Mass General Brigham

Convincing the C-suite You Need an Observation Unit

Christopher Baugh MD, MBA
Vice Chair of Clinical Affairs
Department of Emergency Medicine
Brigham and Women's Hospital
Associate Professor
Harvard Medical School

September, 2022

1

Mass General Brigham

Disclosures

	Affiliation/Financial Interest – Corporate Organizations, Manufacturers, Providers
Consulting Fees	Salix Pharmaceuticals, Nabriva Pharmaceuticals, AcelRx Pharmaceuticals
Contracted Research	Visby Medical
Stock Shareholder	None
Other Financial or Material Support	Roche Diagnostics
Speaker's Bureau	None
Ownership Interest	Lucia Health Guidelines

2

Mass General Brigham

Agenda

- Observation models of care
- Financial rationale of observation units for the hospital
- Professional observation fees
- Professional staffing models
- Negotiating for financial success

3

Mass General Brigham

4

Mass General Brigham

Expectations from the C-Suite: Hiestand's 4 C's

1. Clinical Excellence
2. Calm and Contentment
3. Compliance (especially relevant to observation care)
4. Contribution to Margin

5

Mass General Brigham

Settings of Observation Care

EXHIBIT 1

Hospital Settings In Which Observation Services Are Provided

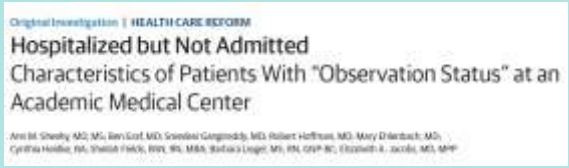
Setting	Description	Characteristics
Type 1	Protocol driven, observation unit	Highest level of evidence for favorable outcomes Care typically directed by ED
Type 2	Discretionary care, observation unit	Care directed by a variety of specialists Unit typically based in ED
Type 3	Protocol driven, bed in any location	Often called a "virtual observation unit"
Type 4	Discretionary care, bed in any location	Most common practice Unstructured care Poor alignment of resources with patients' needs

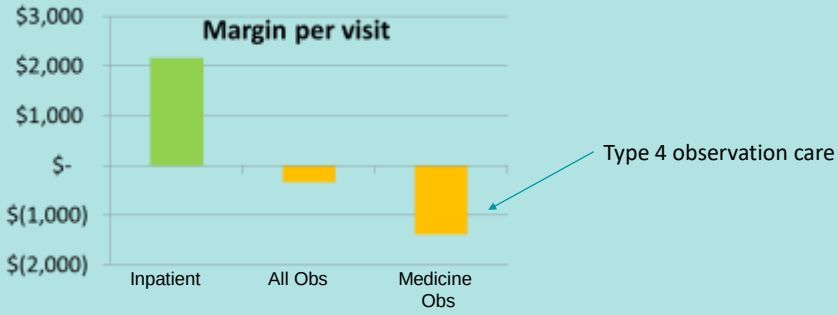
Ross, *Health Affairs*, December 2013

6

Mass General Brigham

Inpatient Management of Observation Patients





JAMA Internal Medicine, July 8th , 2013

7

Mass General Brigham

How to Add Capacity

Two main options:

Build beds

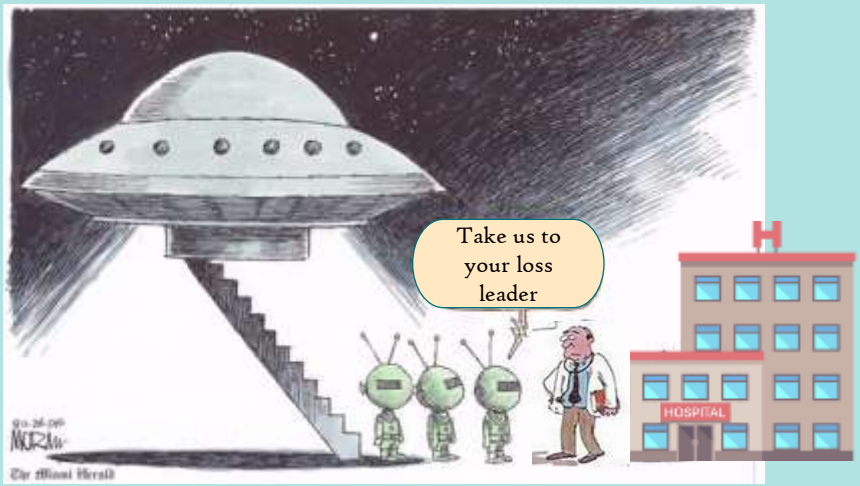
Takes time (months/years) and money ($ millions)

