

HealthVis

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Stakeholders

Health Services needs* to use data!

But why are they not?

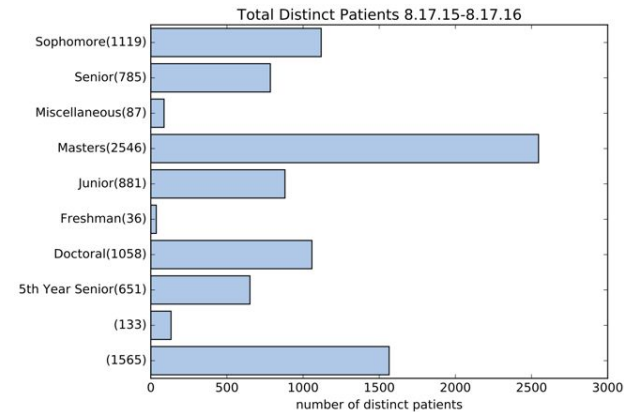
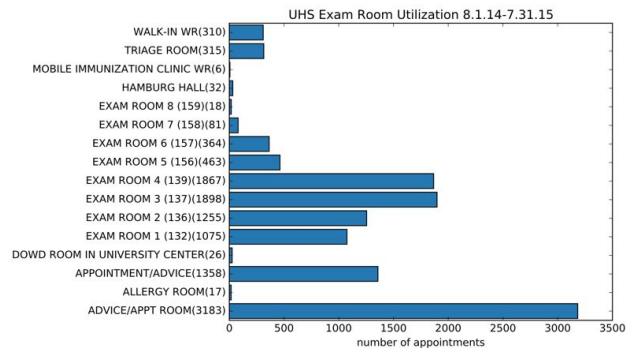
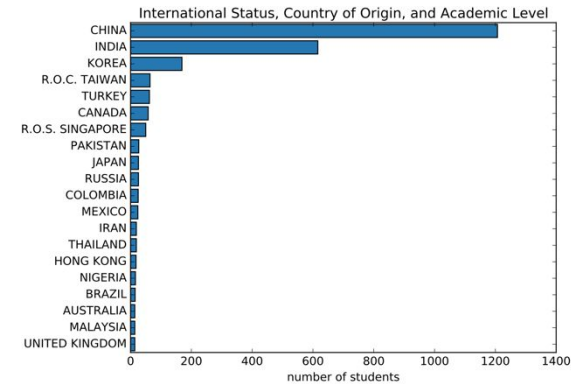
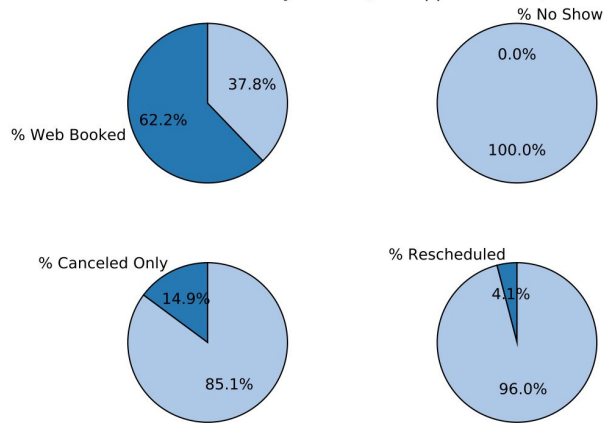
- Nobody has the job of analyzing their data
- The data is stored in a clunky software that runs on an old version of Windows
- There has been no initiative to explore the data

* and wants to

How can we help?

Make *using data* easy

ALLERGY INJECTION (222 appointments)



Automated Data Visualization!

