Assessment, Planning and Prevention in Collegiate Sports Medicine

Brian Anderson, President
Institute for Collegiate Sports Medicine
“Improving the Day to Day of Athletic Healthcare”

Predicting Success in Football

- Turnover Ratio
- 3rd Down Percentage
- Rushing Yards For
- Rushing Yards Against
- Red Zone Conversion
- Penalty Rate
PREDICTING SUCCESS IN SPORTS MEDICINE?

Predicting vs. Assessment
Validating Your Worth
Sports Medicine Assessment Tools

- Injury Stats
- Financial
- Survey Information
- Program Information

Injury Stats

- # of Injuries / SA
  - Whole
  - By Sport

- Analysis of Data
  - 2010-11
    - Total Inj: 444
    - Time Loss: 170
  - 2011-12
    - Total Inj: 403
    - Time Loss: 119
  - 2012-13
    - Total Inj: 386
    - Time Loss: 120

- Why and How?
Injury Stats

• Validity of Injury Data
  – Definition of Injury (Consistency)
  – All Injuries Recorded
  – Daily, Weekly, Monthly, Seasonal and Annual Reporting

• Time Loss Data
  – Definition of Time Loss
  – Correctly Documenting Return to Play / Activity
  – Improving Prevention and / or Treatment & Rehabilitation

Surgery Stats

• Easier Reporting
• Further Analysis
  – By Sport
  – By Gender
  – By Dx / Procedure
  – By Total Cost
Treatment / Rehabilitation Stats

- Treatments vs. Rehabilitation
- # of T/R per Injury or Time Loss Injury
- T/R per Staff Member

Treatment vs. Rehabilitation

2011-12

- 18% Treatment
- 82% Rehabilitation

2012-13

- 38% Treatment
- 62% Rehabilitation
Time Loss Data

Days Out

Avg Days Out

FINANCIAL ASSESSMENT
2010-11 Risk / Insurance Profile

- Insured Student Athletes (98%)
- Uninsured (2%)
- With COB (60%)
- Without COB (38%)

Note: Although 98% have insurance, only 60% have applicable insurance

COB: Coordination of Benefits

2012-13 Risk / Insurance Profile

- Insured Student Athletes (98%)
- Uninsured (2%)
- With COB (90%)
- Without COB (8%)

Note: Although 98% have insurance, 90% with applicable insurance

COB: Coordination of Benefits
Assessment of Billed Charges

- Factors
  - Injuries
    - 2010-11: 444
    - 2011-12: 403
    - 2012-13: 386
  - Surgeries
    - 2010-11: 42
    - 2011-12: 32
    - 2012-13: 28

2010-11 Insurance Payment Analysis

- Primary Payment: $326,750
- Primary Adjustment: $436,500
- Secondary Payment: $451,600
- Secondary Adjustment: $116,200

Cost Per $1 of Healthcare: $0.339
2011-12 Insurance Payment Analysis

- Primary Payment: $227,650
- Primary Adjustment: $363,850
- Secondary Payment: $341,800
- Secondary Adjustment: $89,500

Cost Per $1 of Healthcare: $0.334

2012-13 Insurance Payment Analysis

- Primary Payment: $267,300
- Primary Adjustment: $454,600
- Secondary Payment: $135,050
- Secondary Adjustment: $67,500

Cost Per $1 of Healthcare: $0.146
Insurance Analysis

- Decrease in Injuries / Time Loss
- Decrease in Surgeries
- More Students with COB

Secondary Insurance Claims

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
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<tbody>
<tr>
<td>2010-11</td>
<td>$451,600</td>
</tr>
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60% with COB
90% with COB

SELF ASSESSMENT
Staff Self Assessment

- Provides for broader opinions of programs
- Helps develop SWAT Analysis
4. Specialist

16. Concussion Program
Self-Assessment to Determine SWOT

Student Athlete Assessment of Athletic Healthcare
XYZ University
Athletic Training Student-Athlete
Outcomes Report

Provided by: Institute for Collegiate Sports Medicine

Overall Score (Highest = 100)

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
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<tbody>
<tr>
<td>XYZ University</td>
<td>89.6</td>
</tr>
<tr>
<td>All Schools</td>
<td>86.4</td>
</tr>
<tr>
<td>Classification</td>
<td>82.8</td>
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</tbody>
</table>
Gender Comparison