Reduce length of stay

Pull the observation patients out of the inpatient beds and manage them using a different model

8

Mass General Brigham



9

Mass General Brigham

Systematic Review of Facility Cost Savings

Disease	First Author	Year	Total Cost Savings of Observation Unit vs. Inpatient Admission
Asthma			
	Rydman(35)	1998	$1,726
Chest Pain			
	Gaspoz(36)	1994	$1,322
	Sayre(37)	1994	$2,745
	Field(38)	1995	$2,645
	Mikhail(39)	1997	$2,505
	Roberts(40)	1997	$966
	Stomel(41)	1999	$2,387
	Robinson(42)	2002	$1,675
	Chang(11)	2008	$653
	Chang(11)	2008	($1,219)*
	Miller(43)	2010	$605
Infections			
	Roberts(44)	1997	$1,746
Pediatrics			
	Listernick(12)	1986	$6,641*
	Greenberg(45)	2006	$426
Sickle Cell			
	Benjamin(46)	2000	$968
TIA			
	Ross(47)	2007	$748
Upper GI Bleed			
	Longstreth(48)	1995	$1,795
Average			$1,528 (SD +/- $789)

Type 1 observation care

Baugh et. al. Health Affairs. 2012

10

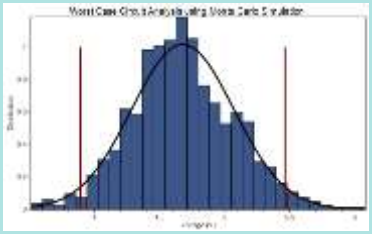
Mass General Brigham

Monte Carlo Simulation

Stats Table

Assumptions					Current Results		Summary Results	
Description	Max	Min	Mean	StdDev	Value	Name	Value	Name
Sales	120.00	55.00	87.50	16.25	85.40	c.Sales	87.67	s.Sales
COGS Pct	47%	30%	39%	4.3%	35.0%	c.PctCOGS	38.5%	s.PctCOGS
Operating Exp	50.00	35.00	42.50	3.75	38.62	c.OpExp	42.44	s.OpExp
Tax Rate	28%	22%	25%	1.5%	27.1%	c.TaxRate	25.0%	s.TaxRate
Profits							8.63	s.Profits

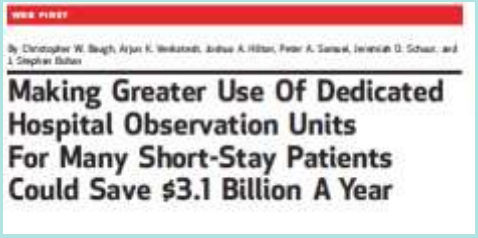
Run 1000 trials



11

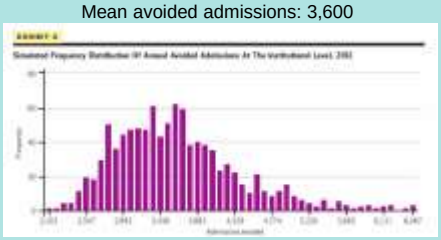
Mass General Brigham

Modeled Savings: Hospital Level

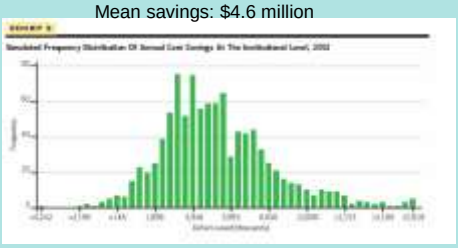


Making Greater Use Of Dedicated Hospital Observation Units For Many Short-Stay Patients Could Save $3.1 Billion A Year

