Improving Depression Screening Completion Rates for Medicare Patients in a Primary Care Setting

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VALPO

Significance of Problem

- Depression is a problem for the older adult population that often goes unrecognized (Phoh et al., 2017)
- 16.0% of adults 65 and older had depression in Indiana in 2020 (2% higher than the national average) (America's Health Rankings, 2022)
- It is estimated that 1/6 of older adults experience depression but only 40-50% are recognized and treated (Phoh et al., 2017)
- Depressive symptoms in older adults are associated with poorer health outcomes, suicide, and mortality (Shah et al., 2018)

PICOT Question

In Medicare patients in a primary care setting (P), is an MA depression screening protocol using the PHQ-9, coupled with staff education (I), more effective than standard care (C) for improving depression screening rates (O) after three months (T)?

Review of Literature

Author/yr	Database(s)	Level of Evidence/Type	Quality/Tool
Campbell et al. (2021)	MEDLINE with Full Text	VI/Quality Improvement	92/160 Melnyk & Fineout-Overholt Rapid Critical Appraisal Questions for EBP QI Projects Consider evidence with caution
Costantini et al. (2021)	PsycInfo	I/Systematic Review	Strong/CASP Systematic Review Checklist
Gorman et al. (2021)	CINAHL	III/Nonrandomized Controlled Study	Sufficient/CASP Case Control Study Checklist
Heinz et al. (2021)	MEDLINE with Full Text	VI/Qualitative Study	Strong/CASP Qualitative Studies Checklist
JBI Recommended Practice (2019)	JBI	VII/Clinical Practice Guideline	AGREE II D1 = 66.7%; D2 = 37.9%; D3 = 0%; D4 = 13.3%; D5 = 47.6%; D6 = 16.7%; Overall = 4/7 = 50% Would recommend the guideline with modifications
Jiao et al. (2017)	MEDLINE with Full Text	VI/Quasi-experimental	Sufficient/CASP Clinical Prediction Rules Checklist
Kaiser Permanente (2021)	TRIP	I/Clinical Practice Guideline	AGREE II D1 = 83.3%; D2 = 77.8%; D3 = 38.9%; D4 = 76.7%; D5 = 76.2%; D6 = 41.7%; Overall = 6/7 = 83.3% Would recommend the guideline
Lizarondo (2021)	JBI	VII/Integrative Review	Sufficient/Melnyk & Fineout-Overholt Rapid Critical Appraisal Questions for Literature Review Tool Would recommend article for use within a body of evidence
Maust et al. (2017)	CINAHL	VI/Descriptive Cross-Sectional Study	Sufficient/CASP Case Control Study Checklist
Rhee et al. (2017)	CINAHL	VI/Descriptive Cross-Sectional Study	Sufficient/CASP Case Control Study Checklist
Siniscalchi et al. (2020)	CINAHL	VI/Quality Improvement	98/160 Melnyk & Fineout-Overholt Rapid Critical Appraisal Questions for EBP QI Projects Consider evidence with caution
Sinnema et al. (2018)	MEDLINE with Full Text	II/RCT	Sufficient/CASP Randomized Controlled Trial Checklist
Smith et al. (2021)	Cochrane Database of Systemic Reviews	I/Systematic Review	Strong/CASP Systematic Review Checklist
University of Michigan Health System. (2021)	TRIP	I/Clinical Practice Guideline	AGREE II D1 = 94.4%; D2 = 72.2%; D3 = 88.9%; D4 = 80%; D5 = 83.3%; D6 = 75%; Overall = 7/7 = 100% Would recommend the guideline

Best Practice

USPSTF recommends screening for depression in the general adult population once adequate systems in place (Grade "B" recommendation) (Siu et al., 2016)

