

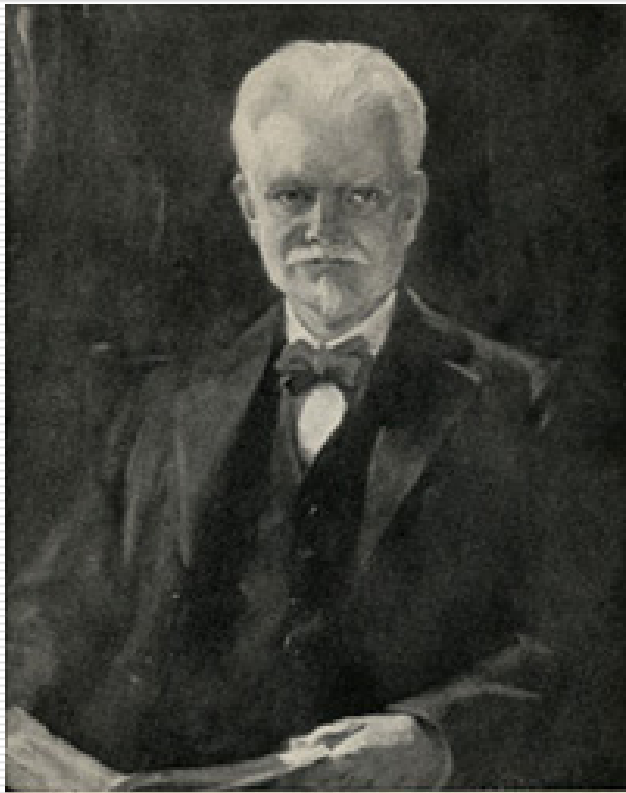
Only useful when
shared: HIPAA and
history

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Outline

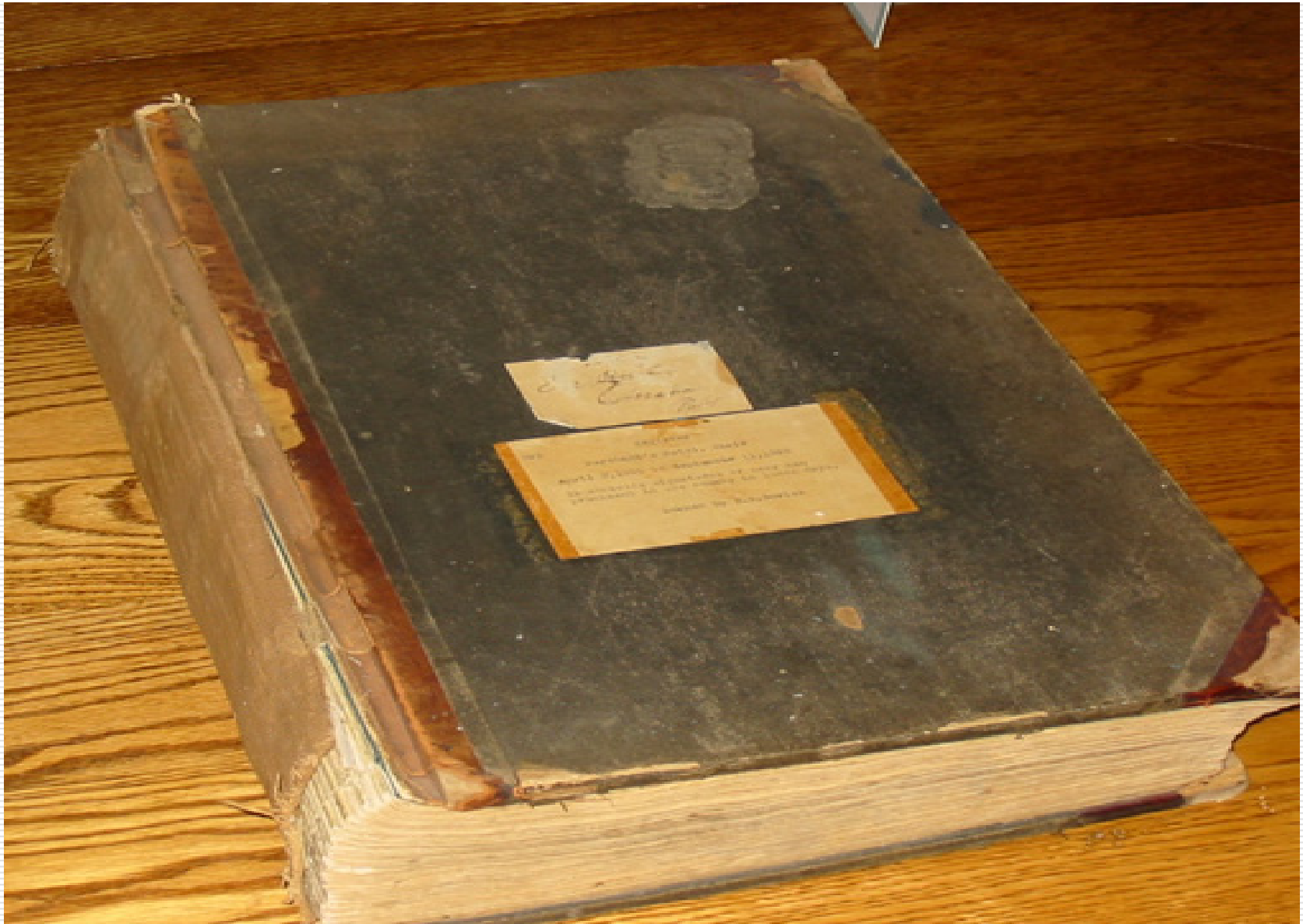
- Health Information Portability and Accountability Act (April, 2003)
 - Problematic example
 - Results of document study
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The problem



