

Check-in

Session 1: EHR Downtime Preparedness in College Mental Health Centers

Shineman 170



EHR Downtime Preparedness in College Mental Health Centers

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Learning Objectives

- **Participants will be able to analyze their center's operations and identify 3 areas where they have gaps in EHR downtime preparedness**
- **Participants will be able to generate 3 strategies for mitigating EHR downtime risks at their center**
- **Participants will be able to construct a basic framework for downtime preparedness drills with the staff at their center**

About Me / About Us

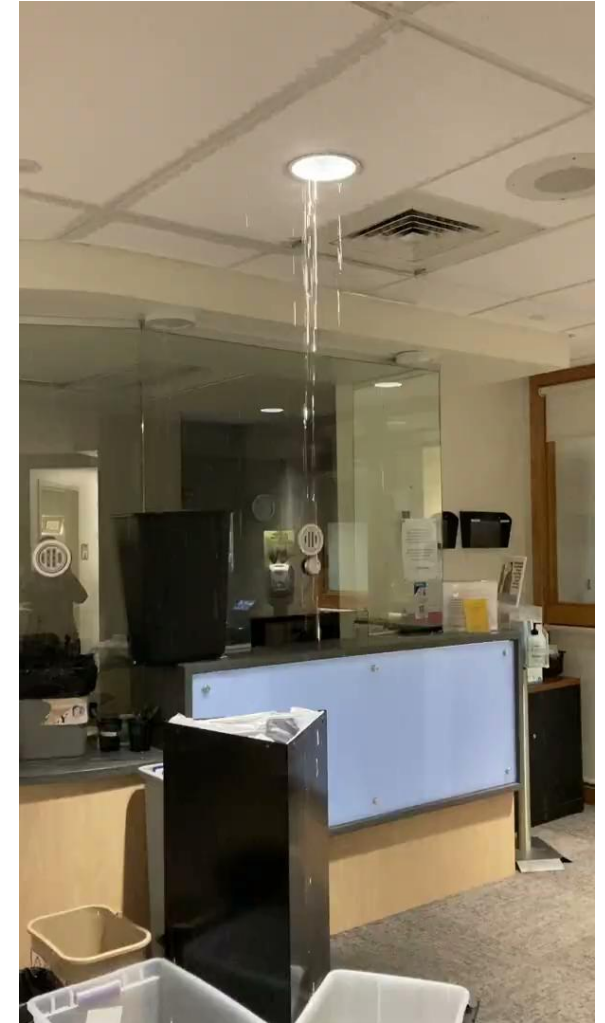
**What made you decide to attend
this particular session?**

Downtime Preparedness - Overview

- **Most college counseling centers are utilizing electronic health record systems (EHRs)**
 - 2020 Dept of Health and Human Services report identifies 84% of Behavioral Health facilities in the US are utilizing an EHR
- **EHRs are subject to downtime events**
- **Downtime events can be planned or unplanned**

Downtime Events

- **Planned**
 - Routine events such as system updates/upgrades
 - Expected infrastructure outages
 - Etc.
- **Unplanned**
 - Unexpected events such as hardware failures
 - Infrastructure disasters
 - Human error or malicious actors



Downtime Preparedness

- **We can anticipate that unplanned downtime will occur in every organization**
 - “Not if, but when”
- **Having plans in place to shift operations to downtime procedures is critical to mitigating risk**

Downtime Preparedness Gap Analysis

Case Study

- **RIT's Integrated Health Services**
 - Focused on Student Health Center and Counseling & Psychological Services departments
 - Healthcare services provided to undergraduate and graduate students at the Rochester campus
 - Examined IHS operations after initial research and SME interviews

Gap Analysis

Key Areas where gaps identified

- Patient Experience
- Patient Safety
- Provider Experience
- Other Actions/Areas
- Technical Implications

Downtime Impact – Patient Experience

- **Appointment Scheduling**
 - Students can no longer access web scheduling or make appointments via support staff
 - Automated appointment reminders?
- **Active Appointment Experience**
 - Signage in reception area for check-in?
 - Confirming patient identity?
 - What if the student doesn't know their UID and you have no internet access to verify?