Mean avoided admissions: 3,600



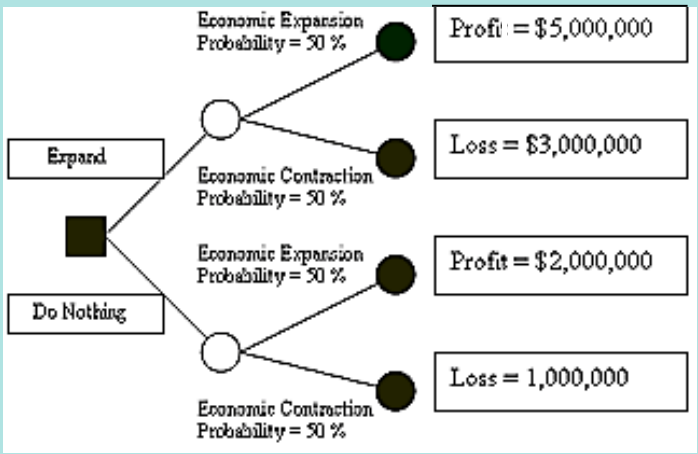
Mean savings: $4.6 million



12

Mass General Brigham

Real Options

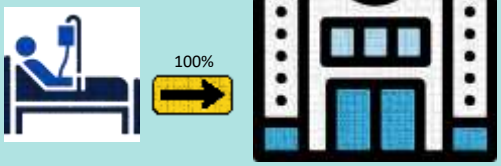


13

Mass General Brigham

Back to Observation Medicine

Default care without an observation unit



14

Mass General Brigham

Value of an Observation Unit Stay

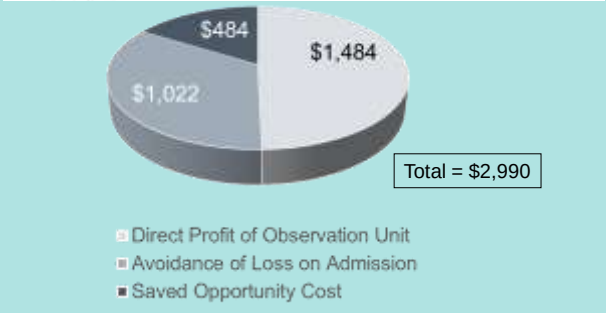
15

Mass General Brigham

Total Value Per Observation Unit Patient

Estimating Observation Unit Profitability with Options Modeling

Christopher W. Baugh, MD, MBA, J. Stephen Bohan, MD, MS



16

Mass General Brigham

Did You Say "Observation?"

The New York Times

Under 'Observation,' Some Hospital Patients Face Big Bills

Nightly News | February 25, 2014

Why Going 'Under Observation' Can Cost You

The decision to categorize a patient as "under observation" as opposed to "inpatient" can have a lasting impact.

NBC NEWS

17

Mass General Brigham

Your Money

You may think you're an inpatient, but you're not. Hospitals call it being **under observation**. It's a **real problem**. Here's how to prevent it.

Being 'Observed'

It Can Cost You Plenty

Jean Arnau spent five days in the hospital with a fractured spine—lying in a hospital bed, wearing a hospital gown and ID bracelet, eating hospital food and receiving regular nursing care.

But when she was discharged to be transferred to a rehab facility, her family learned that she'd never been formally admitted to the hospital

this insurance by law cannot pay the out-of-pocket costs of services that Medicare doesn't cover.

At first, Arnau's daughter, Mimi Auer, thought it was a mistake. But staff at the rehab facility told her they'd had four cases like her mother's in just the previous week. "Four cases of the same situation!" Auer protests. "What's going on here?"

