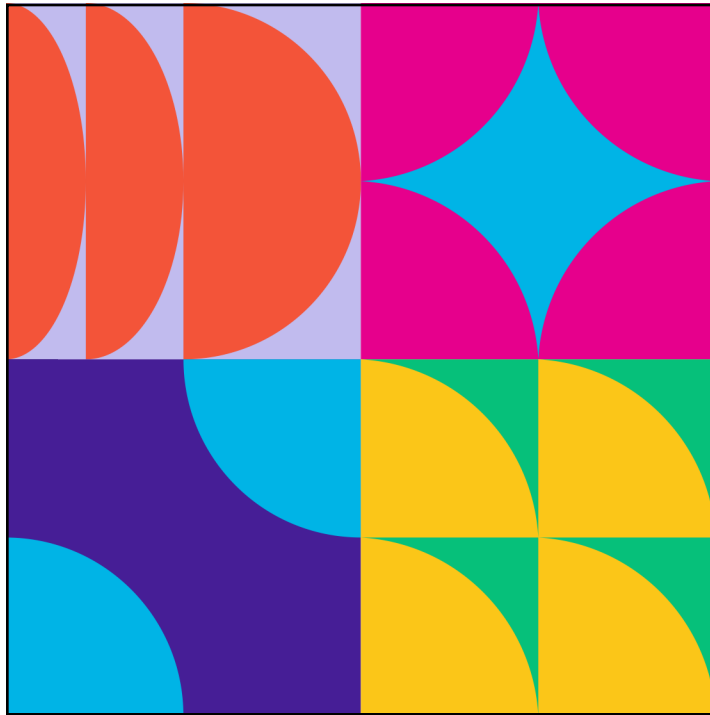




Turning AI Into Action in Your Pharmacy

Jonathan Adly, PharmD, MBA

ThoughtSpot | CEimpact 1

Description

What if you could take hours of administrative work off your plate each week? Review real-world use cases to see how AI can support your daily workflow, streamline tasks, and reduce burden. Equip yourself with best practices for evaluating AI tools, structuring effective prompts, and navigating key risks so you can confidently use AI in your pharmacy.

ThoughtSpot | CEimpact 2

Meet the Faculty



Jonathan Adly, PharmD, MBA

CEO
TJM Labs

Jonathan Adly

Jonathan Adly, PharmD, MBA is the founder and CEO of TJM Labs, an AI automation company purpose-built for pharmacy. TJM Labs deploys intelligent bots that replace manual technician workflows — handling prescription data entry, refill processing, and administrative tasks across any pharmacy management system. Serving independent, compounding, specialty, and long-term care pharmacies across the US and Canada, TJM Labs is helping pharmacy owners reclaim time, reduce labor costs, and focus on patient care. Jonathan is passionate about applying cutting-edge AI to one of healthcare's most underserved operational challenges.

Disclosures

- Jonathan Adly (content creator and presenter) and Keroles Ekladios (content planner and reviewer) have no relevant financial relationships with ineligible companies to disclose.
- Jonathan Adly discloses that AI tools were not utilized for this presentation.

Funding for this course was provided by Cencora.

Recording, capturing, or sharing any part of this presentation is strictly prohibited. This includes the use of AI note-taking tools, audio/video devices, or screen capture technology. Please help us protect the privacy of our speakers and the integrity of the educational content.

Learning Objectives

Upon completion of this activity, learners should be able to:

- Identify three practical ways to use AI to streamline pharmacy workflow, communication, and patient care.
- Evaluate the benefits and limitations of AI-enabled tools in community pharmacy practice.
- Construct effective prompts for generative AI tools to support common pharmacy tasks.
- Select one workflow or communication task where AI can reduce manual effort or administrative burden.
- Outline safeguards for implementing AI tools responsibly, including privacy, accuracy, and compliance considerations.

Today's Agenda

- Section 1: The Hidden Constraint
- Section 2: The AI Shift
- Section 3: Three Practical AI Use Cases
- Section 4: Evaluating AI Tools
- Section 5: Prompting AI & Responsible Use

The Hidden Constraint

The Iron Law of Pharmacy Operations

- **+200 scripts = +1 FTE**
- **The Math Every Pharmacy Lives By**
- Every pharmacy knows this ratio. It's not a problem to solve, it's just the physics of the business.
- Want to grow? Hire more people.
- Want to scale? Build a bigger team.
- Want to take on a new contract? Find the staff first.