Downtime Impact – Patient Experience

- **Active Appointment Experience – cont'd**
 - Forms to complete
 - Scheduled vs Unscheduled visits?
 - More time required during downtime event
- **Accessibility**
 - Lack of access to web portal
 - Impact on users with visual impairments
 - Inability to schedule interpreters
 - Impact on Deaf/HoH students
 - Elevator access if power outage

Downtime Impact – Patient Safety

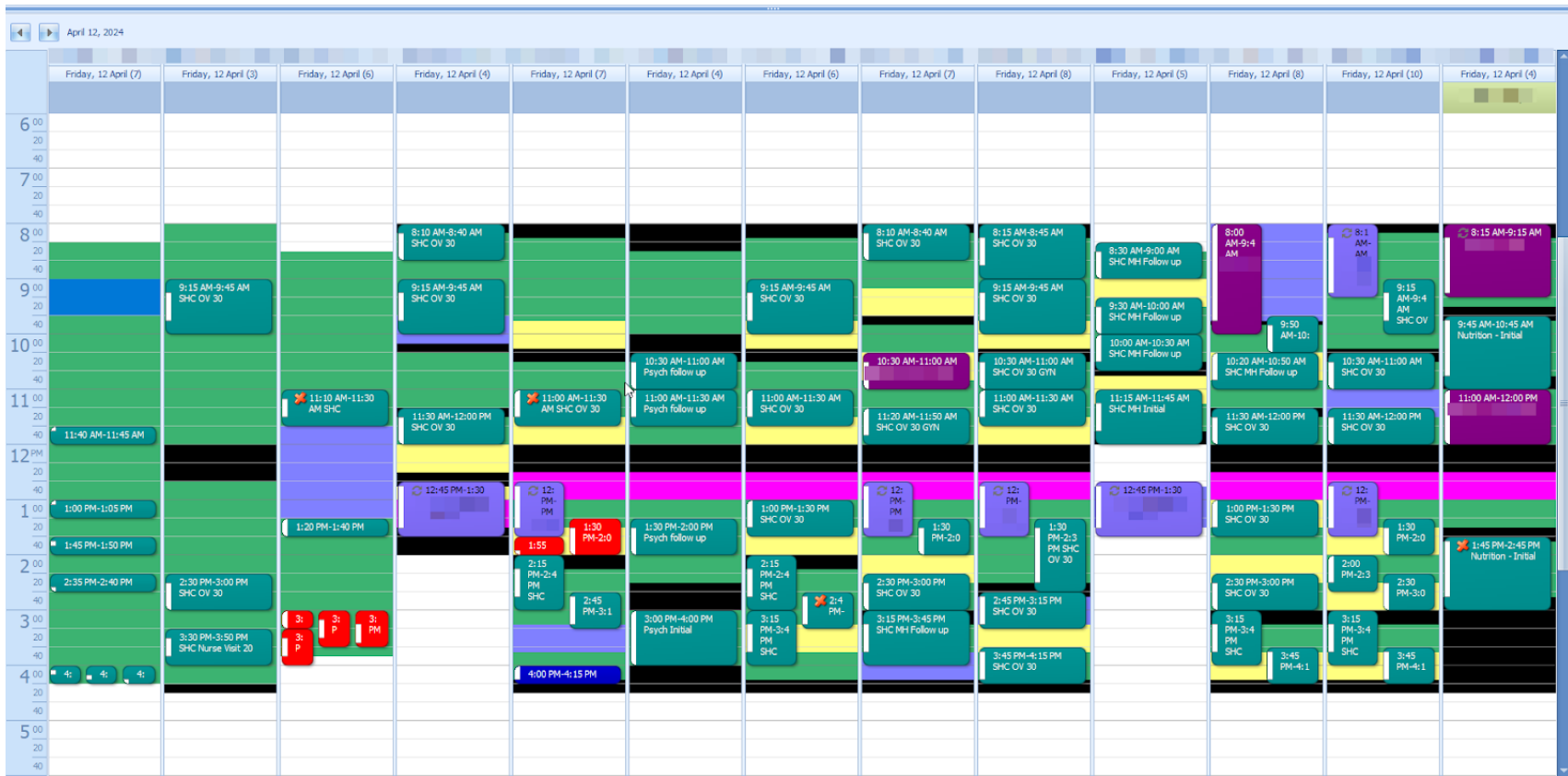
■ Medications

- Medical history, existing meds, allergies, etc.