Source: AARP

18

Mass General Brigham

Policy Reform: SAM and SNF

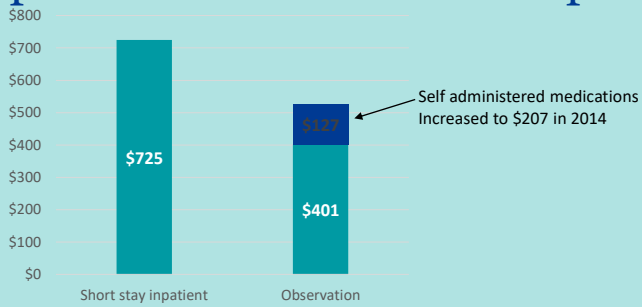
Home medications: Medicare should reimburse for home medications administered while in observation status (self-administered medications)

Qualifying inpatient minimum for SNF benefit: Midnights in observation status should count toward 3-night minimum for SNF benefits

19

Mass General Brigham

OIG Report – Inpatient vs. Observation Expense



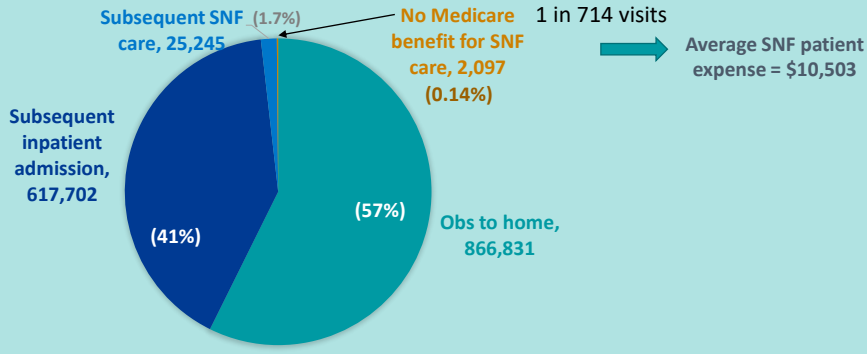
94% of observation beneficiaries had a lower expense than the inpatient deductible

2013 OIG data

20

Mass General Brigham

SNF Expense Real But Rare



2013 OIG data

21

Mass General Brigham

Supplemental Insurance Reduces Patient Expense

TABLE 1. Insurer Payments and Beneficiary Out-of-Pocket Costs

	Medicare Stays, N = 498		
	Mean (SD)	Median (IQR)	Range
Payments by Medicare	$2,533 (2,883)	$1521 (1,898)	$4–$29,633
Payments by supplemental insurers			
Private insurers (N = 351)	$454 (384)	$324 (332)	$0–$2,590
State-based insurers (N = 29)	$222(402)	$43 (102)	$2–$1,229
Beneficiary out-of-pocket costs			
Without supplemental insurer (N = 118)	$537 (1,557)	$286 (440)	$0–$16,196*
With private supplemental insurer (N = 351)	$45 (414)†	$0.39 (16)	$0–$7,670*
With state-based supplemental insurer (N = 29)	$168 (412)	$0.15 (27)	$0–1,870*

Doyle et. al. Supplemental Insurance Reduces Out-of-Pocket Costs in Medicare Observation Services. Journal of Hospital Medicine Vol 11 | No 7 | July 2016

