hands Give It Away



N ENGL J MED 360;3 NEJM.ORG JANUARY 15, 2009

Curtis J. Donskey, M.D.  
Brittany C. Eckstein, B.S.

Cleveland Veterans Affairs Medical Center  
Cleveland, OH 44106



[-] DRUG SCRNS/TOXICOLOGY			
<input type="checkbox"/>	Volatile Screen,S	.	16-Dec-11
<input type="checkbox"/>	Methanol, S	.	04-Sep-12
<input type="checkbox"/>	Ethanol, S	⚠ 249	04-Sep-12
<input type="checkbox"/>	Acetone, S	⚠ 20	04-Sep-12
<input type="checkbox"/>	Isopropanol, S	⚠ 15	04-Sep-12
<input type="checkbox"/>	Ethanol, P/S	⚠ 313	21-Sep-12
<input type="checkbox"/>	Ethanol, P	⚠ 350	15-Sep-11
<input type="checkbox"/>	Ethylene Glycol(S)	.	04-Sep-12

Day 3  
Hospitalization





# License and Credentials

From Persia to Philadelphia

# The Vendidad

- Persian Book of Law
- cult of Zoroaster 1000 B.C.
- Competence of candidate based on practice on 3 heretics
- if unfit then further practice related deaths were homicide



French Postcard

# Medieval Credentialing

- Roger of Sicily 1140-Practice without a license and go to prison, lose all possessions
- Grandson Frederick 1224-required 3 years logic, medicine and surgery, 5 years of treating the poor for free. Subsequently all patients seen for a set fee



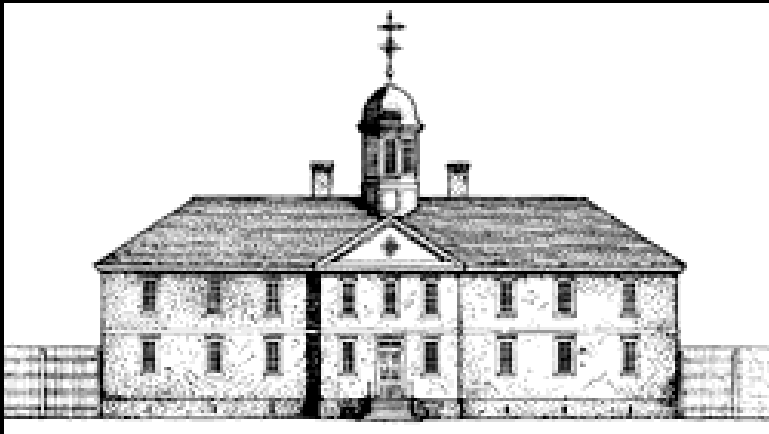
Roger's Coronation Mantle

# Henry VIII



English Act of 1511 No practice without an exam and approval of 4 physicians

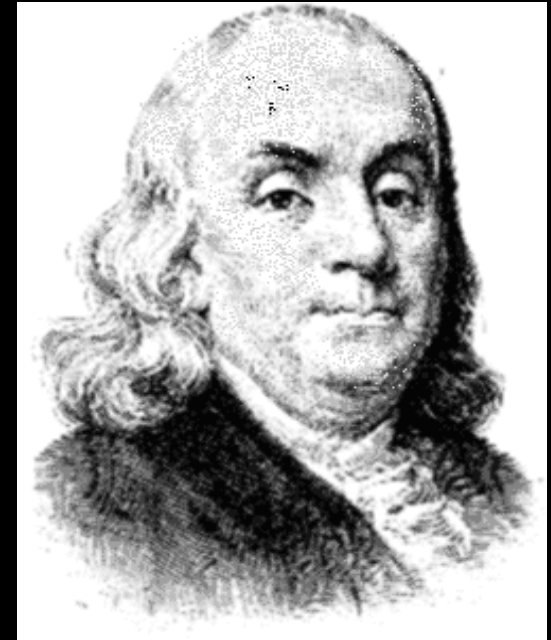
# Colonial Virginia



- Candidate to practice had to be judged by the “Wisest and Gravest” as competent

Hospital- Colonial Virginia

# The Pennsylvania Hospital 1752



Applying practitioners must be 27 years old, and have served an apprenticeship in Philadelphia, have studied Physick or Surgery for 7 years or more and undergone an exam by 6 hospital practitioners. Visiting practitioners must reside in the city for 3 years before applying and then undergo the same criteria

# Hospital Committees

- French P + T  
committee 1821



- Maryland Medical Society 1799-
- disorderly conduct fines





# Practice Guidelines

# Egyptian Clinical Pathways

The Hermetic Books of Thoth- If a patients death resulted from deviation from the set line of treatment is is regarded as a capital crime