FTE: Full-Time Equivalent

Growth = Headcount

- Want to double volume? Double your team.
- Want to expand to mail order? Build a 100-person facility.
- Want to sign a large institutional contract? Hire 150 techs.
- The question isn't "can we do this," it's "can we staff this."

The Invisible Ceiling

Most pharmacies never hit their market ceiling.

They hit their operational ceiling first.

- Opportunities declined because “we don’t have the bandwidth”
- Geographic expansion limited by recruiting in new markets
- Service lines unexplored because the staffing model doesn’t scale
- Revenue left on the table due to operational constraints, not market demand
- Contracts declined that competitors take and win

The ceiling isn’t the market. It’s the operating model.

The Compounding Effect

- When growth requires proportional headcount:
 - Margins compress as you scale
 - Complexity increases with each new hire
 - Your upside is capped by your ability to recruit and train
- **The Constraint Shapes Everything**
 - Your pricing. Your service model. Your geography.
 - Which opportunities you even consider.

What That Really Costs

\$45K–\$65K

Average technician salary per year

3–6 months

To hire and fully train a tech

30%+

Annual turnover rate*

- That's before overtime, agency staff, or missed prescriptions
- Every rehire restarts the 3–6-month training clock
- Productivity loss during transitions impacts patient safety

Some pharmacies are exploring automation as one strategy to manage volume growth alongside their existing workforce.

*Figures are estimates based on industry ranges and may vary by market and pharmacy type.

ThoughtSpot | CEimpact 13

**This isn't a problem
pharmacies talk about.**

It's just the way it's always been.

ThoughtSpot | CEimpact 14

Until Now.

Not Faster Humans. Different Physics.

Humans

- Process serially, one task at a time
- Work 8-hour shifts with breaks
- Require training, management, & onboarding
- Scale linearly; more volume = more staff
- Subject to turnover, burnout, sick days
- Geographic limits on hiring & recruiting

AI Agents

- Can handle high volumes of repetitive tasks in parallel
- Operate 24/7 without interruption
- Deploy instantly, update globally in seconds
- May reduce need for proportional headcount increases at higher volumes
- Eliminate certain workforce challenges, such as turnover and shift coverage
- Expand to new geographies instantly

***This isn't about cost per script.
It's about reducing volume-related constraints when
automation is implemented appropriately.***

The AI Shift

17

AI Is a Tool, Not a Strategy by Itself

- Best suited for repetitive, rules-based, administrative tasks
- Requires human oversight, exception handling, and workflow redesign
- Must be evaluated for accuracy, privacy, workflow fit, compliance, and return on investment (ROI)
- Should support - not replace - clinical judgment and patient relationships
- Value depends on fit with your pharmacy's workflow, systems, and patient needs

The Cognitive Shift Required

Old Question

"How do I optimize cost per script with my current model?"

- Thinking in margins
- Incremental improvements only
- Headcount is the primary variable
- Growth is constrained by operations
- Same business model, just optimized

New Question

"What businesses could I consider if automation reduces operational bottlenecks?"

- Thinking in possibilities
- Step-function changes in output
- Headcount decoupled from volume
- New markets become accessible
- Competitive moat grows with each automation

***Most executives are still asking the old question.
The window to shift is now.***

The Strategic Unlock

Before AI Agents

- "We'd love that contract, but we can't staff it."
- "Geographic expansion means recruiting in new markets."
- "That service line doesn't fit our operational model."
- "We don't have the bandwidth right now."

**Every decision filtered through:
"Can we staff this?"**

With AI Agents

- "Can our AI handle the volume? Yes. Let's talk terms."
- "New geography? Deploy the agents."
- "New service line? Configure and launch."
- "We want this business. Let's move fast."

