

A Novel AI-Driven, Text-Based Approach to Trainee Feedback Acquisition & Aggregation

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INTRODUCTION

Assessment is a fundamental component of competency-based medical education, yet residency programs struggle to obtain timely, consistent, and high-quality feedback on trainees.

Current feedback methods, such as anecdotal recollections, app-based procedural logs (e.g., MyTipReport), and end-of-rotation surveys, are limited by recall bias, inconsistent use, and lack of real-time input. These shortcomings make it difficult to map feedback to Accreditation Council for Graduate Medical Education (ACGME) milestones, evaluate procedural competency, and support decisions related to remediation, individualized learning plans (ILPs), and promotion. Additionally, residents report insufficient real-time, actionable feedback hinders their growth.

Emerging approaches, including text-based reminder systems and AI-driven natural language processing, show promise in improving both the frequency and quality of feedback.

OBJECTIVES

Primary Objectives

- Solicit formative and summative feedback from faculty via a text-based platform
- Provide real-time, actionable feedback to trainees via a text-based platform
- Organize feedback into database according to ACGME milestones for Clinical Competency Committee (CCC) evaluations

Secondary Objectives

- Increase the volume and quality of faculty feedback
- Improve faculty and trainee satisfaction with feedback process
- Enhance efficiency and data quality for CCC

NEXT STEPS

IMMEDIATE NEXT STEPS INCLUDE:

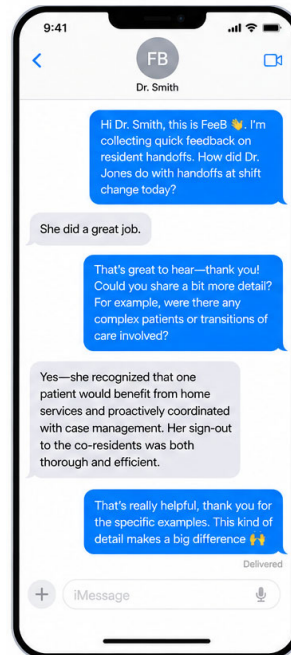
- Creating Northwell- AI compliant knowledge bank
- Creating Northwell- AI compliant text-based platform
- Initiating pilot using Fake Back End (ie. manual texting and monitoring of data organization)

METHODOLOGY

- Build Knowledge Bank** from which FeeB can learn to organize feedback and prompt faculty for more actionable and concrete feedback
- Perform a Fake Back End** with small cohort of faculty and residents
- Automate and Scale** FeeB's process once validated
- Track Response Rates and Satisfaction** of users
- Integrate** FeeB into Clinical Competency Conference
- Expand** FeeB to additional trainee programs

2. Feedback Organized into Structured Database

1. Feedback Collected in Real Time



Feedback Database	
Feedback ID	FB-2024-05-21-001
Date/Time	May 21, 2024 9:41 AM
From	FeeB
To	Dr. Smith
Resident	Dr. Jones (PGY-2)
Rotation	Labor & Delivery
Feedback Type	Handoff / Sign-out
Overall Rating	★★★★★
Key Themes	- Recognized patient needs - Coordinated with case management - Transition of care (home services) - Thorough and efficient sign-out
Milestone Domains	ICS, PC, SBP
Milestones	ICS PC2, ICS PC6, PC F1, SBP SBP1
Raw Feedback	Yes—she recognized that one patient would benefit from home services and proactively coordinated with case management. Her sign-out to the co-residents was both thorough and efficient.

3. Data Mapped to ACGME Milestones of OBGYN Residencies

ACGME Milestones Mapping			
Milestone Domain	Milestone	Description	Evidence from Feedback
Patient Care (PC)	PC F1	Develops patient care plans that are patient-centered and evidence-based.	Recognized that one patient would benefit from home services.
Interpersonal & Communication Skills (ICS)	ICS PC2	Communicates effectively with members of the health care team.	Proactively coordinated with case management.
Interpersonal & Communication Skills (ICS)	ICS PC6	Provides clear and timely handoffs.	Her sign-out to the co-residents was both thorough and efficient.
Systems-Based Practice (SBP)	SBP1	Works effectively within the health care system to optimize patient care.	Coordinated with case management to arrange home services.

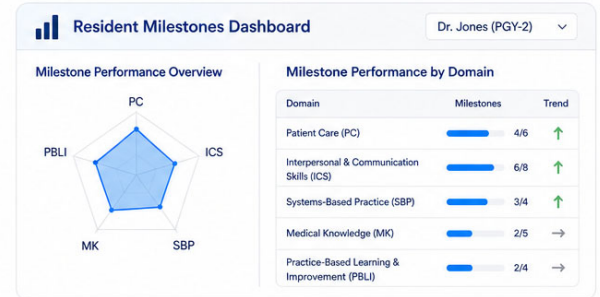


Figure 1: Vision of FeeB workflow from faculty interface, to database, to output dashboard for real-time trainee feedback and summative reports.

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ACKNOWLEDGEMENTS

Thank you to **Dr Linus Chuang & Miri Levi** for their nomination and support to participate in the PATMDTA. Thank you to **Beth, Haley, Nicole, & the 2025-2026 PATMDTA cohort** for their ongoing inspiration, collaboration, and camaraderie throughout our journey together. Thank you to **Dr Erin Panarelli & Jen Franke** who have been our fearless leaders of the OBGYN Residency and helped me grow as an associate program director. Most of all, thank you to the residents at the Zucker School of Medicine at Hofstra / Northwell Obstetrics & Gynecology Residency at Danbury Hospital. Their commitment to excellence is the driving force behind this initiative.