



# DEPARTMENT OF PUBLIC HEALTH

MEDICATION ADMINISTRATION PROGRAM (MAP)  
STAKEHOLDER WORKGROUP

MARCH 27<sup>TH</sup>, 2025

# Agenda, March 27th, 2025.

1. Welcome and introductions

2. A state sponsored eMAR for MAP providers

3. Reviewing hotline reports to identify themes and learning

4. Reimbursement rates for pharmacies

5. Policy and guidance updates

6. Further MAP updates

7. **Discussion Item:** Training and testing in MAP

A state sponsored  
eMAR for MAP  
providers.

# The Need for Modernization

- Challenges exposed by the pandemic accelerated the urgency to modernize MAP.
- An independent study by **Eastern Research Group** (ERG) in 2022 produced 30 modernization recommendations, and the introduction of a single, state-sponsored eMAR system was key to the success of these.
  - A state-sponsored eMAR would provide a **standardized, efficient, and safer** medication administration process.
  - Many other settings across multiple states have used eMAR systems for years. Research has demonstrated the quality improvements that result from such systems.
  - A 2023 survey of MAP providers found that **95%** of them would adopt a state-sponsored eMAR if made available (assuming it was of sufficient quality and could integrate with existing HER systems).

# Why do we need to act now?

DPH continues to raise the profile of this project...

- Many MAP sites still rely on outdated paper-based systems.
- Others may be adopting their own eMARs, risking fragmentation.
- **Staffing shortages and high turnover rates** are having a critical impact on medication safety.
- Data-driven decision-making is prevented by inconsistent records, fragmented across multiple providers and sites.
- Medication errors and lack of oversight can lead to **safety risks, hospitalization and serious harm**. Medication errors are among the highest cause of avoidable harm in health care, and rates are increasing in the MAP program.
- **Hotlines are increasing** and we believe an eMAR will help to address this (more later..).

# What outcomes are we looking for from an eMAR?

The use of a single state – sponsored system would...

- Allow for a uniform medication administration process and enhance the safety of medication administration to individuals served.
- Provide for remote monitoring and thereby increase DPH and the MAP agencies' reach and ability to identify and address unsafe conditions at MAP sites.
- Increase coordination of oversight between agencies.
- Provide access for DPH and the four MAP agencies to data that would assist in quality improvement and planning.
- Allow for uniform medication administration training and thereby enhance workforce readiness, morale, and mobility.
- Upgrade or replace the eMAR systems currently in use that vary significantly in the quality of safety features, ease of use, and compliance with MAP policy.

# What are the benefits?

Evidence from multiple comparable state programs indicates that clear benefits will be realized for patients, staff, providers, DPH and MAP agencies.

Reduce medication administration errors and improve **patient safety**.

Avoid downstream **harm, hospitalizations and associated costs**.

Increase **efficiency** on med passes.

Increase workforce **satisfaction** and **retention**

**Real-time data** access for better oversight and compliance.

Cost-effective solution with potential **statewide impact** beyond MAP.

## Ongoing research: Hotline Reports Show Increasing Complexity and Risks

- In MAP, a hotline event is a medication error that is followed by a significant adverse outcome, such as illness, injury, medical intervention, or death.
- Increases in the complexity and risks of medication administration in MAP are clearly reflected in the data available on hotline events.
- 453 hotlines have been reported in MAP over the last three years, **the frequency of reports has increased by 56% during this period:**
  - 2022 – 122 reports
  - 2023 – 146 reports
  - 2024 – 190 reports
- DPH is currently conducting thematic analysis of these hotline events to identify key learning and improvement initiatives. This indicates:
  - **42% would likely to have been prevented with a high quality eMAR.**
  - Of the preventable cases, **87.5% resulted in emergency care and/or hospitalization.**



# MAP Hotlines: Common themes and eMAR

## **New medications not transcribed to the MAR**

A high quality eMAR with pharmacy integration would have allowed the pharmacy to upload the new orders and populate the medication administration record.

## **Medications not administered by staff due to scheduling errors**

If the medication was not administered at the scheduled time, an alert would have been sent to the staff and supervisor

## **Medications not administered due to exhausted supply**

An eMAR with pharmacy integration would have automatically reordered the medication and/or alerted the provider that more refills were needed

## **Other administration errors such as wrong dosage or wrong route**

Pharmacy integration will require MAP-compliant language in the pre-populated MAR, improving the consistency and clarity of instructions.