**Every decision filtered through:
"Do we want this business?"**

The Economics That Actually Work

Traditional Scaling

- Revenue ↑ 2x → Headcount ↑ 2x
- Margin: minimal improvement
- Complexity: exponential as you scale
- Recruiting becomes a bottleneck
- Turnover erodes any gains made
- Profitability plateaus at scale

AI-Native Scaling

- Revenue ↑ 2x → Headcount ↑ ~10%
- Margin: compounds as volume grows
- Complexity: contained and manageable
- No recruiting bottlenecks to growth
- Economies of scale actually materialize
- Profitability improves at every stage of growth

AI-enabled automation may help some pharmacies improve operating economics as they scale.

The Competitive Moat

- Once a pharmacy operates AI-native:
 - They can underprice on volume plays
 - They can pursue opportunities competitors must decline
 - They accumulate data advantages that compound
 - They attract strong pharmacy teams who want more time for clinical and patient-focused work
- The pharmacies that move first don't just win.
- Early movers may develop operational and data advantages that are difficult to replicate quickly.

Every Industry Goes Through This Shift

- Manufacturing. Finance. Customer Service. Software Development.
- There's always a moment when:
 - The constraint that defined the industry... breaks
 - The impossible becomes routine
 - Two classes of companies emerge
- Pharmacy is at that moment now.

Pharmacy's Moment is Now.

The Proof

Case Study: Digital Pharmacy*

- **50,000+** scripts filled per day with a highly automated, reduced-tech workforce model
- **10x** volume growth in under one year
- Faxes, e-Rx, refills, shipping – all bots
- Standard question before hiring: “Can a bot do that?”
- Answer was almost always: “Yes”

This isn't theoretical.

The pharmacies using AI agents were able to scale without requiring proportional staffing increases.

*Results may not generalize to all pharmacy settings; implementation depends on workflow, payer mix, technology infrastructure, and oversight model.

ThoughtSpot | CEimpact 25

Benefits and Limitations of AI in Pharmacy

Benefits

- Reduces volume-related workflow constraints
- Can reduce per-script labor cost significantly
- Improves consistency and accuracy in workflows
- Frees the pharmacy team for higher-value work
- Scales without additional recruiting costs
- Can improve staff retention and satisfaction

Limitations

- Requires upfront implementation investment
- Needs ongoing monitoring and updates
- **Not** a replacement for clinical judgment
- Data privacy must be actively managed
- Change management required for staff adoption
- Exception handling still requires human review

ThoughtSpot | CEimpact 26

3 Practical AI Use Cases

27

Use Case 1: Rx Intake Automation

***Your team
focuses on
clinical decisions
and patient care,
not data entry.***

- AI reads and interprets eRx, fax, and paper prescriptions automatically
- Extracts drug name, dose, sig, prescriber, and patient info with precision
- Routes to pharmacist only when clinical intervention is needed
- May reduce intake time from 5+ minutes to <30 seconds per script in some workflows
- Handles ambiguous prescriptions via an exception queue
- Operates 24/7, no shift handoffs, no data-entry backlogs

The Math on Intake

$$\begin{array}{ccc} \boxed{\begin{array}{c} \mathbf{400} \\ \text{scripts per day} \end{array}} & \times & \boxed{\begin{array}{c} \mathbf{5 \text{ minutes}} \\ \text{per intake} \end{array}} & \times & \boxed{\begin{array}{c} \mathbf{\$22/\text{hour}} \\ \text{technician cost} \end{array}} \end{array}$$

You're spending

\$733/day **\$16,000/month**

Before overtime, turnover, and training costs. This estimate can help your pharmacy team evaluate whether AI-enabled automation or workflow redesign may be worth exploring.

Use Case 2: Insurance Verification & Prior Authorization

The workflow that consumes pharmacy team time, now handled automatically.

- AI agents check eligibility and coverage in real time across all payers
- Automated prior auth submissions using payer-specific logic
- Rejection handling and appeal workflows triggered without manual effort
- Pharmacist sees only the exceptions requiring clinical judgment
- Can reduce prior auth turnaround from days to hours, depending on payer and workflow
- Tracks status and follows up automatically with payers

Use Case 3: Patient Communication



The relationship layer is now scalable without extra staff.