■ Schedule Administration

- Is there a paper copy of the days appointments?



Downtime Impact – Provider Experience

- **Schedule Administration**

- Embedded locations
- Reasons for visit
- Is there any automation?
 - Ex: RIT's EHR will automatically mark an appointment a No Show if the student has not been checked in within 60 minutes of the end of the visit time

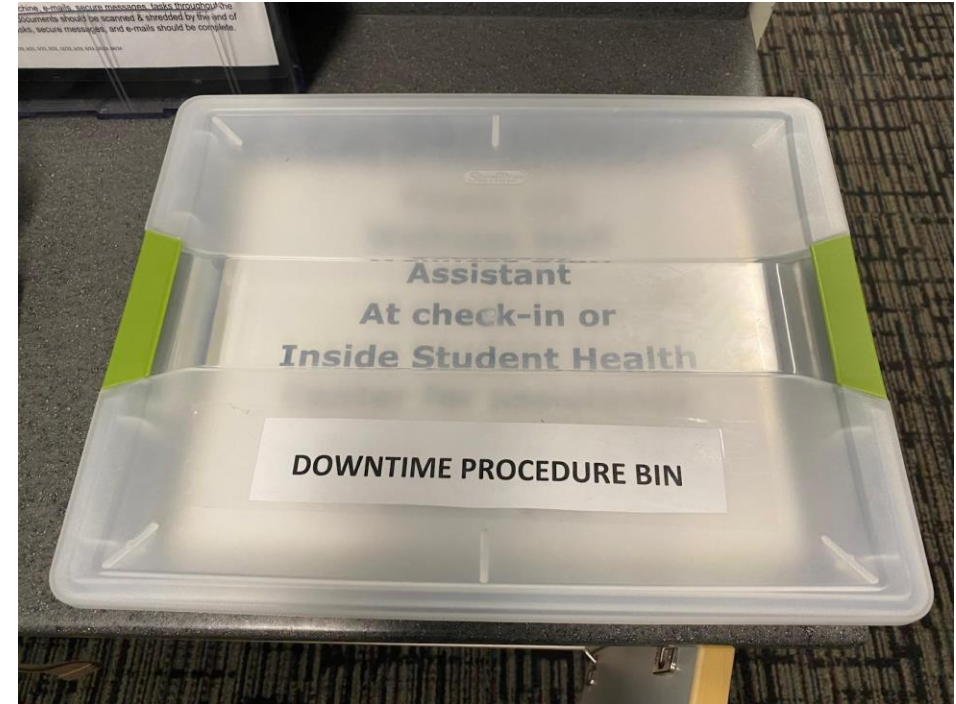
Downtime Impact – Provider Experience

- **Communication Standards**
 - Check-in notifications
 - Instant Messaging (e.g., Slack, Teams, etc.)
 - Walking to Provider's Office?
 - Tasking system inside EHR
- **Documentation Standards**
 - Appointment Forms
 - CCAPS, SDS, Triage Forms
 - Note Templates

Downtime Impact – Provider Experience

- **Documentation Standards – cont'd**

- Downtime “bin” to store forms?



- Record retention
 - Where/how to store paper forms?