# Safety: In summary.

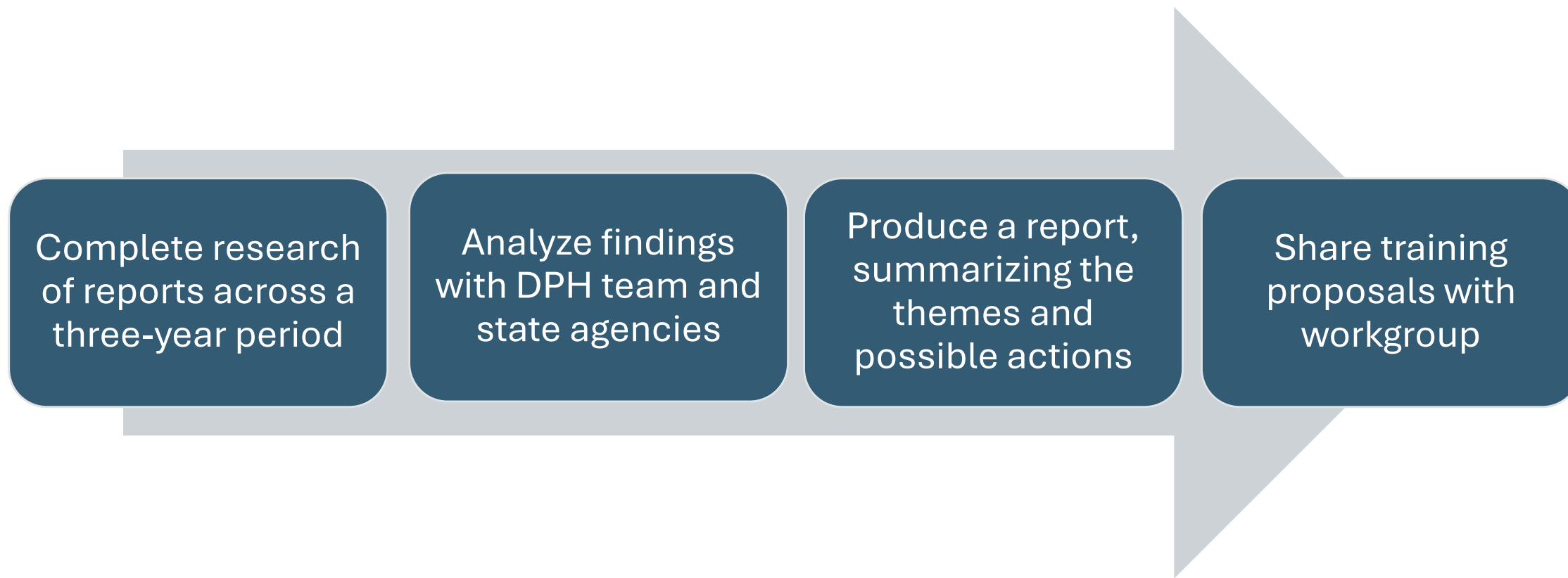
- At the current rate of reporting, **we estimate that a high performing eMAR would likely prevent at least 80 hotline events and 70 hospitalizations in MAP each year, as:**
  - The eMAR can send an alert to both staff and supervisor e.g., a medication not documented as given.
  - The eMAR allows the site the opportunity to administer a forgotten medication, or to follow up with a MAP consultant to avoid a hotline for medications not available e.g., prior authorization.
  - A pilot project using an eMAR system demonstrated significant benefits, including error reduction and time savings for staff – it was safer and less burdensome on the workforce.

## Cost and Prevention

- Research conducted by the MA Health Policy Commission in September 2021\* found that the average commercial payment (excluding professional fees) per inpatient hospital stay was \$20,900 in 2019.
- **Approximately \$1,460,000 is therefore spent annually to cover costs of treatment after harm has occurred at MAP sites. Funding directed into a high quality eMAR will significantly reduce the frequency and severity of these harmful events within the program.**

\* Massachusetts Health Policy Commission 2021 Annual Health Care Cost Trends Report: [download](#)

## Next Steps for Hotline Research



Complete research  
of reports across a  
three-year period

Analyze findings  
with DPH team and  
state agencies

Produce a report,  
summarizing the  
themes and  
possible actions

Share training  
proposals with  
workgroup

# Reimbursement Rates for Pharmacies

# Reimbursement Rates for Pharmacies

## **H1 – Governor’s Budget**

### **Section 78 - Pharmacy Assessment**

(b) Each pharmacy shall pay an assessment per prescription dispensed in Massachusetts. The assessment shall not exceed the lesser of: (i) \$2 per prescription dispensed in Massachusetts or (ii) an amount equal to 6 per cent of the revenues received by the pharmacy for the applicable period in Massachusetts. A pharmacy's liability for the assessment shall, in the case of a transfer of ownership, be assumed by the successor in interest to the pharmacy.

