

Utilizing an Interprofessional Workforce Development Approach to Improve Diabetic Retinopathy Screening at an FQHC Clinic

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BACKGROUND / ABSTRACT

Diabetic retinopathy (DR) is a leading cause of preventable blindness in adults, yet screening rates remain below national benchmarks in many community health settings. **At El Rio Health's Cherrybell Clinic, only 53% of eligible patients were receiving their annual DR screening** as of the first day of our intervention on August 16 2024 – despite availability of in-office EyePAC machines.

In response, our team launched a structured, interprofessional quality improvement (QI) initiative grounded in continuing education principles. The goal was to build team-based competencies in communication, role clarity, and shared workflow design to reduce missed opportunities and improve both workforce engagement and DR screening outcomes.

PURPOSE & OBJECTIVES

To strengthen interprofessional collaboration, clarify team roles, and improve communication workflows through a structured quality improvement initiative grounded in interprofessional continuing education (IPCE) principles—with the goal of closing care gaps and increasing diabetic retinopathy screening rates at El Rio Health's Cherrybell Clinic.

METHODS / MATERIALS

I. TEAM FORMATION:

- Formed an interprofessional QI workgroup in August 2024.
- 14 individuals sustained participation throughout the duration of the project, including 4 physicians (1 resident and 3 attendings), 3 MAs, 1 MOR, 1 LPN, 2 PharmDs, 1 LCSW, and 2 clinic managers.
- Held bi-weekly to monthly meetings to identify barriers and test small changes using Plan-Do-Study-Act (PDSA) cycles.

This project positioned frontline staff as active participants in the QI project design and implementation — not just as implementers, but also as agents for change.

II. IMPLEMENTED QI + IPCE APPROACH:

- Delivered training on QI fundamentals and IPCE core competencies, focusing on **role clarity, communication, and teamwork**.
- Established a clear project aim: to increase diabetic retinopathy screening rates to 65% by April 1, 2025.
- Engaged the team in applied learning exercises: Fishbone & Driver Diagram Development; Process Mapping; Motivational Interviewing & Role Play.

III. DATA COLLECTION & EVALUATION:

- Monitored monthly DR screening rates via Epic reports.
- Collected weekly staff feedback through anonymous surveys.
- Logged same-day eye exam data and missed opportunities through MA tracking sheets.
- Assessed perceptions of team collaboration using pre- and post-intervention CPAT surveys (Collaborative Practice Assessment Tool).¹