Process

Records of appointments and visits

1100
1010
0101

are stored in

Point n Click



exports

Reports (csv)



which are inputted to



which produces



Visualizations

Our program

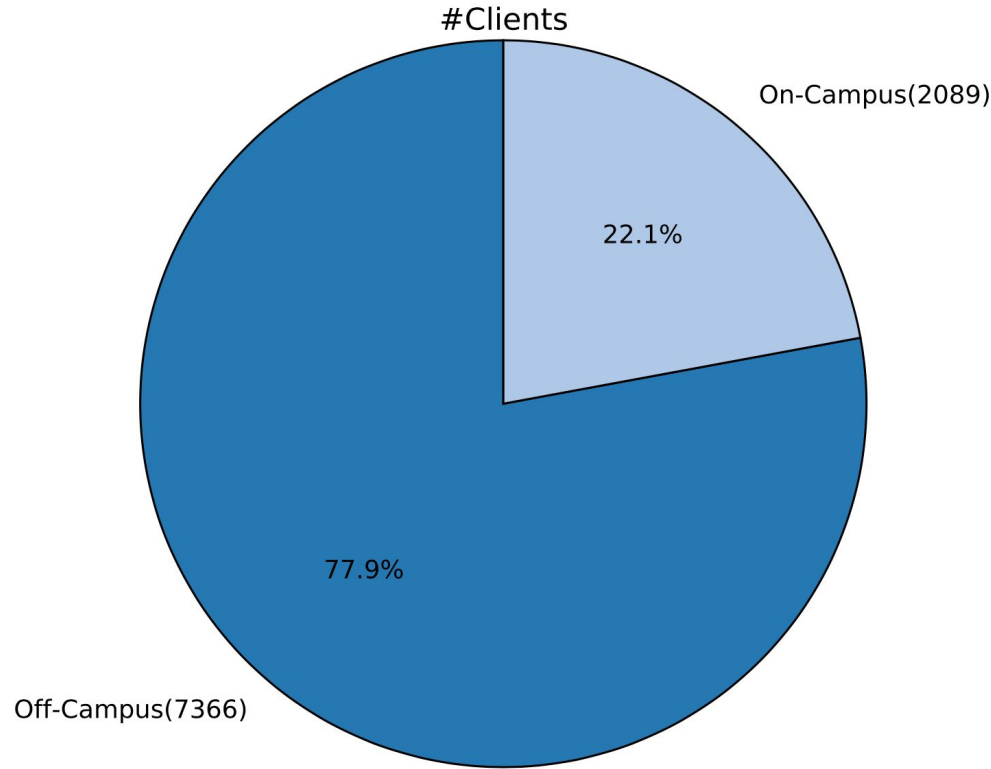
Here is what a report looks like

	A	B	C	D	E	F	G	H
	Department Name & Visit Type	Visit Type	# Appr'd	% Web Booked	% No Show	% Canceled Only	% Rescheduled	Avg # Days
2	CASE MANAGEMENT							
3	CASE MANAGEMENT	COORDINATED CARE FOLLOW UP	48	12.5%	0%	14.58%	4.17%	0
4	CASE MANAGEMENT	COORDINATED CARE INITIAL EVALUATION	103	6.8%	2.91%	9.71%	2.91%	0
5	CASE MANAGEMENT Total:		151	8.61%	1.99%	11.29%	3.31%	0
6	DERMATOLOGY							
7	DERMATOLOGY	DERMATOLOGY EXAM	40	95%	0%	15%	0%	4
8	DERMATOLOGY Total:		40	95%	0%	15%	0%	4
9	HEALTH EDUCATION-PROMOTION							
10	HEALTH EDUCATION-PROMOTION	GIV HP VISIT	85	79.87%	7.06%	9.41%	0%	4
11	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION ALCOHOL FU	18	16.67%	0%	11.11%	16.67%	5
12	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION ALCOHOL INTAKE	42	80.95%	4.76%	11.9%	2.38%	4
13	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION DRUG FU	2	50%	0%	0%	0%	1
14	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION DRUG INTAKE	15	80%	13.33%	13.33%	13.33%	5
15	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION SMOKING CESSATION FU	6	50%	16.67%	50%	0%	5
16	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION SMOKING CESSATION INTAKE	2	100%	0%	0%	0%	2
17	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION STRESS CONSULT	32	68.75%	12.5%	34.38%	12.5%	4
18	HEALTH EDUCATION-PROMOTION	HEALTH EDUCATION STRESS FU	4	50%	0%	75%	0%	9
19	HEALTH EDUCATION-PROMOTION Total:		206	70.87%	7.28%	16.5%	4.85%	4
20	MASSAGE							
21	MASSAGE	MASSAGE	196	95.92%	0.51%	30.61%	0%	5
22	MASSAGE Total:		196	95.92%	0.51%	30.61%	0%	5
23	NURSING							
24	NURSING	ALLERGY INJECTION	222	62.16%	0%	14.86%	4.05%	22