- Automated refill reminders via SMS, voice, or app personalized per patient
- Pickup notifications and real-time delivery tracking updates
- Adherence outreach for patients with chronic conditions on maintenance meds
- Personalized messaging based on medication type and patient history
- Two-way communication; patients can reply YES to confirm pickup
- Escalates to pharmacist only when a clinical question arises

Poll the Audience:
Where is your biggest workflow bottleneck right now?

- A. Prescription intake – receiving and entering Rx data
- B. Insurance verification – prior auth and claim adjudication
- C. Drug dispensing – filling, labeling, and checking
- D. Inventory management – stock tracking and ordering
- E. Staffing and workload – understaffing and task overload



Where is your biggest workflow bottleneck right now?

Do not edit
How to change the design

i The Slido app must be installed on every computer you're presenting from

slido

Learner Exercise: Step 1 — Determine Your Volume

Metric	Your Value
Scripts filled per day	_____ Rx/day
Average time from intake to pharmacist review	_____ minutes
Technician hourly cost	\$_____ /hour

Learner Exercise: Step 2 — Calculate Your Intake Cost

Sample Assumptions

- 400 scripts filled per day
- 5 minutes per intake (average)
- \$22/hour tech cost
- Before pharmacist review time

You're currently spending
\$733/day
\$16,000/month
on intake labor alone

This estimate can help you evaluate whether AI-enabled automation or workflow redesign may be worth exploring for your pharmacy.
Now plug in your real numbers.

What Should You Automate First?

Manual eRx Entry

High volume, repetitive, error-prone.
Highest ROI for most pharmacies.

Fax Prescription Entry

Still common in community pharmacy.
Vision AI reads handwriting and typed faxes.

Insurance and Prior Authorizations

Biggest time-sink for pharmacies.
Automation may reclaim 2-4 hours per day in some settings.

Provider Clarifications

Routine callbacks can be scripted and automated. Escalate only true clinical questions.

Pick ONE card above. That's your starting point.

What This Means for Your Pharmacy Team

When AI handles data entry work, the entire pharmacy team benefits:

- Pharmacists focus on the clinical work they were trained and licensed for
- Technicians shift from data entry to higher-value support tasks and patient interaction
- Complex therapy management and patient education become a larger part of the team's day
- Staff retention improves when the work is meaningful and engaging
- Attract pharmacy professionals who want meaningful, clinical challenge
- AI doesn't replace the pharmacy team. It lets each member focus on what they do best.

Evaluating AI Tools

Different AI Tools Solve Different Problems

Generative AI

(e.g., ChatGPT, Gemini, Claude)

- Drafts communications and patient education
- Requires human review of all clinical content
- **Not** connected to your pharmacy system
- Manual copy/paste workflow required

Best for: Writing, summarizing, patient education

Agentic AI

(Workflow Bots, Automation Platforms)

- Operates directly inside your pharmacy management system (PMS)
- Executes tasks end-to-end without human input
- Connected to PMS, payers, and prescribers
- Runs 24/7 with no manual intervention needed

Best for: Intake, insurance, refills, routing

Both require governance, oversight, and validation.

ThoughtSpot | CEImpact ➤ 39

Key Evaluation Criteria for Any AI Tool

Integration

- Connects to your existing PMS?
- Works without application programming interface (API) access (vision-based preferred)?
- Works within your current workflows?
- No system replacement required?

Accuracy

- What is the documented error rate?
- How are exceptions handled and flagged?
- Is pharmacist review built into the workflow?
- Can you audit AI decisions?

Support

- Who maintains the bots on an ongoing basis?
- How are updates deployed?
- What is the implementation timeline?
- Are reference pharmacies available?

ThoughtSpot | CEImpact ➤ 40

Key Takeaway

- AI tools offer significant operational leverage
- Require intentional implementation, ongoing oversight
- A clear understanding of where human judgment is needed remains essential
- The question is not whether to adopt AI...but how to adopt it responsibly.