Diabetic Retinopathy QI Workgroup Team Composition

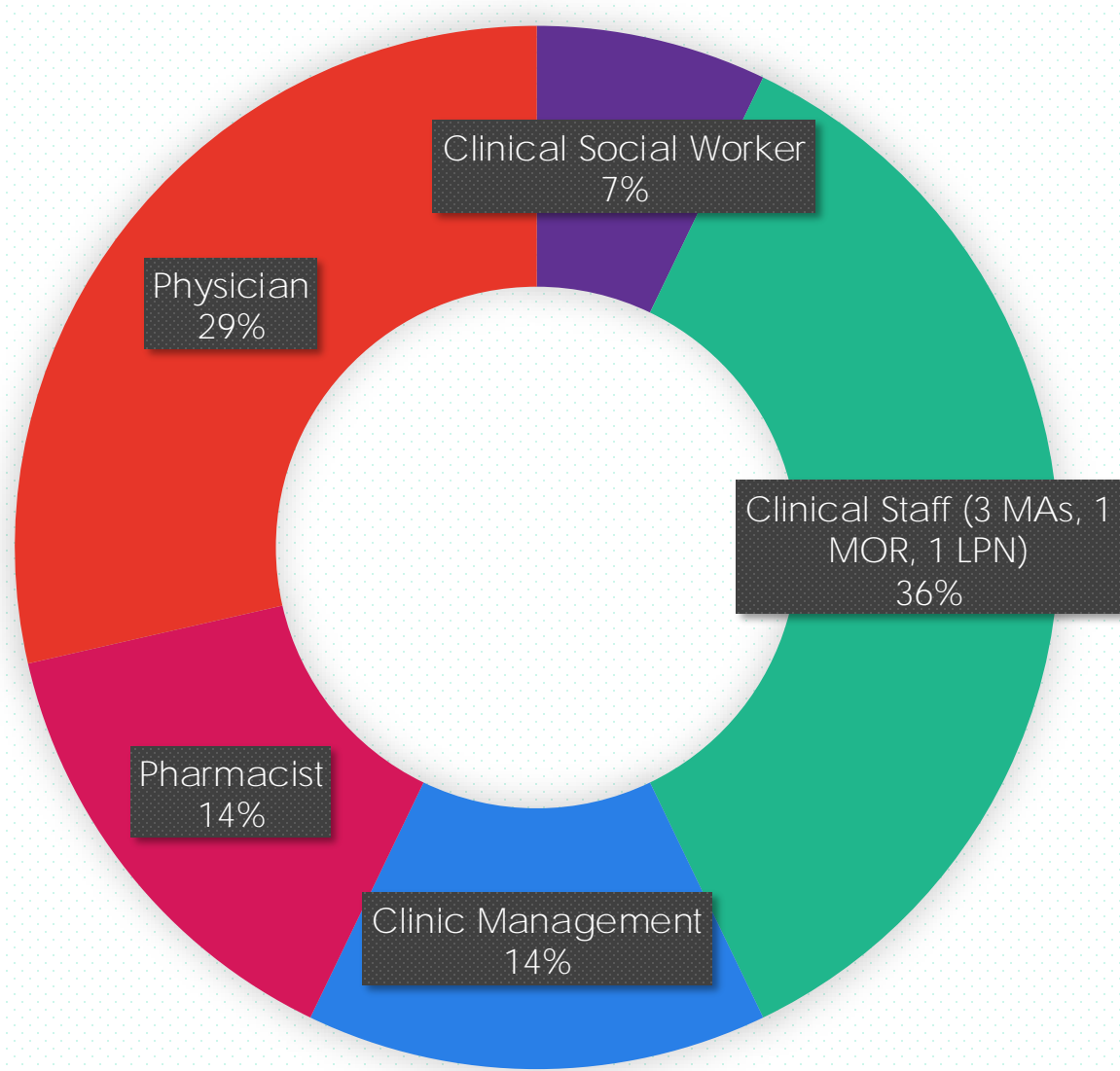


Figure 1. Distribution of Health Professions, El Rio Cherrybell DR QI Workgroup.

RESULTS

PROCESS IMPROVEMENTS:

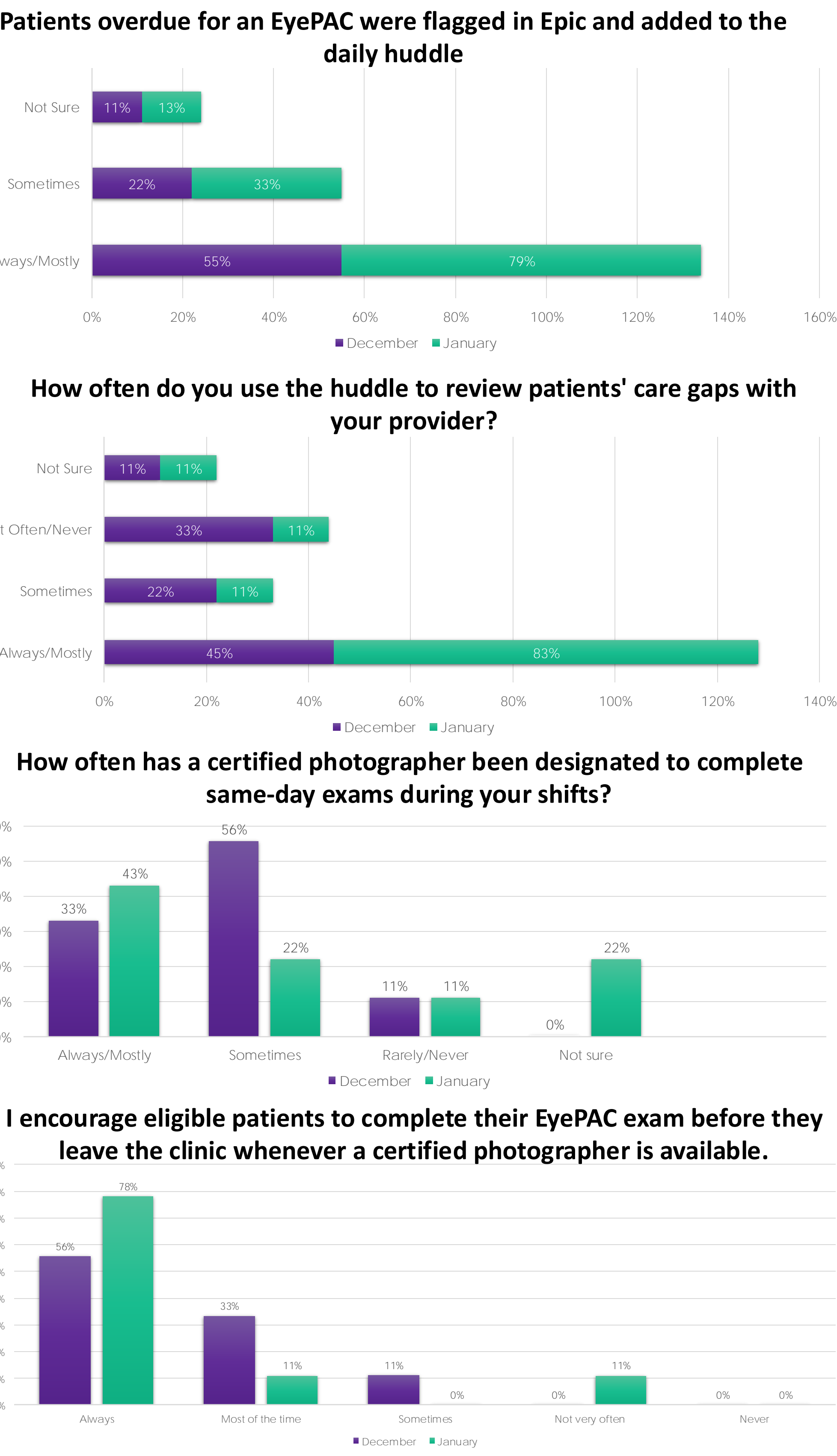
- Co-created and implemented a standardized same-day eye exam coordination process, including use of designated EyePAC photographers and shared communication protocols.
- Developed visual aids and scripted messaging to engage team members to follow protocol.