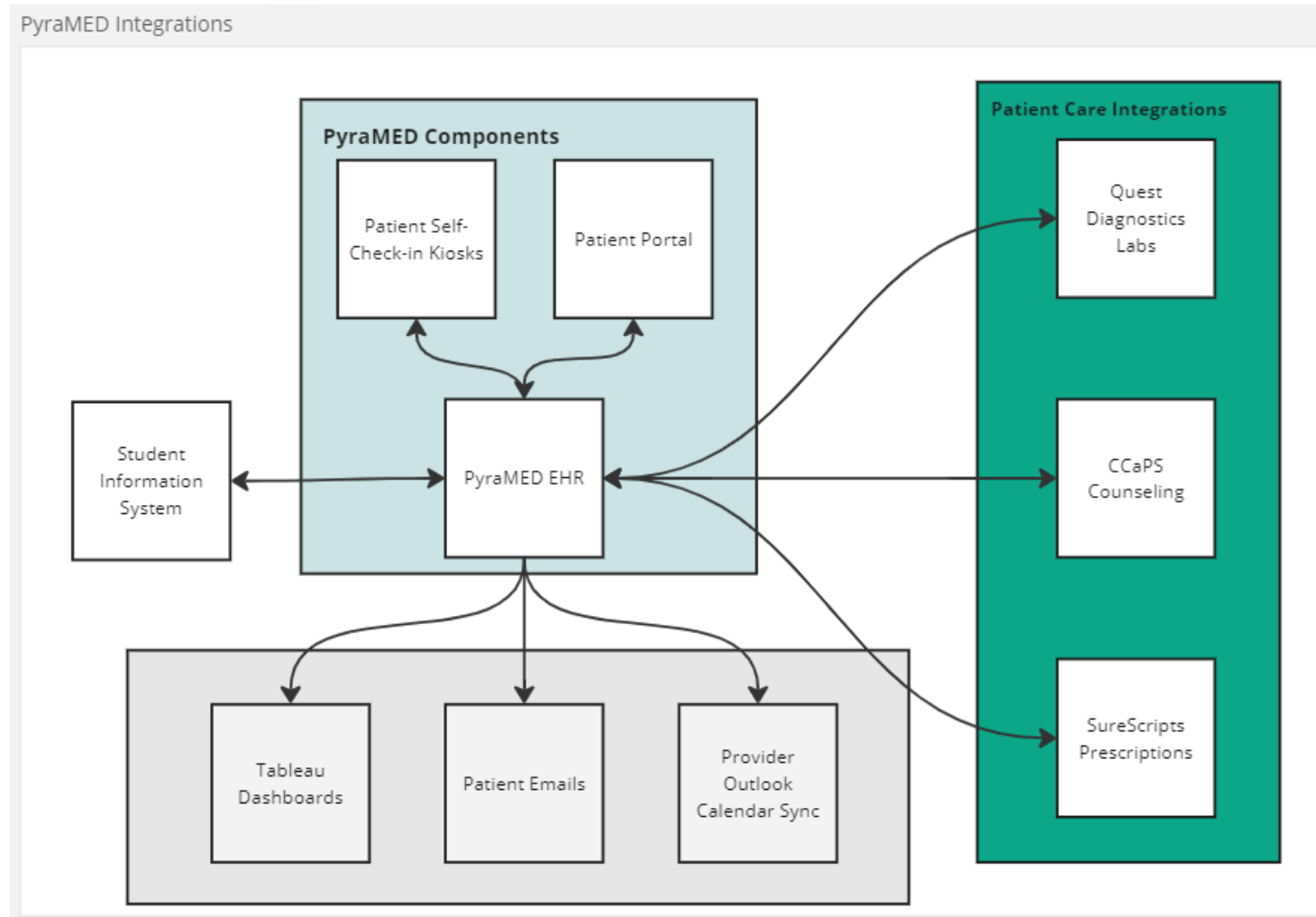
Downtime Impact – Other Areas

- **Financial Risks**

- How are your services funded?
- What is the duration of the downtime?
 - Reduced/lack of services resulting in requests for credit
 - Patient Safety Event attributed to EHR downtime?