Best practice for increasing depression screening in older adults in primary care includes:
- An MA depression screening protocol during patient check-in (Gorman et al., 2021)
- Staff education including depression education, the need for depression screening, standard measures for diagnosing and grading depression severity, how to treat depression, and when to refer the depressive patient (Gorman et al., 2021; Heinz et al., 2021; Siniscalchi et al., 2020)
- Best practice advisories (BPAs) (Campbell at al., 2021; Gorman et al., 2021)
- Referral to collaborative care following a positive screening (University of Michigan Health Systems, 2021)
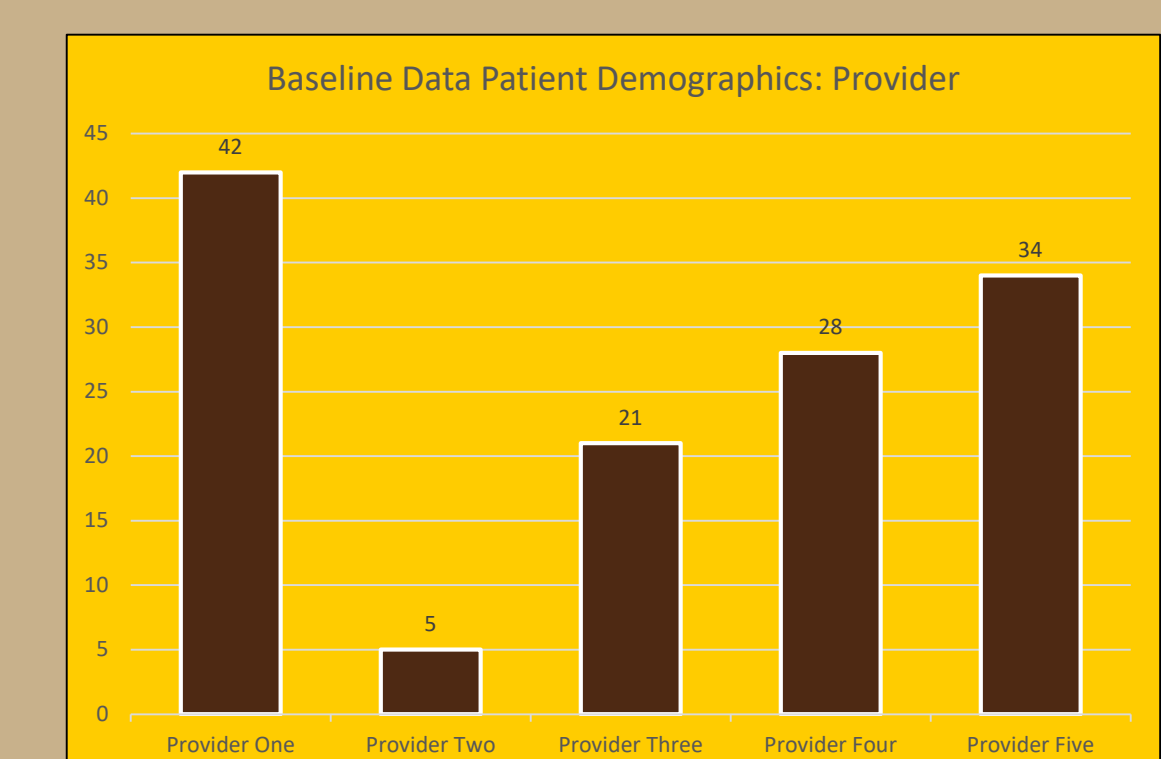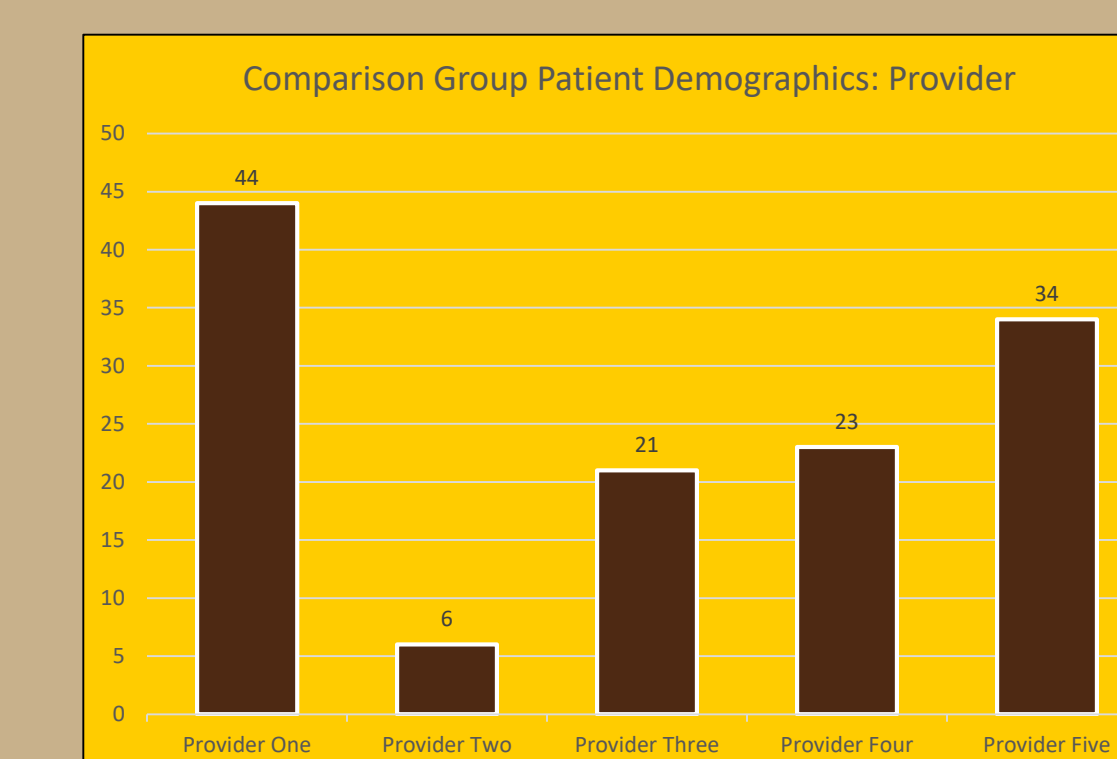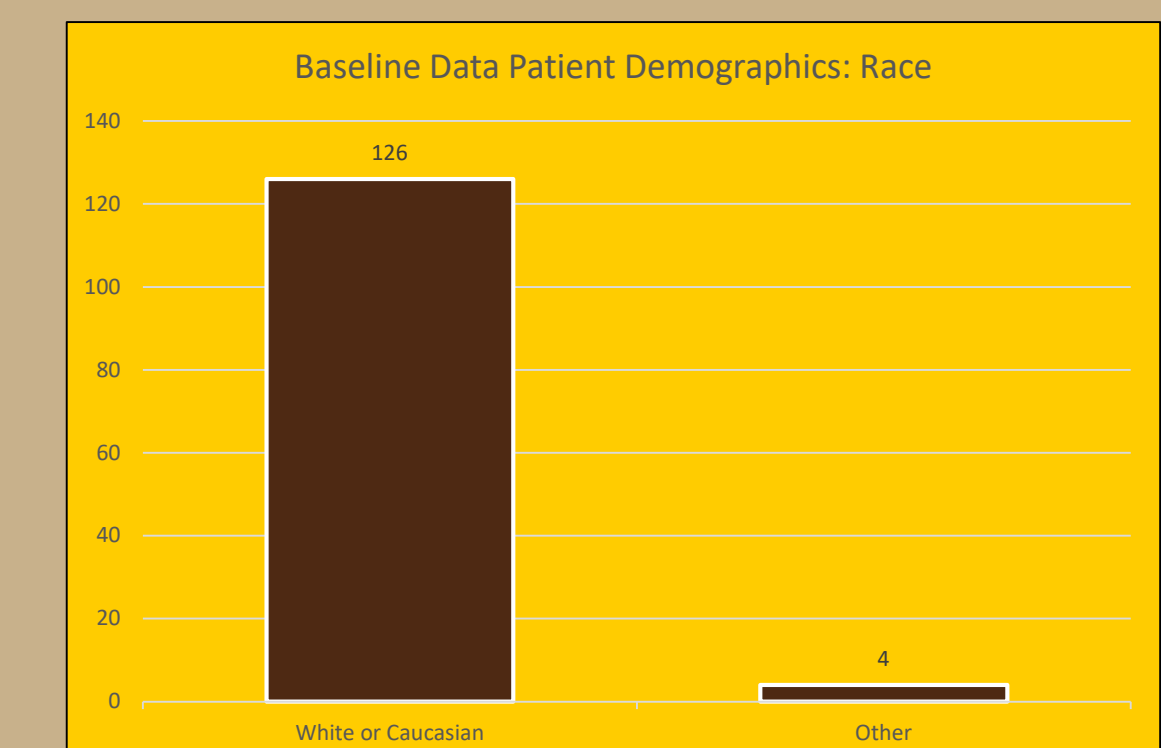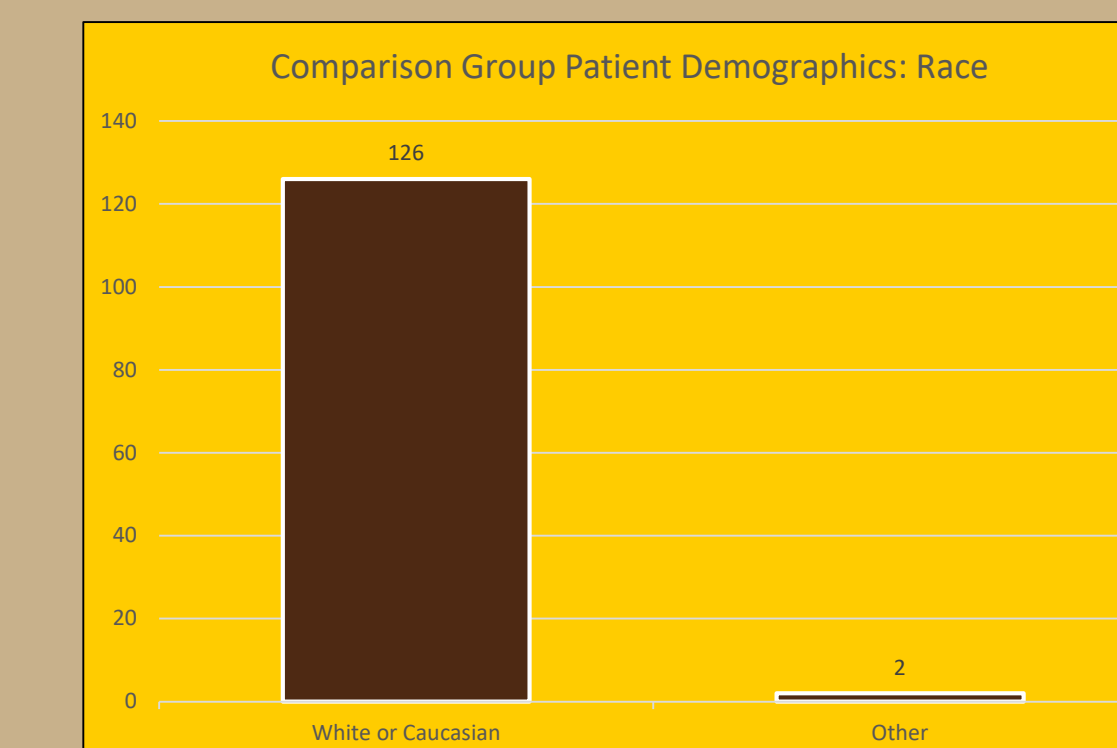
Implementation

