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Minnesota Workers' Compensation Health Initiative Finds Costs Fall When Patients Feel Cared For

Development of a coordinated benefits model of health care for work-related and non-work-related conditions

SUMMARY

From 1997 to 1998, staff at the Minnesota Health Partnership designed and evaluated a model blending the best components of general health and workers' compensation medical care.

Under the model, called the Coordinated Health Care and Disability Prevention Model, employees went to their usual primary care provider for both work- and non-work-related complaints.

Participating providers documented the kinds and amounts of activity that were appropriate for each patient's condition in a written activity plan, which patients used to inform employers or other third parties about any medically necessary limitations in their activities at work or elsewhere.

The Institute for Research and Education, the research and outreach arm of Park Nicollet Health Services (an integrated care system in Minneapolis), served as the administrator of the grant.

The project was part of the Robert Wood Johnson Foundation (RWJF) *Workers' Compensation Health Initiative* national program.

Key Evaluation Findings

- Patients who received a written activity plan gave higher ratings to the time they spent with their provider, their provider's skills and their overall satisfaction with their clinic.
- Patients who reported a stronger relationship with their provider and that their provider took more steps to prevent and manage their disability also reported fewer physical health problems, fewer lost days from work and higher ratings of mental health.

- There was a high level of agreement among physicians about the positive impact of disability prevention strategies, but more than half (56%) thought that having to complete a written activity plan was burdensome, and a significant minority (22%) thought that it might interfere with the patient-provider relationship.
- Among employers with any costs related to lost work time, a preliminary analysis suggests that average costs were lower for test employers than for control employers.

Funding

RWJF supported this project through two grants totaling $754,256.

THE PROBLEM

Despite relatively stable claims rates, workers' compensation costs in Minnesota have grown substantially even after adjustment for inflation and employment growth. Total costs to employers grew from $471 million in 1980 to $1.22 billion in 1993. Medical costs were a principal cost driver, increasing 37 percent between 1982 and 1989, after adjustment for inflation, compared to a 2 percent increase for payments for lost work time. A study of medical costs, completed by the Minnesota Department of Labor and Industry in 1990, showed that costs in the workers' compensation system were on average twice as high as those in Blue Cross for similar injuries.

THE PROJECT

This project represented an effort to contain rising health care and workers' compensation costs while providing high quality health care. Its goal was to create and evaluate a new model of health care, called the Coordinated Health Care and Disability Prevention Model, that blends the best components of general health and workers' compensation medical care. This "24-hour coverage" model would allow an employee who breaks her leg at work, for example, to receive medical care through the same health care delivery system, with the same treatment and disability management, as she would if she had broken her leg on her driveway. The Minnesota Health Partnership, a coalition of representatives from state government, business, health plans and providers that was formed to test and evaluate the model, spearheaded the project. The Institute for Research and Education, the research and outreach arm of Park Nicollet Health Services (an integrated care system in Minneapolis), served as administrator of the grant.

Under the model, patients are encouraged by their employer to see their usual primary care provider for both work- and non-work-related complaints. As part of the treatment, providers discuss with patients the kinds and amounts of activity that are appropriate for their condition and document any recommendations in a written activity plan. The activity plan can be used by patients to inform employers or other third parties about any

medically necessary limitations in their activities at work or elsewhere. Project staff anticipated that implementation of the model would improve communication between patients and providers and allow for greater teamwork between patients, providers and employers in creating an optimal environment for patient health and productivity. This, in turn, would lead to better health outcomes, less time off from work and reduced disability costs.

As part of the development process, project staff conducted focus groups with consumers and providers to gain insight into the main issues that the model should address. The objectives of the consumer focus groups were to understand what employees want and need from providers and to provide input into the development of the written activity plan for patients. The provider focus groups were held to obtain primary care provider input on the content and use of the activity plan. Staff also created protocols for clinic staff to use in determining treatment and billing procedures when an employee seeks treatment for both work-related and non-work-related conditions.

THE EVALUATION

For the evaluation, project staff examined the effects of the model on patient outcomes and satisfaction, the cost and impact on employers and the impact on health care providers. (See the Appendix for a list of employers and clinics participating in the evaluation.) In these studies, 1999 and 2000 data was collected from seven test employers and seven test clinics, which had agreed to implement the model. At any given test clinic, only those patients who worked for one of the test employers were treated according to the protocol. These data were compared with data collected from five control employers and eight control clinics, which did not implement the model. Separate studies were conducted of:

- **Outcomes and satisfaction among 2,817 patients with a general health complaint.** Patients were seen at test and control clinics in 1999 and 2000.
- **Outcomes and satisfaction among 451 patients with low-back pain, knee pain or diabetes mellitus.** Patients at test and control clinics completed a baseline survey (response rate of 75 percent) and a follow-up survey 3, 6 or 12 months later (response rate 80–90 percent).
- **Provider impact.** All 251 providers at test and control clinics were mailed surveys about their disability treatment and prevention practices; 51 percent responded.
- **Employer impact.** Interviews were conducted with senior managers in the risk management and human resource departments of 10 test employers and 10 control employers. Surveys were mailed to 109 front-line supervisors in test and control employers (59 percent responded).