Figure 2. "Ask Me Why" team / patient engagement pins, developed by the DR QI workgroup as conversation starters to discuss importance of addressing care gaps.



Figure 3. Visual aid developed for the "Test Today, See Tomorrow" Initiative.

PROCESS IMPROVEMENT STAFF FEEDBACK RESULTS (BEFORE VS. AFTER 1ST PDSA TESTING CYCLE):



Figures 4-7. Weekly staff feedback results, pre vs. post initial PDSA testing cycle.

Process Improvements as Reported in Weekly Staff Feedback (Before vs. After First PDSA Cycle):

- ↑ Use of daily huddles to review care gaps
- ↑ Designation of certified EyePAC photographers per shift
- ↑ Same-day EyePAC exams offered to eligible patients

CLINICAL OUTCOMES:

Diabetic Retinopathy screening rates **increased from 53% to 63%** between August 2024 and March 2025 (+10%).

TEAM DYNAMICS (CPAT SURVEY RESULTS):

Domain	Observed Shifts
Mission, Purpose, Values	Improved clarity in team goals (40% → 100% agreement), but decreased perception of commitment to collaboration (80% → 20%).
Team Leadership	Increased agreement that leadership clarified roles (40% → 80%), but overall decline in leadership ratings (5.44 → 5.10 avg.).
Roles & Responsibilities	Growth in perceived shared accountability (20% → 40%), but declined perception of individual team members being held accountable for their work (20% → 40%).

Figure 8. CPAT Post-intervention results revealed mixed signals: while team goal clarity, role definition, and shared ownership improved, challenges in individual accountability and perceptions of leadership engagement remain.

DISCUSSION

Structured interprofessional collaboration likely improved DR screening rates (+10%) through better workflow coordination, adoption of shared protocols, and enhanced communication strategies.

While we anticipated corresponding gains in perceived team dynamics and broader engagement across the clinic—not just among QI workgroup members—post-intervention surveys revealed mixed results. Although role clarity and shared accountability improved, perceptions of team leadership and site-wide team unity declined. These tensions likely reflect a growing awareness of the complexity of effective teamwork.

Mixed signals highlight that shared understanding of roles, leadership, and mission remains a work in progress. Sustaining and scaling improvements will require continued investment in structured facilitation, role development, and interprofessional training across the broader clinic team.

REFERENCES

¹ Collaborative Practice Assessment Tool (CPAT) © OIPEP Final Version – March 2009. <https://interprofessional.ucsf.edu/sites/g/files/tkssra4171/f/wysiwyg/cpat-s2-queen.pdf>