Quality with Efficiency
12 by 12

RICHARD SHLOFMITZ, MD
CHAIRMAN OF DEPT. OF CARDIOLOGY
ST. FRANCIS HOSPITAL
ROSLYN, NEW YORK

St. Francis Hospital,
The Heart Center
Catholic Health Services
Mandatory NASCAR Internship
MINIMIZE STAFF PIT STOPS
STAFF LUNCH
HOUSEKEEPING IN TRAINING
PATIENT NUTRITION
STREAMLINE DC
&PROMOTE NEW BUSINESS
Quality with Efficiency
12 by 12

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St. Francis Hospital,
The Heart Center®
Catholic Health Services
EFFICIENCY

Speed → Quality → Costs

St. Francis Hospital, The Heart Center
Catholic Health Services

OPTIMIZING PCI
INTRAVASCULAR IMAGING & CORONARY PHYSIOLOGY
AMBULATORY UNIT

- 24 BEDS
- ADMISSIONS
  5:15AM-5:00PM
- 4 PTS
  EVERY 30 MIN
Mission Control

6 Rooms

Interventionalists w/ Block Time
Transportation
THE TEAM

1 Tech
1 Scrub Assistant
1 Circulating Nurse
Anesthesiologist
Turn Over

PATIENT ROOM TURNOVER

A BALANCE OF
SPEED AND QUALITY
Recovery

ROAD TO RECOVERY
AMBULATORY UNIT

Discharge
10am-12 midnight
Quality with Efficiency
12 by 12

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ST. FRANCIS HOSPITAL
ROSLYN, NEW YORK
3 PCIs and 12 Diagnostic Cases

- Procedure Prep
- Diagnosis
- Treatment
- Post Procedure
Aggregate Procedure Time - 15 Cases

- **Post Procedure**
  - Last treatment to patient out

- **Treatment**
  - Sum of time spend on treatments inclusive of vessel prep, stenting, post-PCI imaging, and optimization

- **Transition**
  - Last diagnostic angio to lesion cross

- **Diagnosis**
  - Sum of diagnostic imaging and physiology

- **Procedure Prep**
  - Patient in room to first angio shot
15 by 12

- Procedure Prep
- Diagnosis
- Treatment
- Post Procedure

3 PCIs and 12 Diagnostic Cases
Algorithmic approach

- Pro-active decision-making
- More control and greater predictability
- Reliable procedural outcomes
Non-Algorithmic approach

- Reactive decision-making
- Guesstimation
- Unreliable procedural outcomes
We should standardize algorithmic approach to angioplasty

- Brightest minds in the field of Interventional Cardiology, yet no uniform way of teaching fellows

- Algorithmic approach to angioplasty may facilitate better decision making and improved outcomes

- Streamlines quality procedural outcomes in an efficient manner
Image Guided Precision

- Help me optimize pretreatment strategies
  - Lesion Morphology
  - Stent Sizing (Vessel Diameter & Lesions Length)
  - Co-registration for precise placement

- Help me COT (Complete Optimization Treatment)
  - Edge Dissection Detection
  - Optimal Expansion
  - Optimal Apposition
THE DATA IS THERE!

THE MARKET IS NOT

### 2016 US IMAGING PENETRATION RATES

<table>
<thead>
<tr>
<th>Procedure</th>
<th>2016 Penetration Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angio Only</td>
<td>82%</td>
</tr>
<tr>
<td>IVUS Guided</td>
<td>15%</td>
</tr>
<tr>
<td>OCT Guided</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Millennium Research Group
Forecasted 2016 penetration rates
US Market Only

### 2014-16 GLOBAL PHYSIOLOGY AND IMAGING PENETRATION RATES

<table>
<thead>
<tr>
<th>Procedure</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW OCT</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>WW IVUS</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>WW FFR</td>
<td>11%</td>
<td>12%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Data derived from Millennium Research Group
Syndicated Reports 2015-2016
WW estimate includes: US, EU, Japan, China, and Canada
PRESCRIPTIVE ALGORITHM FOR TREATMENT OF CALCIFIED LESIONS

OCT

Deep

Superficial

Nodular

CVI Score I-III

CVI Score IV

(>180° arc, >5mm long, >0.5mm thick)

Balloon crossable

Balloon uncrossable

NC/Scoring/Cutting balloon

IVL

RA or OA

Calcium fracture on OCT

Stent

Final OCT

No

Yes

Stent

Final OCT

St. Francis Hospital Database
Safe Same Day Discharge w/ Femoral Access

2,103 pts with elective PCI and 321 CHIP cases w/ femoral access at St. Francis Hospital from 2016-2018

Same Day Discharge 30-Day Readmission

*From U.S. Nationwide Readmission Database, 833,344 patients
OCT vs. Angio SDD

Odds Ratio for SDD and Readmission

1.937

Same Day Discharge

2,103 patients with elective PCI with femoral access at St. Francis Hospital from 2016-2018

OCT Improves Same Day Discharge

*Adjusted for age, gender, BMI, renal failure, previous CABG, left main intervention, operator, previous PCI, previous cerebrovascular event, and type of angina (absent, stable, unstable)

Imaging doubles your odds for SDD

*From U.S. Nationwide Readmission Database, 833,344 patients
RESEARCH – TOP ENROLLER “CHIP STUDIES”
The Beacon Award of Excellence awards hospitals units that employ evidence based practice to improve patient and family outcomes. The award provides gold, silver, and bronze levels of recognition to hospital units that exemplify excellence in professional practice, and patient care and outcomes.

A gold Beacon Award celebrates staff-driven excellence in sustained unit performed and patient outcomes that exceed national benchmarks.

The St. Francis Hospital Cardiac Catheterization Lab/ACU units is the only Cath Lab in the United States to achieve the AACN Gold Level Beacon Award of Excellence.
TEAMWORK
Conclusion

- Algorithmic approach to PCI enhances efficiency
- Incorporation of IVI essential to optimize and control quality of procedural results
- Cathlab leadership and teamwork essential to 12 by 12
OPTIMIZING PCI
INTRAVASCULAR IMAGING & CORONARY PHYSIOLOGY

SAVE THE DATE
APRIL 24-25, 2020
CONRAD NEW YORK DOWNTOWN, 102 NORTH END AVE, NEW YORK, NY 10282

JOIN US AT THE ONLY COURSE THAT SPECIALIZES IN PRECISION PCI.

FACULTY DIRECTORS

TO REGISTER VISIT: sfh-intravascularimaging.com
Complimentary registration for fellows.

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