Optimizing Communication in Outpatient Parenteral Antimicrobial Therapy Amid the COVID-19 Pandemic

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In this presentation, I will:

- Describe our team’s efforts to optimize communication and care coordination for patients receiving outpatient parenteral antimicrobial therapy.

- Core objectives for the project and the methods used to achieve these

- Impact of the COVID-19 pandemic on our team’s priorities and outcomes

- Outline the beneficial impacts of aligning this project with the American College of Physicians (ACP) Certificate in Physician Leadership program.
Complex Care Coordination for Outpatient Parenteral Antimicrobial Therapy (OPAT)

- Multi-Week Courses of Intravenous Antibiotics
- Complex Transitions Between Inpatient and Outpatient Settings
- Post-Discharge Monitoring, Follow-Up, and Care Coordination
Project Overview
Two Core Objectives for Optimizing OPAT Communication

**Inpatient-to-Outpatient Transitions of Care**

To identify barriers to and facilitators of the inpatient-to-outpatient transition of care for patients who are eligible for OPAT, through focused, interdisciplinary discussions in the health system.

**Post-Discharge Monitoring System**

To define critical gaps in the OPAT post-discharge monitoring system that may impact either the probability of patient safety events or the practice efficiency of involved providers and staff.
COVID-19 Pandemic Priorities for Optimizing OPAT Communication

**Inpatient-to-Outpatient Transitions of Care**
- Rapid conversion to telemedicine-based care
- Focused tasks for providers and staff

**Post-Discharge Monitoring System**
- Out-of-office contingency planning
- Post-discharge monitoring data collection
Project Methods and Preliminary Results
Overview of Methods for Optimizing OPAT Communication

- Focused, interdisciplinary discussions
- Parallel-cycle Plan-Do-Study-Act analysis

Inpatient-to-Outpatient Transitions of Care

- Focused, interdisciplinary discussions
- Failure mode and effects analysis

Post-Discharge Monitoring System
Preliminary Results for Optimizing OPAT Communication

- Focused, interdisciplinary discussions
- Parallel-cycle Plan-Do-Study-Act analysis

Inpatient-to-Outpatient Transitions of Care
Parallel-Cycle Plan-Do-Study-Act (PDSA) Analysis for Telemedicine/Tele-OPAT

**Scheduling Tele-visits**

- **P**: Rapid Rollout
- **D**: Provider Response Grids
- **A**: Revise Grids
- **S**: Common Issues

- **P**: Longer Range Plans
- **D**: Advanced Scheduling
- **A**: Increase Volume & Efficiency
- **S**: Common Issues

- **P**: Durability For Patients
- **D**: Scheduling Scripts & Tele-Plans
- **A**: Enhance Sustainability & Safety
- **S**: Common Issues

**Labs & Imaging**

- **P**: Triage Labs/Imaging
- **D**: Local or Consolidated When Possible
- **A**: Improve Workflow
- **S**: Common Issues

- **P**: Longer Range Plan
- **D**: Advanced Scheduling When Possible
- **A**: Increase Efficiency
- **S**: Common Issues

- **P**: Durability For Patients
- **D**: Tele-Plans with Patients
- **A**: Enhance Sustainability & Safety
- **S**: Common Issues
Preliminary Results for Optimizing OPAT Communication

- Focused, interdisciplinary discussions
- Failure mode and effects analysis
# Simplified Failure Mode and Effects Analysis for OPAT Post-Discharge Monitoring

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Failure Mode</th>
<th>Failure Effect</th>
<th>Potential Severity</th>
<th>Probability of Occurrence</th>
<th>Current Controls</th>
<th>Probability of Detection</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPAT Enrollment</td>
<td>Electronic order not placed by provider</td>
<td>Failure to enter OPAT workflow</td>
<td>High</td>
<td>Moderate</td>
<td>Routine, manual staff review</td>
<td>High</td>
<td>Deferred</td>
</tr>
<tr>
<td></td>
<td>Missed on routine, manual staff review</td>
<td>Failure to enter OPAT workflow</td>
<td>High</td>
<td>Low</td>
<td>Ancillary services</td>
<td>Moderate-High (due to ancillary services)</td>
<td>Deferred</td>
</tr>
<tr>
<td>OPAT Workflow</td>
<td>Absence of primary workflow admin</td>
<td>Marked gaps or delays in all data</td>
<td>High</td>
<td>Moderate (upgraded due to pandemic)</td>
<td>Secondary workflow admin</td>
<td>High</td>
<td>Deferred</td>
</tr>
<tr>
<td></td>
<td>Absence of secondary workflow admin</td>
<td>Marked gaps or delays in all data</td>
<td>High</td>
<td>Moderate (upgraded due to pandemic)</td>
<td>Ad hoc</td>
<td>High</td>
<td>Added tertiary/provider access</td>
</tr>
<tr>
<td>OPAT Data Review</td>
<td>Incomplete or delayed lab/imaging data</td>
<td>Possible care delays or errors</td>
<td>Low-High</td>
<td>Moderate-High</td>
<td>Cross-checks by admin &amp; providers</td>
<td>Moderate</td>
<td>Integrated OPAT dashboard</td>
</tr>
</tbody>
</table>
Integration with ACP Certificate in Physician Leadership Training
Core and Elective Coursework Directly Supported the Project

- Communication
- Conflict
- Negotiation
- Just Culture
- Effective Teams

**Future Directions**

- Our team is moving forward with future phases of the OPAT project.
- I am moving forward with American Association for Physician Leadership coursework.
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  - Poorani Sekar, MD
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- Patients Who Provided Formative Input about Their OPAT Experiences

Note: Persons listed above provided written consent to be named in this presentation. Patient input was spontaneously offered in the context of real-time clinical encounters. No human subjects research or human subjects data collection were performed.
Thank you.

Questions?
References and Resources