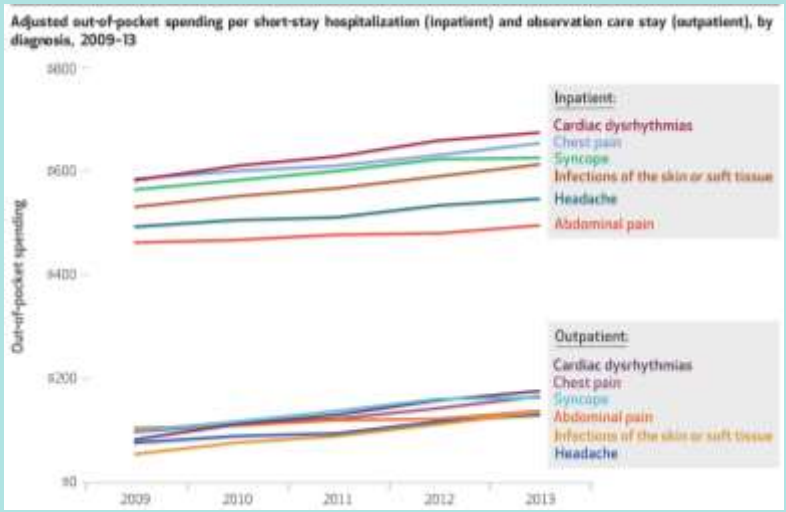
85% of Medicare beneficiaries have supplemental insurance

-MedPAC 2016

22

Mass General Brigham

Lower Expense for the Commercially-Insured



Adrion et. al. Rising Use Of Observation Care Among The Commercially Insured May Lead to Total And Out-Of-Pocket Cost Savings. Health Affairs 36, NO. 12 (2017): 2102–2109.

23

Mass General Brigham

Back to Professional Billing and Staffing

24

Mass General Brigham

Billing Models: One versus Two Service

- CPT/Payers: cannot bill two E&M codes on the same calendar date from the same specialty and group
- Stark Law: self-referral risk

25

Mass General Brigham

Billing Models: One versus Two Service

Can't control the date of service, so there are two options to get paid for both the ED visit and observation visit on the same date if you staff with a separate physician:

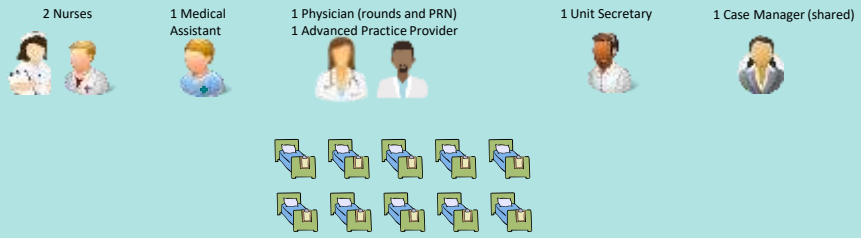
Different group (Tax ID number)

Different specialty (NPI number)

26

Mass General Brigham

Staffing Model for One Service Dedicated Unit



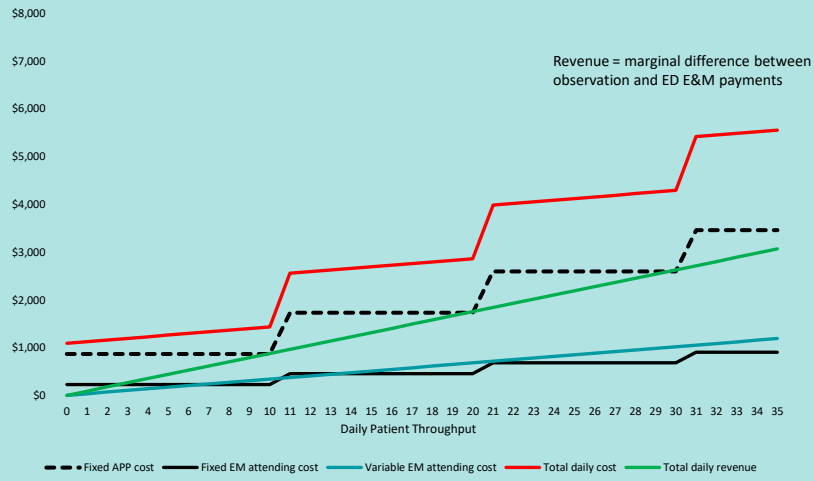
Key collaborators: Physical therapy, social work, pharmacy, IS, radiology, consulting services