Example Implementation Considerations

- **Operational expertise**
 - Who understands and supports pharmacy workflow during implementation?
- **Technical integration**
 - How does the tool connect to or operate within your current systems?
- **Ongoing support**
 - Who maintains, updates, and monitors the tool after launch?
- **Implementation models vary by vendor**
 - Use the evaluation criteria and vendor selection framework to assess any AI partner you are considering

Vendor Selection Framework

Questions to Ask Any AI Vendor:

- What pharmacy systems do you integrate with?
- What is your error rate and how do you handle exceptions?
- Do you require API access or work through the user interface (UI)?

More Questions to Ask:

- What does implementation look like and how long does it take?
- Who is responsible for ongoing maintenance and updates?
- Can I speak with a reference pharmacy at similar scale?

A vendor who can't answer these questions isn't ready to be your partner.

Poll the Audience:

What is your biggest concern about implementing AI?

- A. Errors and accuracy issues
- B. Cost of implementation
- C. Regulatory compliance
- D. Unsure if it will work with our current PMS



What is your biggest concern about implementing AI?

Do not edit
How to change the design

i The Slido app must be installed on every computer you're presenting from

slido

Pilot Selection Scoring Matrix

★ Score each workflow 1–5 on the criteria below. Highest score = start here.

Criteria	Weight	Score (1–5)
Volume (scripts/day affected)	30%	___
Time per manual task (minutes)	25%	___
Error rate / rework frequency	20%	___
Staff frustration level	15%	___
Implementation complexity	10%	___

Prompting AI & Responsible Use

47

What Is a Prompt?

A prompt is the instruction you give an AI tool. Output quality mirrors input quality.

- Vague prompt → Generic, unusable output that needs heavy editing
- Specific, context-rich prompt → Useful, actionable output ready to send
- Think of it as briefing a very capable, very literal assistant
- You don't need to be a programmer to write great prompts
- Include:
 - Who you are
 - What you need
 - Format
 - Tone
 - Context
- The CRAFT framework gives you a repeatable system for every prompt

The CRAFT Prompting Framework



C - Context: Who are you? What's the situation?



R - Role: What role should the AI play?



A - Action: What do you want it to do?



F - Format: How should the output be structured?



T - Tone: What's the appropriate voice?

Prompting Example: Patient Communication

Weak Prompt

"Write a refill reminder."

Why it fails:

- No context about the patient or medication
- No tone or format specified
- No call-to-action (CTA) or urgency
- Generic output that isn't ready to send

Strong Prompt (CRAFT)

"You are a friendly community pharmacy technician. Write a 2-sentence SMS reminder for a patient whose metformin refill is due in 3 days. Use a warm, professional tone. Include the pharmacy name and a call-to-action to call or reply YES."

Why it works:

- Role defined (friendly pharmacy technician)
- Format specified (2-sentence SMS)
- Context given (metformin, 3 days)
- Tone and CTA specified

Prompting Example: Clinical Summary

Weak Prompt

"Summarize this patient's medications."

Result:

- Simple list with no clinical insight
- No interaction or duplication screening
- Not formatted for clinical use
- Not immediately actionable

Strong Prompt (CRAFT)

"You are a clinical pharmacist. Review the medication list and identify: (1) drug interactions, (2) therapeutic duplications, (3) medications inappropriate for a 72-year-old patient. Format as a bulleted clinical summary."

Result:

- Structured, clinically relevant output
- Flags interactions and contraindications
- Immediately actionable for the pharmacist
- Formatted correctly for documentation

Prompting Example: Prior Auth Appeal

Weak Prompt

"Write a prior auth appeal."

- Generic template unrelated to denial reason
- No patient specifics or diagnosis included
- Requires heavy editing before sending

Strong Prompt (CRAFT)

"You are a clinical pharmacist. Write a prior auth appeal letter for a 58-year-old patient with diabetes denied for semaglutide. Denial reason: 'not medically necessary.' The patient has failed metformin and has an A1C of 9.2%. Write a formal, evidence-based appeal citing clinical guidelines."