WILLIAM SNOW MILLER, M.D., D.D.
—from the painting by Abrahamson

- ❑ William Snow Miller, M.D.
 - ❑ 1895-1939
 - ❑ Author of *The Lung* (1937)
 - ❑ Founder of medical history at Wisconsin
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The problem

Page No. 81
 Supervisor's Dist. No. 62
 Enumeration Dist. No. 527

Mass A.—The Census Year begins June 1, 1880, and ends May 31, 1880.
 Mass B.—All persons must be included in the Enumeration who were living on the 1st day of June, 1880. No others will. Children BORN SINCE June 1, 1880, will be OMITTED. Members of Families who have DIED SINCE June 1, 1880, will be INCLUDED.
 Enumeration Dist. No. 527

SCHEDULE I.—Inhabitants in Shrewsbury, in the County of Worcester, State of Mass
 enumerated by me on the 25th day of June, 1880. Abel C. Perry

Dist.	No.	Name	Sex	Age	Color	Profession, Occupation, or Trade	Place of Birth			Naturalized	Date of Naturalization	Date of Arrival in U.S.	Date of Declaration of Intention	Date of Oath of Allegiance
							State	County	Town					
318	1	Wm. W. Nathan	M	39	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	37	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		John	M	7	W	School	Mass	Worcester	Shrewsbury					
		Anna	F	5	W	At School	Mass	Worcester	Shrewsbury					
		Thomas	M	3	W	At School	Mass	Worcester	Shrewsbury					
319	3	James Nathan	M	36	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	34	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		Lucy J.	F	7	W	At School	Mass	Worcester	Shrewsbury					
		Thomas	M	5	W	At School	Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
320	4	Lemuel Jones	M	26	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	24	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
321	5	Richard W. Perry	M	29	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	27	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		John	M	3	W	At School	Mass	Worcester	Shrewsbury					
322	6	Bates Daniel	M	25	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	23	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
323	7	James Perry	M	22	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	20	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
324	8	Franklin Perry	M	19	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	17	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
325	9	John Perry	M	17	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	15	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
326	10	William Perry	M	15	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	13	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
327	11	William Perry	M	13	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	11	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					
328	12	William Perry	M	11	W	Farmer	Mass	Worcester	Shrewsbury					
		Wife	F	9	W	Housewife	Mass	Worcester	Shrewsbury					
		Children					Mass	Worcester	Shrewsbury					
		William	M	3	W	At School	Mass	Worcester	Shrewsbury					

□ Nellie Freeman in the 1880 census for Shrewsbury, Massachusetts

Medical information

- “The most sensitive information about who and what we are” (Rindfleisch, 1991)
 - Competition of two goods:
 - Patient treatment
 - Patient privacy
 - No distinction between old and new under HIPAA
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18 data elements not to have

- Names
 - Elements of dates (except years) directly related to individual
 - Telephone, fax numbers
 - Geographic subdivisions
 - Email addresses
 - Social Security #s
 - Medical record #s
 - Health plan beneficiary #s
 - Account #s
 - Certificate/license #s
 - Vehicle identifiers/serial numbers, including license plates
-

18 data elements not to have

- ❑ Device identifiers and serial #s
 - ❑ URLs, IP address #s
 - ❑ Biometric identifiers
 - ❑ Full-face images
 - ❑ "Any other unique identifying number, characteristic or code"
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Document study

Document selection

- Broad spectrum, narrow focus:
 - Operating Room Notes
 - Describes surgical procedure
 - All generated through voice dictation
 - First clinical document type to be standardized (1918)
 - Coders examined 60 documents (1895-2001) for:
 - Persistency of elements
 - Frequency of elements
 - .. To develop data model describing core features
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Results

- 896 total elements (See Tables I-IV)
 - Halsted (oldest) → most unique elements (111)
 - Blalock's (middle) → least unique elements (16)
 - Average unique elements similar across collections (11-16.5)
 - 18 HIPAA-sensitive elements (Table V)
 - 54-66% of elements present would have to be redacted under HIPAA
 - Names, mostly
 - Dates
 - "Any other unique", etc.
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Five persistent elements

- Anesthesia type ⊘
 - Identifier ⊘
 - Operation Description
 - Operation Type ⊘
 - Patient Name ⊘
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