Aristotle notes they could alter care plan on fourth day if no improvement

# Rembrandt's Aristotle Contemplating the Bust of Homer

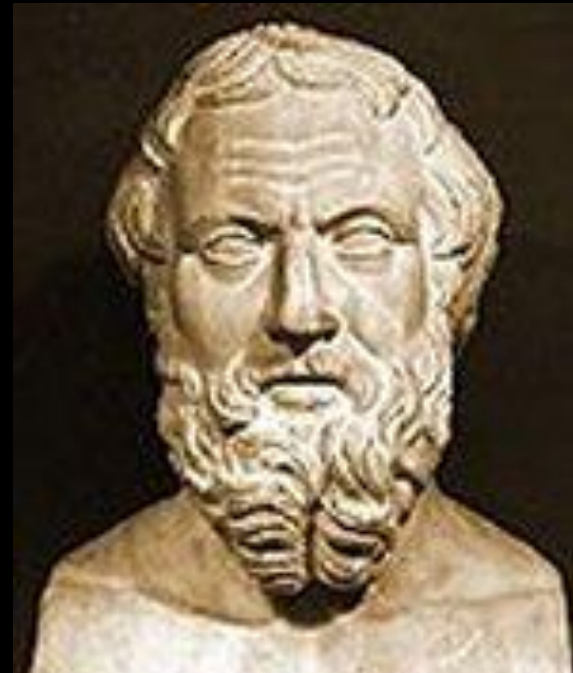


# Specialization

# Ebers Papyrus



# Herodotus



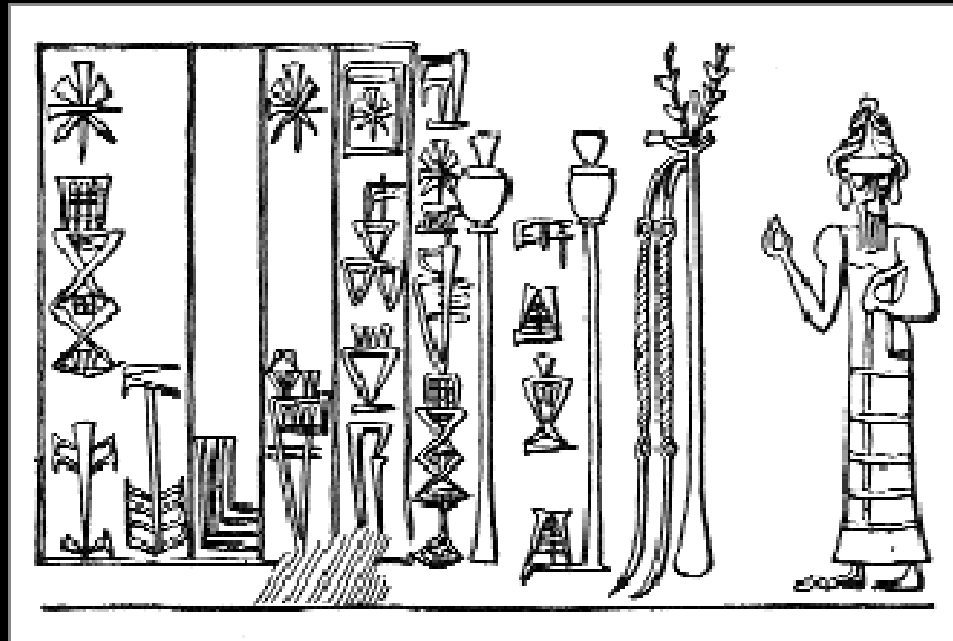
The land is filled with physicians, one for the hand one for the eye ....

Given one well trained mind of  
the highest type, He will do better  
work for 100 people than 10  
specialists

Will Mayo 1921

A good specialist needs to  
advertise...

# Babylonian Business Card



O Edinmagi, servant of the god Girra, who helps mothers in childhood, Ur-Lugaledina the physician is your servant



That's so Byzantine...



# Pantokrator Hospital

Founded 1136 in Constantinople by  
Emperor John II Komnenos

Lazaretto and gerontochium

50 beds in 5 sections for -wounds and  
fractures (10), eyes and stomach (8),  
women (12), two mens wards (10 each)

16 physicians and 2 surgeons with  
(one female physician!).

3300 cal daily diet-bread, veggies and 2  
onion heads



# The Mansuri Hospital in Cairo, completed in 1248 AD



Complex of Mansur Qalaun

"The hospital shall keep all patients, men and women, until they are completely recovered. All costs are to be borne by the hospital, whether they are residents or foreigners, strong or weak, rich or poor, employed or unemployed, blind or sighted, physically or mentally ill, learned or illiterate..."

So nothing has changed;  
but everything has...

- Malpractice
- Documentation
- Credentialing
- Utilization Review
- Fundraising

@DrJamieNewman

Newman.James@mayo.edu