Leadership: Medical director, APP leader and nurse manager

27

Mass General Brigham

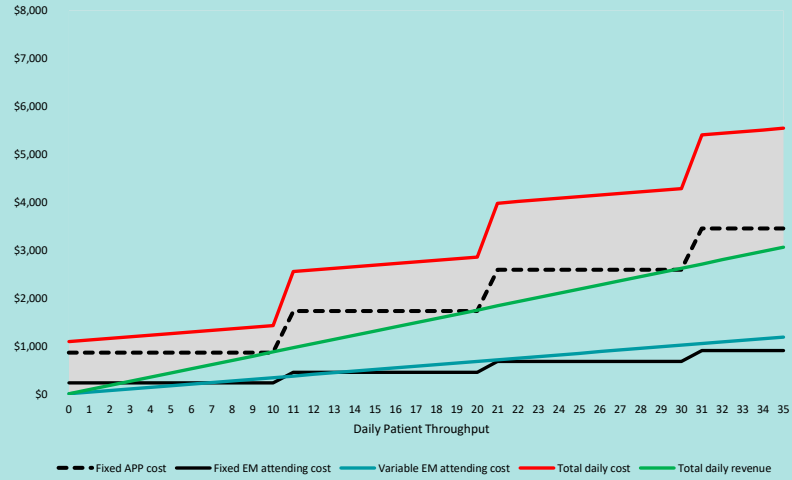
One Service Cash Flow Model



28

Mass General Brigham

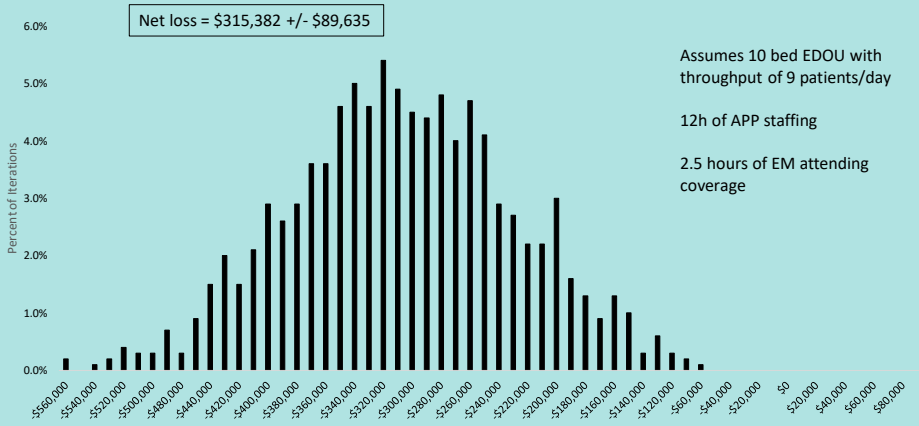
Net Loss at All Levels of Patient Throughput



29

Mass General Brigham

Simulation – Annual Net Loss from One Service Model



Assumes 10 bed EDOU with throughput of 9 patients/day

12h of APP staffing

2.5 hours of EM attending coverage

30

Mass General Brigham

Staffing Model for Two Service Dedicated Unit

5 Nurses

2 Medical Assistants

1 Physician (dedicated)
1-2 Advanced Practice Providers

1 Unit Secretary

1 Case Manager (dedicated)

25 beds

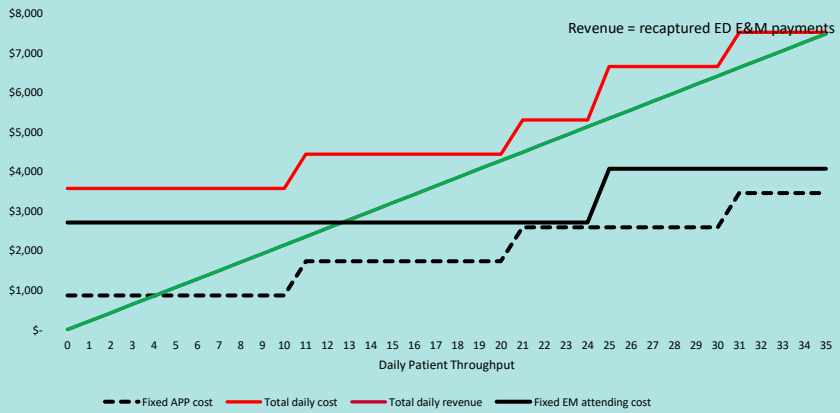
Key collaborators: Physical therapy, social work, pharmacy, IS, radiology, consulting services