Sport Comparison
Covered vs. Not Covered

- Covered = Those sports that would typically have an ATC present during practice
- Not Covered = Those sports that would not typically have an ATC present during practice

Full-Time vs. GA

- This report reflects that sports that the primary contact for student athlete is a Full-Time or GA ATC.
Sport Profile

- Profile – determined by those sports that receive the most request of information by SID
  - High Profile (Example): Football, Basketball, M&W, Baseball

By # of Injuries

- 0: 93.5
- 1-2: 92.1
- 3-4: 86.4
- 5+: 84.3
% of AMCIA Recommendation

- > 90% of AMCIA Recommendation: 92.6%
- 70-89% of AMCIA Recommendation: 86.5%
- 50-69% of AMCIA Recommendation: 81.3%
- < 49% of AMCIA Recommendation: 76.5%

SAAAH Analysis

- Validate the Need for Medical Staff
- Used as a tool to evaluate staff
- Supplement to AMCIA
- Need to Demonstrate Weakness
PROGRAM INFORMATION

AMCIA Comparison

<table>
<thead>
<tr>
<th></th>
<th>Sports</th>
<th>Student Athletes</th>
<th>Current FTEs</th>
<th>AMCIA</th>
<th>% of AMCIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Univ. of Maryland</td>
<td>21</td>
<td>581</td>
<td>15</td>
<td>21.67</td>
<td>69.22%</td>
</tr>
<tr>
<td>Mississippi College</td>
<td>14</td>
<td>425</td>
<td>3.5</td>
<td>12.14</td>
<td>28.83%</td>
</tr>
<tr>
<td>Azusa Pacific University</td>
<td>19</td>
<td>564</td>
<td>5.5</td>
<td>12.81</td>
<td>45.38%</td>
</tr>
<tr>
<td>Other DIII School</td>
<td>22</td>
<td>650</td>
<td>11</td>
<td>14.54</td>
<td>75.65%</td>
</tr>
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AD: Actual vs. Appropriate # of ATCs

Event Coverage and Staff Hours Report

8/1/2010 through 7/31/11
“Covered Event”

- Practice or Game
- Direct observation of for at least 80% of the time
- Can only cover one event at a time

Events Covered – All Schools

- Events Covered (Full-Time) 46%
- Events Covered (GA/Part-Time) 6%
- Events Covered (Non-ATC) 30%
- Events Not Covered 30%
AD Perceptions of Coverage

AD Sport Coverage Philosophy
Which Sport Should be Covered?

- **In-Season Softball Px**: 13%
- **Off-Season (W) Soccer Px**: 87%

Which Sport Should be Covered?

- **Tennis Match**: 39%
- **Off-Season (M) Soccer Px**: 61%
Which Sport Should be Covered?

Time of Events – All Schools
Hours / Week (Full-Time ATCs)

Total Hours = 47.83

Hours / Day
- Monday: 7.6
- Tuesday: 8.36
- Wednesday: 8.3
- Thursday: 7.98
- Friday: 7.63
- Saturday: 5.04
- Sunday: 2.94

Hours per Week by Division
- Div. I: 47.36
- Div. II: 49.93
- NAIA: 45.75
Hours / Week (Part-Time/GA ATCs)

Total Hours = 39.81

- Monday: 5.94
- Tuesday: 6.61
- Wednesday: 6.56
- Thursday: 6.56
- Friday: 6.4

Average Hours per Month (Full Time ATCs)

- August: 60
- September: 60
- October: 60
- November: 60
- December: 60
- January: 58
- February: 58
- March: 58
- April: 58
- May: 40
- June: 20
- July: 20
Breakdown of Full-Time ATC Day (All Schools)

Time of Events – All Schools
Hours / Week (Full-Time ATCs)

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- July

Hours / Day
Breakdown of Full-Time ATC Day (All Schools)

Full Time ATCs

- Administrative: 27%
- Event Coverage: 21%
- Pre & Post Event Tx: 18%
- Rehabilitation: 20%
- Travel: 6%
- Education: 7%
- Other: 1%

Assessment Summary

- Categories
  - Injury
  - Financial
  - Survey
  - Program
- Importance of Accurate and Complete Record Keeping
- Basis for Strategic Planning
Strategic Planning

Strategic Planning Provided
- 19% No
- 81% Yes

Strategic Planning Desired
- 11% No
- 89% Yes

Thank You!