25	NURSING	HEPATITIS A VACCINATION	42	83.33%	0%	7.14%	9.52%	5
26	NURSING	HPV VACCINATION	287	84.32%	0.35%	15.68%	4.88%	6
27	NURSING	IMMUNIZATION TUBERCULOSIS TESTING	171	58.48%	0%	14.62%	8.19%	10
28	NURSING	INFLUENZA VACCINATION	6	0%	0%	16.67%	0%	0
29	NURSING	NURSE CONSULT	20	5%	5%	0%	10%	2
30	NURSING	NURSE-TRAVEL EXAM	42	2.38%	7.14%	2.38%	18.05%	2
31	NURSING	NURSING VISIT	258	48.06%	5.04%	25.58%	4.65%	5
32	NURSING	NURSING VISIT HIVST TESTING	151	60.83%	7.95%	19.21%	5.3%	11
33	NURSING	PHLEBOTOMY	74	21.62%	2.7%	12.16%	6.76%	4
34	NURSING	PHONE CONSULT	381	0%	0%	0.79%	0%	0
35	NURSING	TDAP VACCINATION	20	95%	0%	15%	0%	4
36	NURSING	WALK IN CONSULT	4953	0%	0.04%	1.45%	0%	0
37	NURSING Total:		6627	11.62%	0.51%	4.36%	1.15%	1
38	NUTRITION							
39	NUTRITION	NU ASSESSMENT	70	57.14%	10%	20%	15.71%	15
40	NUTRITION	NU BODY COMPOSITION/WEIGHT CHECK	17	58.82%	5.88%	17.65%	11.76%	9
41	NUTRITION	NU EATING DISORDERS ASSESSMENT	9	33.33%	11.11%	11.11%	11.11%	16
42	NUTRITION	NU EATING DISORDERS FOLLOW UP	8	50%	0%	37.5%	12.5%	18
43	NUTRITION	NU FOLLOW UP	36	30.77%	3.85%	26.92%	7.69%	18
44	NUTRITION Total:		130	50%	7.69%	21.54%	13.08%	15
45	OFFICE for INSURANCE							
46	OFFICE for INSURANCE	INSURANCE ISSUE VISIT	35	100%	0%	42.86%	0%	3
47	OFFICE for INSURANCE Total:		35	100%	0%	42.86%	0%	3
48	PRIMARY CARE							
49	PRIMARY CARE	DRIVERS PHYSICAL	375	73.33%	7.2%	38.8%	6.67%	26
50	PRIMARY CARE Total:		375	73.33%	7.2%	38.8%	6.67%	26

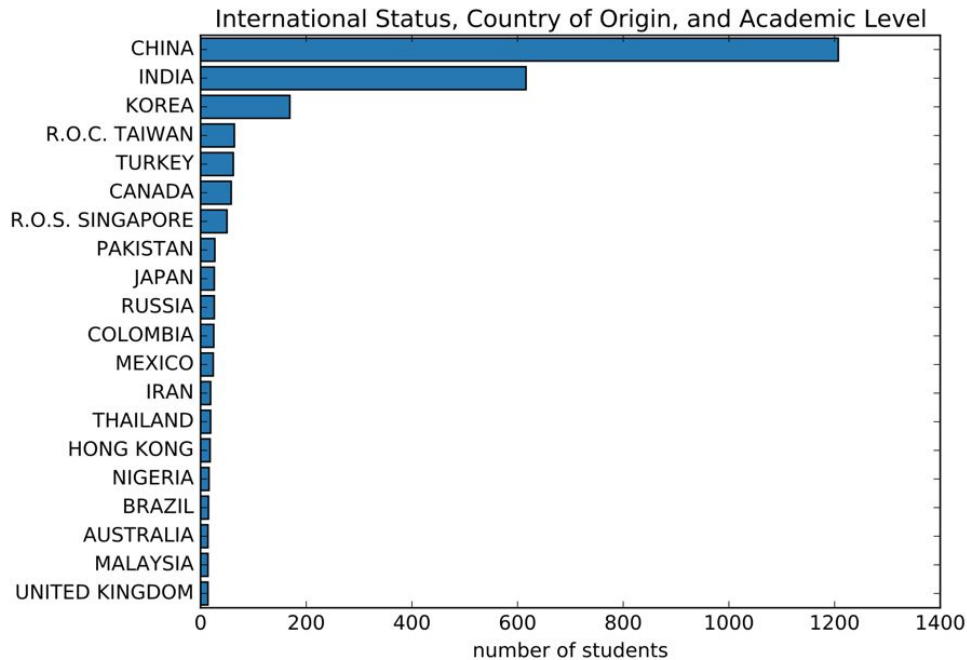
Population	Patient Count	Academic Level
Total Distinct Patients	1565	
Total Distinct Patients	133	
Total Distinct Patients	651	5th Year Senior
Total Distinct Patients	1058	Doctoral
Total Distinct Patients	36	Freshman
Total Distinct Patients	881	Junior
Total Distinct Patients	2546	Masters
Total Distinct Patients	87	Miscellaneous
Total Distinct Patients	785	Senior
Total Distinct Patients	1119	Sophomore