Leadership: Medical director, APP leader and nurse manager

31

Mass General Brigham

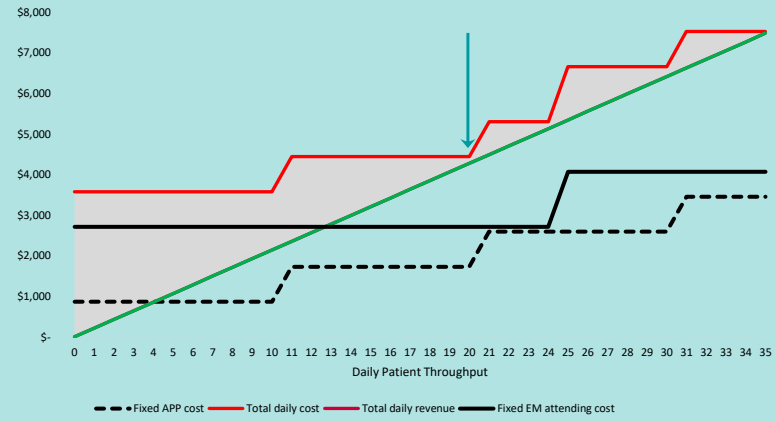
Two Service Cash Flow Model



32

Mass General Brigham

Breakeven Potential Over 20 Patients/Day



33

Mass General Brigham

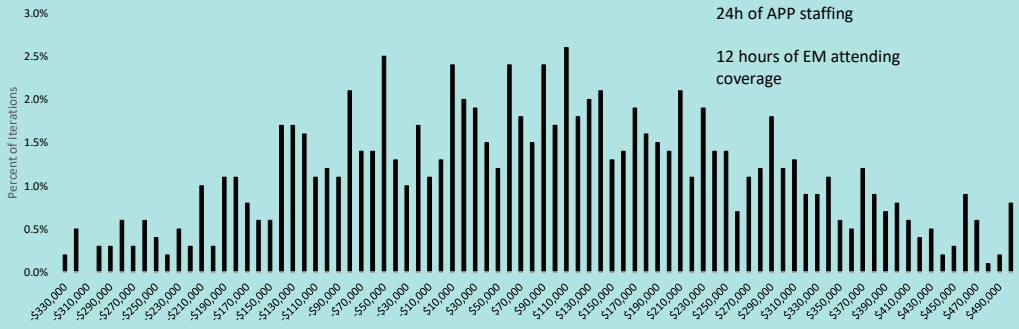
Simulation – Annual Net Cash Flow in Two Service Model

Net profit = $37,569 +/- $359,583

Assumes 25 bed EDOU with throughput of 22 patients/day

24h of APP staffing

12 hours of EM attending coverage



34

Mass General Brigham

Why Should You Own Observation?

Pros

- Expand reach/footprint of department
- Increase department resources
- Strengthens interdepartmental relationships
- Political "win"
- Access to research and training setting
- Gain experience and expertise in rapidly growing area

Cons

- Practice creep
- "Not what I signed up for"
- Observation is not a profit center
- Vulnerable to policy changes

35

Mass General Brigham

Summary

- Observation has been around for decades and isn't going away
- Benefits of observation come from protocol use in dedicated units
- Observation unit staffing model will dictate need for hospital subsidy
- Observation care is an opportunity for emergency physicians, hospitalists and specialists to collaborate

36

Mass General Brigham

cbaugh@bwh.harvard.edu
@DrChrisBaugh

37