Downtime Impact – Technical Implications

■ System Integrations



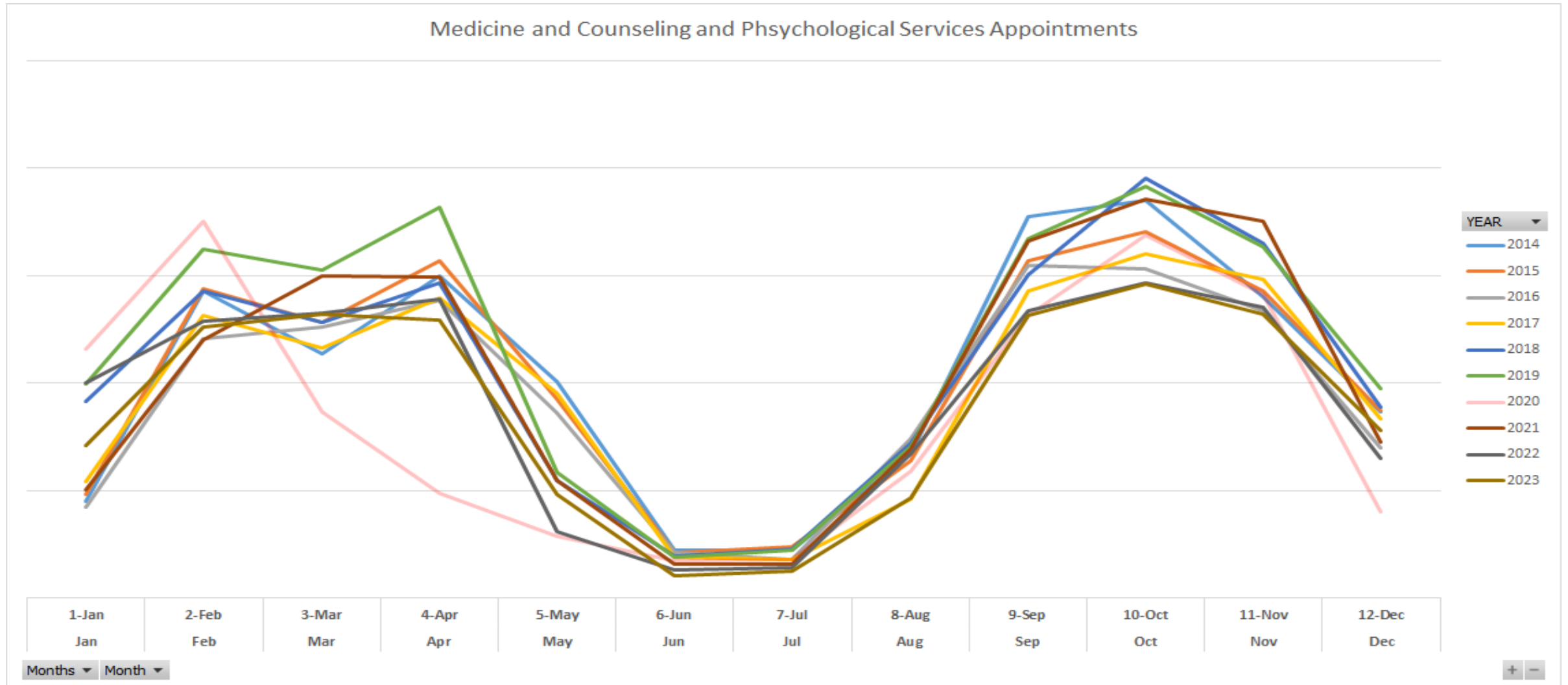
Gap Analysis – Assessing Impacted Processes

Impacted Process	Staff/Provider Efficiency Impacted	Patient Safety Impacted
Appointment Scheduling	●◐	○
Appointment Check-In	●	○
Required Forms	○	●◐
Authorization for Services	●	○
CCaPS Assessment	●	●◐
Lab requisition	●	●◐
Lab results	●	●◐
New Medication	●	●
Medication Renewal	●	●
Health Resources	●◐	●◐
Immunization Compliance	●	●◐
Charges / Payments	●	○
Referrals	●	●◐
EHR Tasking Functionality	●	●