Demo

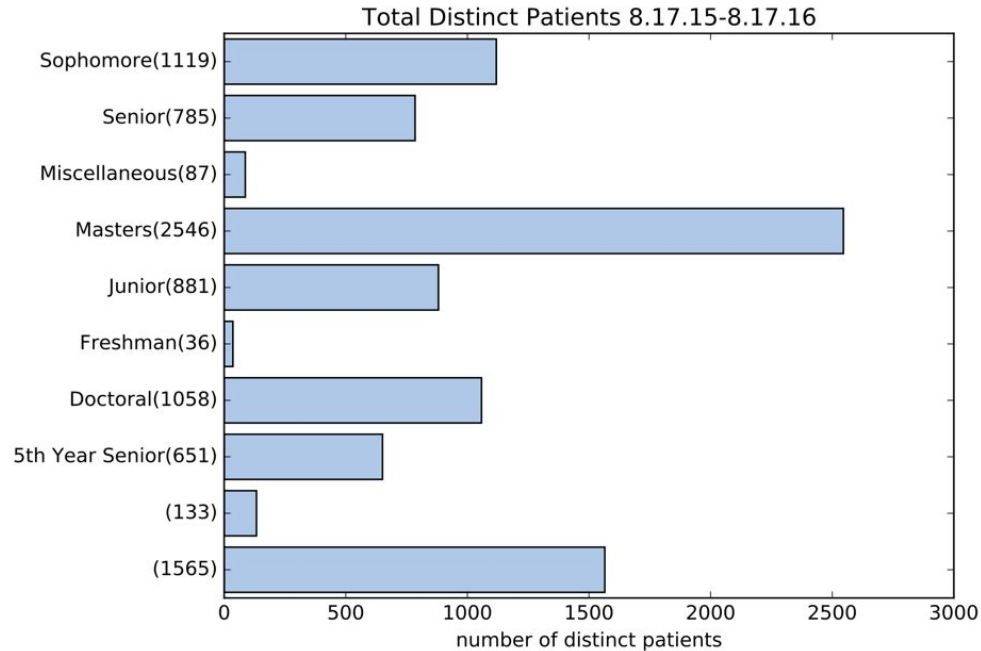
**77.9% of
appointments
were from
off-campus
students**



Chinese students make up the most international students who visit Health Services. This is good to know for hiring an international nurse.



**One report was
programmed incorrectly!
Claimed 36 Freshmen
visited Health Services one
year! Problem fixed.**



Competition/Alternative Solutions

- Microsoft Excel, Tableau
 - Requires training to use/automate
 - Not customized for Point n Click
- Consultation/hire a data analyst
 - Costs money
 - Data is confidential (protected by HIPAA)

Why our solution?

- Quick and easy/Automated
 - User testing went well. The staff were able to use the program by themselves.
- (New!) Annual Report
- Aids decision-making
- Find anomalies
- Future development is easy (students know Python)

The main value is lowering
the barrier to entry for the
Health Services' staff to
utilizing their data.

What about the future?

- Documentation
- Suggested features
 - Visualize reports over time to find trends (probably through line graphs)
 - Add ability to customize visualization
- Currently talking to students who are interested in developing

Thank you! Any questions?