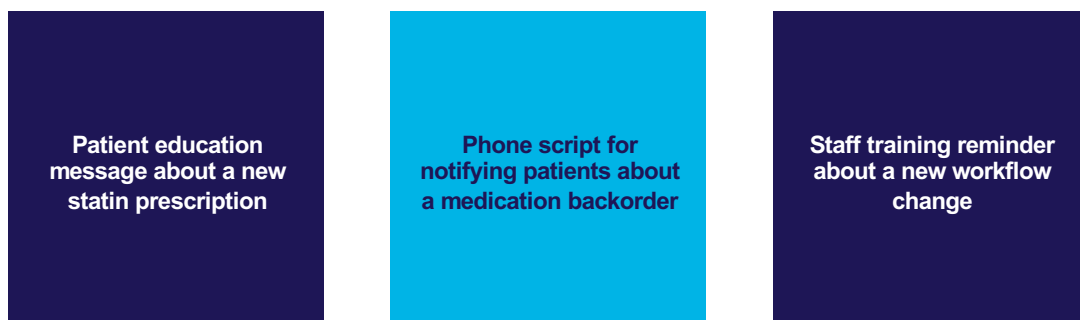
- Patient-specific, diagnosis-driven appeal
- Cites clinical evidence and prior treatment
- Ready to send with minimal editing

The CRAFT Prompting Framework



Your Turn - Build a Prompt

Using the CRAFT framework (Context, Role, Action, Format, Tone), write a prompt for one of these tasks:



C — Context | R — Role | A — Action | F — Format | T — Tone
Share your prompt with a neighbor — what would you change?

Privacy & Compliance: What You Must Know

Before using any AI tool with patient data, confirm all of the following:

- Verify the tool has a signed Business Associate Agreement (BAA)
- Never enter protected health information (PHI) into consumer AI tools – e.g., ChatGPT, Gemini, Claude.ai
- Only use HIPAA-compliant, enterprise-grade platforms for patient-specific tasks
- Document your AI use policies in your pharmacy's compliance program
- Train all staff on what is and isn't appropriate to input into AI
- Treat AI tools like any other covered entity vendor in your compliance workflow

Accuracy & Oversight

When AI Gets It Wrong

- Hallucinations: confident but incorrect outputs
- Outdated drug data if not regularly updated
- Context errors from ambiguous prompts
- Bias from incomplete training data

Never use AI for clinical decisions without verification.

Build In Safeguards

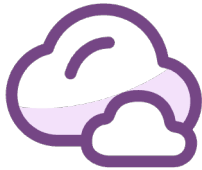
- Pharmacist review of all AI-generated clinical content
- Exception queues for flagged or low-confidence outputs
- Regular audits of AI accuracy metrics
- Clear escalation paths when AI fails
- Documented AI use policy in compliance program

The Responsible AI Implementation Checklist

Before going live with any AI tool in your pharmacy, confirm all of the following:

- ✓ BAA signed with all AI vendors that handle PHI
- ✓ All staff trained on appropriate AI use and data entry policies
- ✓ Pharmacist review built into every clinical AI workflow
- ✓ Regular accuracy audits scheduled on a recurring calendar
- ✓ AI use fully documented in your pharmacy's compliance program
- ✓ Patient data never entered into non-HIPAA-compliant tools

Poll the Audience:
Which safeguard feels most
important to implement first?



Which safeguard feels most important to implement first?

Do not edit
How to change the design

i The Slido app must be installed on every computer you're presenting from

slido

ThoughtSpot | CEImpact ▶

Put It Into Practice

60

Your 30-Day Action Plan

Week 1: Assess

- Score your top 3 workflows using the pilot selection matrix
- Calculate your current intake labor cost

Week 2: Research

- Identify 2–3 AI vendors to evaluate
- Ask the vendor the selection framework questions

Week 3: Pilot

- Run a 1-week pilot on your highest-scoring workflow
- Document baseline metrics before starting

Week 4: Decide

- Review pilot results with your team
- Expand, adjust, or move to next workflow

Connecting Today's Learning to Practice

Your 5 Next Steps This Week:

- Pick one of the 3 use cases and map it to your specific workflow
- Use the evaluation criteria framework before your next vendor call
- Practice the CRAFT framework with one real task this week
- Complete the pilot selection matrix for your top workflow
- Review your BAA status with current and prospective AI vendors

AI works best when it reduces administrative burden,
supports the entire pharmacy team,
and strengthens patient care with oversight and
responsible implementation.



Questions?