Gap Analysis – Assessing Strengths & Weaknesses

Strengths <ul style="list-style-type: none">• EHR hosted locally• Dedicated Informatics team• Existing framework for downtime processes• Low risk of financial impact• University ITS staff support• Single location (plus embedded offices)• Planned downtime can occur during periods of lower utilization (i.e., Winter/Summer breaks)• Payments can still be made outside of EHR• Downtime procedures bin• No inpatient services	Weaknesses <ul style="list-style-type: none">• Limited staff awareness of downtime procedures• No established schedule for downtime drills• Downtime procedure not part of new employee orientation/training• No isolated backup system• Limited infrastructure for secure storage of paper files• Communication protocols for notifications are not established/normalized• No standardized paper version of daily schedule being produced
Opportunities <ul style="list-style-type: none">• Health Informatics Capstone Team conducting gap analysis• Partnership/learning opportunities for Rochester Regional Health partnership• Grant-funding opportunities• Contributing to knowledge base articles, expanded access to downtime procedures	Threats <ul style="list-style-type: none">• Cyber-security threats to university and IHS• Staffing turnover trends• Unplanned facilities disasters

Preparing Your Center for Downtime



Preparing Your Center

Business Continuity - Key Areas for Risk Mitigation

■ **Staff Training/Onboarding Processes**

- Clinical and non-clinical staff
 - Make downtime training a routine and ask your staff what they know about EHR downtime workflows
 - Determine what processes non-clinical staff need to be trained in
 - Educate staff about security risks if not part of required university trainings

Preparing Your Center – cont'd

■ **Clinical Communication Standards & Practices**

- Formalize communication plans for different levels of outage
 - How will you communicate if there is no electronic communication versus if just your EHR is down?

■ **Clinical Physical Media**

- Documentation paperwork
 - Create a Downtime Bin that includes signage and paper versions of forms/templates
 - Designate someone to routinely check and update these
- Record storage plans
 - Identify where/how paper docs are stored and who will input them to EHR later

Preparing Your Center – cont'd

■ Disaster Recovery Plan (when system comes back online)

Scenarios	Full vs Partial Downtime		Data Recovery Effort		Notes
	EHR Downtime	Component Only	Manual Process	Automatic	
Data Updates:					
Previously Scheduled Appointments	X		X		Mark as attended
Unschedule Pt Appointments during downtime	X		X		
Labs Ordered	X	Quest Interface	X		
Lab Results Received	X	Quest Interface	X	X	Depends on ordering method
Prescriptions Ordered (new & renewals)	X	Surescripts	X		
OCa PS-34 Processed	X	OCAPS Interface	X	X	Depends on duration and form collection method.
Service fees charged and payments received	X		TBD	TBD	Encounter creation process may automatically generate service fee processing
Patient forms completed	X		X		
Provider Outlook Calendar Sync	X	Outlook Sync		X	
External patient referral tracking	X		X		
Immunization Compliance Feed to SIS	X	UC4, SIS		X	
Technical Scenarios:					
Patient portal down		Patient Portal	TBD	TBD	
EHR Database down but Application Server Available	X			X	
RIT Internal Network Down	X			X	
RIT External Network Connectivity Down		Multiple	X		
Etc...					

Preparing Your Center – cont'd

- **Downtime Drills/Rehearsals**

- Establish routine schedule for these
- Identify new gap areas

- **Tabletop Drill**

- Discussion-based, low-stress

- **Partial Training Drill**

- Demonstrate walk-through of select items from Tabletop Drill

- **Full-scale Drill**

- Walk-through of all high-risk and routine procedures in your center to ensure all staff are familiar with their downtime alternatives

In Conclusion

- **Ongoing process of discovery and adjustment**
- **Work to understand what you are already prepared for and what might be your gap areas**
- **Seek input from all staff roles and possibly from your students**
- **Know your institution's policies and procedures for Incident Management**
- **Always debrief after downtime scenarios to examine how it all went**

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