# Stakeholder Report: Syracuse Women’s Lacrosse – Performance Review & Recommendations

## 🎯 Purpose

This report summarizes insights from the 2024 Syracuse Women’s Lacrosse season and provides actionable recommendations for the coaching and athletic leadership team. It focuses on performance trends, ethical considerations, and structured decision-making using AI-assisted analysis.

## 📋 Executive Summary

**Recommendation 1: Focus defensive training on late-game performance (Low Risk)**

* **Rationale:** Most goals allowed occurred in Q4. Improving defensive response in the final quarter could prevent overtime losses.
* **Confidence:** Moderate – based on descriptive analysis; consistent trend across 22 games.

**Recommendation 2: Reevaluate overtime conditioning and substitutions (Medium Risk)**

* **Rationale:** Syracuse lost all 3 overtime games. Fatigue and decision-making under pressure are potential contributors.
* **Confidence:** Moderate – observed in multiple high-stakes matches.

## 🏁 Background & Decision Context

**Audience:** Head Coach and Athletic Director, Syracuse Women’s Lacrosse.  
**Decision at Stake:** Allocation of training focus and strategy development for next season.  
**Risk Level:** Medium — decisions may affect training priorities, late-game strategy, and possibly player development.

## 📊 Data & Methods

* **Source:** Official 2024 Syracuse Athletics season statistics (PDF).
* **Collection:** Data recorded by Syracuse Athletics staff during games; cross-reported in NCAA box scores.
* **Scope:** Team-level statistics only; no player-level granularity.
* **Limitations:** Potential bias from self-reported stats, no demographic or fairness breakdown, no independent validation across multiple seasons.

## 📈 Findings

 Syracuse finished with a **16–6 record** across 22 games.

 Went **0–3 in overtime**, all losses by narrow margins.

 Most goals allowed occurred in **Q4 (55 goals)**.

 Offense averaged **15.23 goals/game**, above national averages.

 Shot **clock violations:** SU (6) vs Opponents (13).

## 📌 Recommendations (Tiered)

✅ **Operational (Low Risk):**

* Run focused **Q4 defensive drills** during practice.
* Adjust **substitution patterns** and timeout usage in the final quarter.

**🔍 Investigatory (Medium Risk):**

* Review **conditioning and endurance** impacts in overtime.
* Pilot alternate late-game strategies in scrimmages.

**⚠️ High-Stakes (High Risk):**

* No roster, personnel, or scholarship changes recommended.

## 📐 Quantifying Uncertainty

* Estimates are based on descriptive season averages.
* No confidence intervals available due to lack of raw player-level data.
* Trends (Q4 breakdowns, OT losses) are consistent across multiple games, increasing confidence.
* Future analysis: use bootstrap sampling or game-level variance to generate confidence ranges.

## 🧪 Robustness & Sensitivity Checks

* Removing overtime games still shows strong Q4 defensive vulnerabilities.
* Offensive averages remain high across wins and losses, confirming that defense — not scoring — is the main differentiator.
* Patterns stable when excluding non-conference games.

## ⚖️ Bias & Fairness Considerations

* No player-level or demographic data available, so subgroup disparities (e.g., by position or playtime) cannot be assessed.
* Ethical care was taken to avoid unsupported claims about individuals.
* Only public, aggregate data was used — no private or sensitive information.

## 📅 Next Steps & Validation Plan

* **Collect player-level data** to refine individualized coaching strategies.
* **Conduct post-season interviews** with coaching staff to validate LLM-based insights.
* **Run controlled scrimmages** to test changes in late-game defensive schemes.
* Add fairness checks once positional or demographic breakdowns are available.

## 📎 Appendices

* Raw LLM prompt and output logs
* Narrative and audio from Task 05–06
* Data source: 2024SUStats.pdf
* GitHub Repo: <https://github.com/Shubham-bhalerao-7/Task-7>