"Peer Mentoring and Financial Incentives to Improve Glucose Control in African American Veterans"

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Purpose:

Investigate a means of promoting better diabetic control with a cheap and effective intervention in a population that has not been effectively targeted (i.e., African American veterans age 50 to 70 with high HgbA1C)

Design:

Randomized controlled trial of peer mentoring and financial incentives over a 6 month period at the Philadelphia VA Medical Center. These two groups were compared to a usual care group. Enrollment between 10/09 and 4/10 with follow-up completed 10/10.

Methods:

Patient inclusion criteria: Two HgbA1C samples within last 3 years and at least 2 Classification of Disease 250 codes. Ages 50 to 70. African American. Persistently poor diabetic control = HgbA1C > 8%, with the second measurement within 3 months of enrollment.

Figure 1: 118 of 642 randomly assigned into 3 groups: Control-Peer mentor-Financial incentive. 40 per group.

HgbA1C checked on day of enrollment and 6 months later with all patient notified of HgbA1C and ADA/VA recommended target levels. All patients took initial short survey and got $25 and also got $25 at end of study with final HgbA1C.

Control group—no further care

Peer mentoring group — Mentor match by sex and age and self-identification as African-American as well as hx poor diabetic control (HgbA1C>8% within 3 years) and now with good control (HgbA1C<7.5% within 3 months). One hour long motivational training session for mentors with $25 and exit interview. Mentors paid $20 per month to talk weekly with peer patient and contacted monthly by study.

Financial incentive—Patients would earn $100 at 6 months if HgbA1C dropped by 1% and $200, if by 2%.

Monitor for adverse events such as hypoglycemia with review visits to ER/hospital admissions.
Statistical analysis—Change in HgbA1c was dependent variable. Baseline HgbA1C and patient characteristics not balanced between groups and control were adjustment variables. Multiple imputation method assumes that missing data depends on observed variables only.

Results:

Table 1—Only statistically significant difference between groups was in diabetic complications, with financial incentive group higher than both control and peer mentor group.

Figure 2—Decrease in HgbA1C from 9.9% to 9.8% in control group vs 9.8% to 8.7% in peer mentor group vs 9.5% to 9.1% in financial incentive group over 6 month period.

Table 2: Mean HgbA1C change compared to control in peer mentor group of -1.07% with p value of 0.006-confidence interval of -1.84 to -0.31 with adjustment for covariates. Mean HgbA1C change in financial incentive group of -0.45% with confidence interval of -1.23 to 0.32 and p value of 0.25.

Table 3—No significant difference in occurrence of minor hypoglycemic events.

Decrease in mentor-mentee calls over time—38% received payment in first month and 16% received payment in sixth month.

Mentors main concerns (65% who completed exit interviews)—Scheduling calls, disinterested mentees, talking about nondiabetes issues.

Patients main concerns (74% who completed exit interviews)—Difficulty getting in touch and incompatibility.

Pros/Cons:

Reasons for success—Comraderie, peer trust among minority population, financial incentive, ease of contact, strict inclusion criteria.

Concerns about financial incentives and privacy concerns.

Long term sustainability

Reliability of HgbA1C—typical diabetes practice 14% measurements misleading.

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