Subsequently, the Governor’s Office has communicated to the pharmacy community the assessment will be \$1.10 per prescription.

# Policy and Guidance Updates

# Updated MAP Prescriber Guidance

## Purpose of the Document:

- Support service providers in their quest to obtain MAP compliant orders from the HCP.
- Introduce the MAP to the HCP and explain our requirement for an HCP order; this is not something HCPs typically write (HCPs typically only write prescriptions.)
- Assist the HCP in writing MAP compliant orders thus decreasing the constant need for service providers to contact the HCP for order clarifications.

## Key Messages:

- Safe medication administration starts with a complete HCP order.
- If the HCP order and prescription are written with all required information, there will be no delay in treatment for the individual and there will be less calls to the HCP from the site seeking clarifications.
- Both the service provider and the HCP will be more satisfied if the order and the prescription are the same with all required information.

# MAP Prescriber Guidance



We have revised the document that was initially published in March 2020 because MAP service providers often received “push-back” from health care providers (HCP) when requested to have the order and prescription include certain criteria.



If the HCP wrote the order differently from the prescription, this required the service provider to seek clarification from the HCP so that the two documents were written in the same way i.e., if the order states “once daily in the evening”, the prescription also needs to state “once daily in the evening” and not, “once daily at 8pm”.



State agency MAP Directors have requested that the language on this document be expanded to explain the additional requirements specific to HCP PRN (as needed) medication orders. Examples are also included in this revised document for the HCP’s reference.



Once approved, the improved document will be shared with all MAP sites to share with prescribers they work with, particularly where there have been problems with obtaining MAP-compliant prescriptions or orders.



# Objectives for the New J-Tube and G-Tube Guidance Overview

Service provider may elect to have proficient (i.e., experienced in the process of medication administration via the oral route) certified staff (including proficient relief staff) be trained to administer medication and water flushes via a Gastrostomy (G) or Jejunostomy (J) Tube.

- Current policy states that an RN or HCP must complete all initial and ongoing (every 2 years) G/J tube training.
- The new policy will include the information that a trained and competent LPN may provide subsequent G/J tube training.
- The RN **must do** the initial training; however, the LPN can do the training every-2-years.

# Recertification Training

This will be a new policy stating that it will be a requirement that a training is done **prior to a staff testing for MAP recertification.**

The change is based on issues noted in the field during MAP reviews, hotline reviews, DIR reviews etc. There is a lack of understanding specific to the foundational safety requirements within MAP such as:

- The medication administration process
- Ordering and receiving medication
  - When to order a refill
  - Who to contact when there are 0 refills left
  - Etc.
- Contacting a MAP consultant and documenting the contact
- Disposal documentation
- Count Book documentation
- LOA and transfer form use

It has been determined that a review would be beneficial every **2 years prior to recertification.**

# Updates to Acceptable Codes for Use on Medication Administration Records (MAR)

Our policy was written for paper, and a set of circled initials is a catch-all for a med not being given. Other issues include:

- eMARs can't circle initials, so we need to allow a code that can be clearly entered and captured in eMAR.
- We need to avoid inconsistency or a blank code.
- We recognize this has a knock-on effect on other materials, including training and testing and that many eMARs may currently be under construction
- Policy amendments targeted for **October 25**

## FDA Removal of Clozaril from REMS and Follow-up Actions for MAP

Prior to Feb 24<sup>th</sup> 2025, Clozaril was part of the REMS (Risk Evaluation and Mitigation Strategy) program.

- This required that the pharmacy receive the lab (ANC) results prior to releasing the monthly supply of Clozaril to the person for which the Clozaril is prescribed.

The **FDA removed Clozaril** from the REMS program in February meaning the HCP will still monitor lab results.

- However, it is no longer a requirement that the results are sent to the pharmacy in order for the pharmacy to release the medication.