Setting: Family practice clinic in Northwest Indiana
Stakeholders: Office manager, providers (four physicians and one nurse practitioner), clinic medical assistants (MAs) and administrative assistants, the patient population, the organization's human resources department, and the organization's Clinical Quality Analyst
Intervention:
- Staff education (using an educational presentation prepared by the project manager)
- MA depression screening protocol
  - Using PHQ-9 depression screening tool for eligible patients
  - During patient rooming
  - Inform provider following screening completion for provider acknowledgement in patient EHR
Sampling: Convenience
Eligible Patients: Medicare patients, 18 years and older, presenting for a scheduled appointment, and due for annual screening
Timing:
- Staff education presentation sent to project site facilitator on August 24, 2022
- Baseline data collection period: March – May 2022
- Intervention implementation and data collection period: September – November 2022
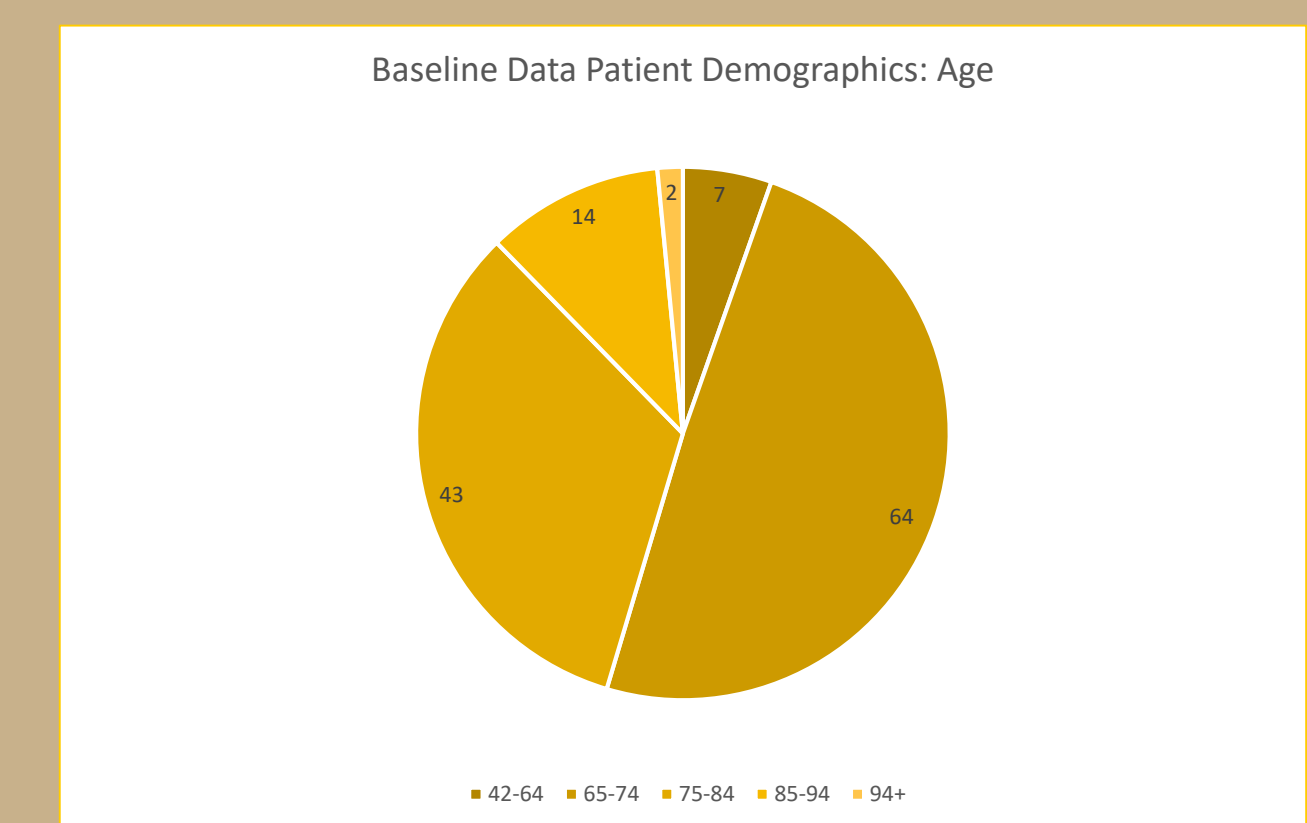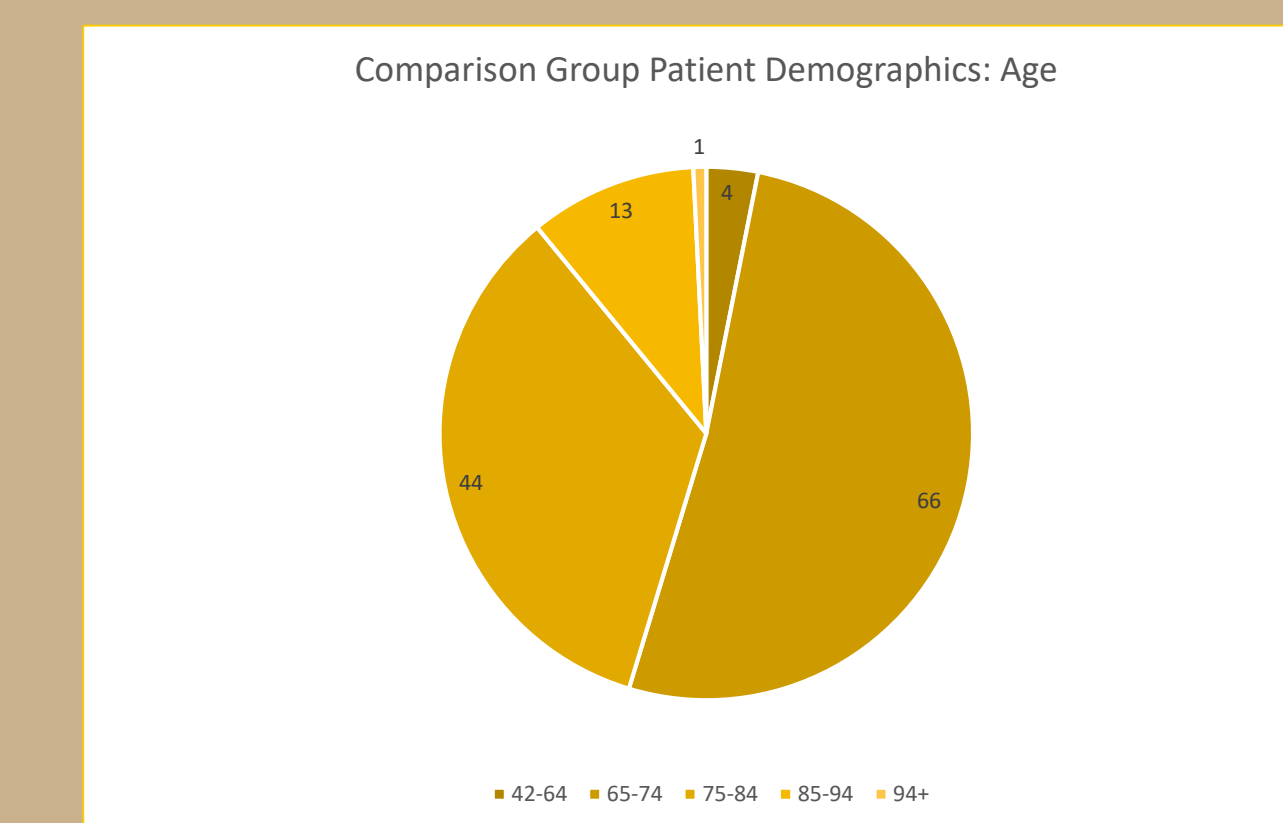
Evaluation

Baseline Group: 130 patients
Intervention Group: 128 patients
Data Analysis: Chi-Square Test of Independence
Primary Outcome Results: A statistically significant (p = .023) higher percentage of people in the post-intervention group than in the pre-intervention (or baseline) group were screened for depression ($x2$ (1) = 5.203, $p < .05$)

Comparison Group Patient Demographics: Age / Baseline Data Patient Demographics: Age

Comparison Group Patient Demographics: Race / Baseline Data Patient Demographics: Race

Comparison Group Patient Demographics: Provider / Baseline Data Patient Demographics: Provider

Group	Number of Eligible Patients	Number of Eligible Patients Screened	Screening Rate	Change
Baseline (Pre-Intervention)	130	65	50%	
Intervention (Post-Implementation)	128	82	64%	+14%

Conclusion and Recommendations

- Clinical site experienced statistically significant increase in depression screening rates ($p < .05$)
- Screening method fit into existing clinical workflow
- **Limitations**: Lack of piloting period and clinical staff turnover following data collection period
- **Recommendations**: Further research is needed to assess the effects increased depression screening rates result in regarding the management and treatment of older adults who screened positive for depression

Summary grid of evidence, PHQ-9 depression screening tool, and staff education presentation available for reference