**We are in process of updating our Clozaril Policy and Clozaril training forms to reflect this change.**

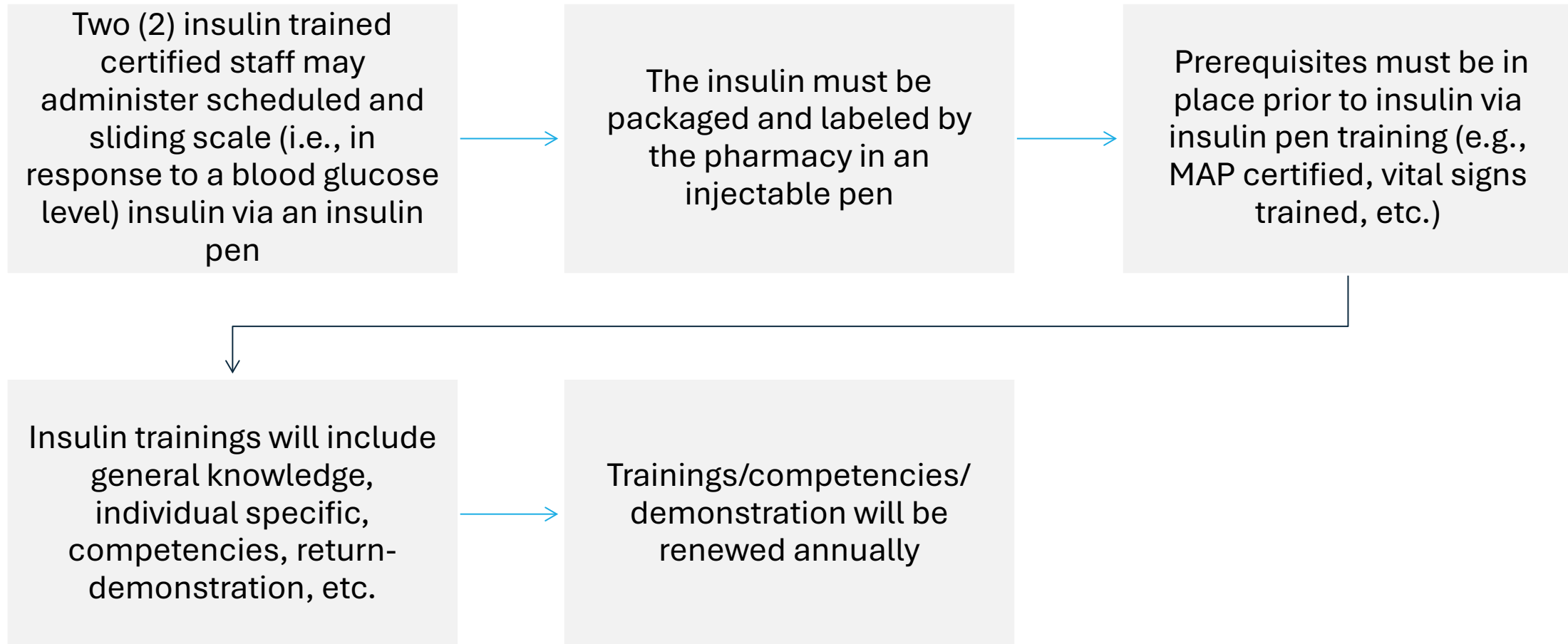
# Further MAP Updates

## Developing an insulin policy: The need for change.

- **COVID-19 dramatically impacted the staffing** of MAP registered sites, the group living, and community day programs funded or operated by MAP agencies.
- On April 1, 2020, **DPH provided notice of a flexibility**, allowing MAP certified staff to administer insulin in consultation with a nurse via telehealth.
- Unfortunately, the current shortage of nurses, combined with an increase in compensation rates, has made the **recruitment and retention of nurses by MAP service providers an ongoing challenge**.
- In addition, **VNAs will rarely come to sites** since insulin administration is not considered to be “skilled nursing”.
- These concerns led to 2024 development and release of MAP policy 19-9 High Alert Medication (vis Insulin Pen) Therapy.

# The Insulin Administration Process

Note: **The process is not mandatory.** It is available for providers/sites to use if they determine it is beneficial and can be deployed safely.



## Objectives and Benefits

---

Allows for (2) MAP certified staff to administer insulin via an insulin pen instead of a licensed staff.

---

Possibly increase the ability to contract with VNAs since the VNA would not be solely responsible for all insulin administrations.

---

Ease some of the burden placed on service provider nurses with the current shortage of nurses.

---

Has the capability to become part of a career ladder, providing more growth opportunities for staff.



# Rules Surrounding the Use of Common Carriers in MAP

- Policy 10-1 Receiving Medication from the Pharmacy states that medications for use at a MAP registered site must be received ‘directly from the pharmacy’.
- Our interpretation of ‘directly from the pharmacy’ includes the use of “common carriers” such as UPS, FedEx, DHL etc. that the pharmacy contracts with, verses an employee of the pharmacy only (pharmacy delivery driver).



# Discussion Item

Training and testing in MAP:  
A review of progress and next steps

# Enhancements to RIA Curriculum and testing procedures in 2024

## Improve Reading Comprehension and Reading Ease

- Lower grade level – Previously at 10<sup>th</sup> grade level but lowered to 8<sup>th</sup> grade.
- Increase reading ease - Flesch Reading Ease of at least 60, which is standard.

## Improve Readability

- Breaking up long sentences and paragraphs into simple sentences.
- Reducing passive voice; using more direct language.
- Re-wording or defining confusing words like ‘post’ or ‘sensitivity.’
- Defining ‘very hard’ words in the text or with footnotes.

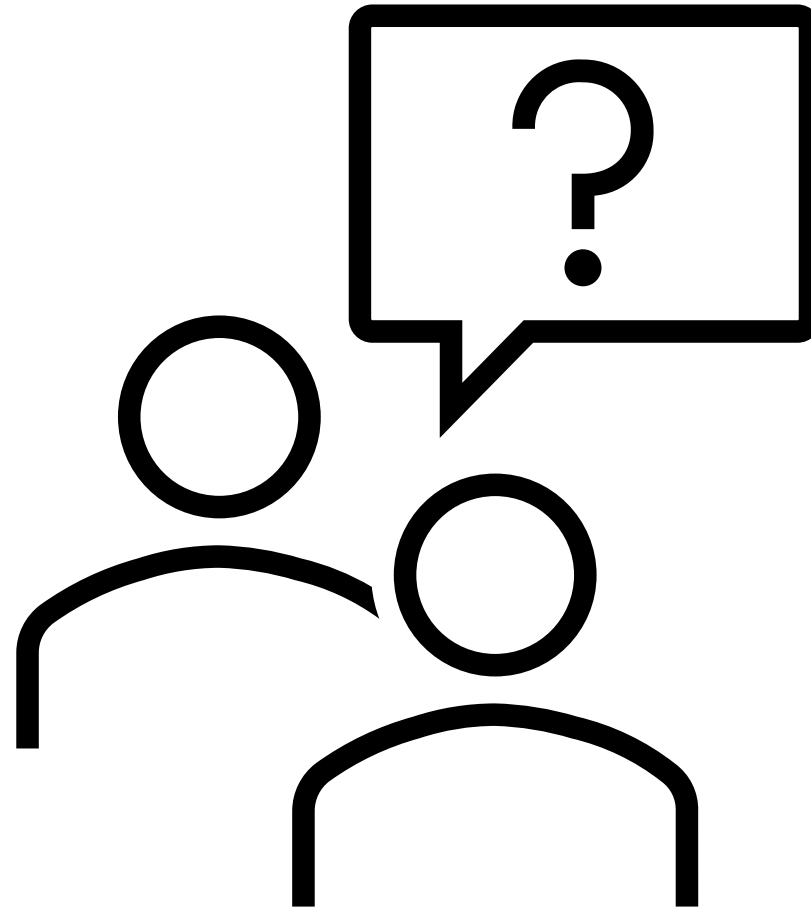
## Additional Enhancements

- Reducing redundancies in the text and in the concepts.
- Improving the flow of concepts.
- Revising ‘Words You Should Know’, ‘Questions to Ask Your Supervisors’ and other adjunct pieces.
- Including a glossary of footnoted terms and:
- Multiple improvements to guidance for the testing process to improve accessibility

## Testing Performance: Early Signs

	2022	2023	Jan 24-Sept 24	Sept 24-2/23/25
Knowledge	43.17%	43.85%	46.15%	50.25%
Med Admin	59.38%	59.35%	66.38%	64.88%

What should we  
focus on next ?





Additional Items?  
Questions?