- **Impact on cost.** Data on health care costs, short- and long-term disability payments and other employer costs related to lost work time were collected from 12 Twin Cities area employers, three local health care systems and four health plans.

In addition to these analyses, the investigators also conducted an analysis of the evolutionary and organizational factors that were instrumental in the creation and continuation of the Minnesota Health Partnership.

Other Funding

The project received supplementary support from Allina Health System, Blue Cross and Blue Shield of Minnesota, Fairview Health Services and HealthPartners, each of which contributed $90,000. The evaluation received $60,000 each per year (for three years) from Allina Health System, Blue Cross and Blue Shield, Fairview Health Services and HealthEast. HealthPartners provided $60,000 for two years, since its participation began a year later than the other plans.

EVALUATION FINDINGS

The principal investigator reported these findings to RWJF and in the *Journal of Occupational Rehabilitation* in 2002.

- **Among patients with a general health complaint, those seen at a test clinic were 40 to 50 percent more likely than control clinic patients to say they received a written activity plan from their health care provider.**
  - There were no significant differences in the quality of care or health status of patients from test and control clinics.
  - Patients who received a written activity plan, gave higher ratings for their time spent with their provider, their provider's skills and their overall satisfaction with their clinic.
  - Patients who reported a stronger relationship with their provider, and that the provider took more steps to prevent and manage their disability, also reported fewer physical health problems, fewer lost days from work and higher ratings of mental health.
- **Among those patients with low-back pain, knee pain or diabetes, test clinic patients were no more likely to report receiving a written activity plan than were patients from control clinics.** The investigators say this is not surprising, since patients with these conditions are more likely than others to receive activity recommendations as a part of their regular medical care.
  - There was no statistically significant difference between the disability prevention practices of test and control clinics.

- Patients with diabetes were more likely than those with knee or low-back pain to receive care to prevent disability. The investigators say this is consistent with routine practice for diabetes.
- Physical and mental health were highest among patients who reported that they had strong relationships with their providers and that the providers took more steps to prevent and manage their disabilities.

- **There was a high level of agreement among physicians about the positive impact of disability prevention strategies.** This includes beliefs such as "discussing appropriate activity is useful for patients" (92%), "prompt return to activity prevents deconditioning" (96%) and "early return to work helps prevent disability" (91%).
  - However, 56 percent of physicians thought that having to complete a written activity plan was burdensome, and a significant minority (22%) thought that it might interfere with the patient-provider relationship. Test clinic physicians approved a written plan even less frequently than the control clinic providers did.
- **Test employers were more likely to have formal policies for both work-related and non-work-related conditions.** Among test employers, 71 percent had a formal policy for work-related conditions compared with 60 percent of control employers. For non-work-related conditions, the corresponding figures were 43 percent for test employers and 0 percent for controls. As with the provider survey, there were areas of agreement among all employers, which suggests a common culture related to disability prevention principles. These include:
  - Agreement about the benefits of providing accommodations for both work- and non-work-related conditions.
  - A high comfort level for discussing employee work restrictions for both work- and non-work-related conditions.
  - The potential utility of a generic activity plan.
- **Among employers with any costs related to lost work time, a preliminary analysis suggests that average costs were lower for test employers than for control employers.** However, the likelihood of having any cost related to lost work time (as opposed to no cost for lost work time) was higher for employees of test employers compared with employees of control employers. The researchers explain that the greater likelihood of experiencing any costs related to lost work time was due to the fact that test employers' were more likely to closely manage disability. For example, a test employer may be more likely than a control employer to send an employee to a clinic for timely treatment, thus incurring a cost for lost work time but also preventing the higher costs of untreated health problems.
- **The probability of having any medical care cost or workers' compensation costs (i.e., both medical and lost work-time costs) and the average level of cost among individuals who had some cost, were all less for employees of test employers.** The

average level of medical care and workers' compensation costs also was less for patients in test clinics.

LESSONS LEARNED

Based on their organizational analysis of the development of MHP, the investigators concluded that:

1. **Changing physician behavior is inherently difficult.** The core of the project involved changing the way in which physicians treat their patients. Many physicians wanted evidence that the intervention would improve patient health before instituting the change. Some saw the model as providing only minor benefits or were uncomfortable with what they perceived as "pushing" their patients, especially to return to work. (Project Director)

2. **The time-limited period and small scale of the intervention made system changes impractical.** If the project had been implemented for all patients at a given clinic, the process of implementation would have been greatly simplified. Clinic front desk personnel and providers would have been able to use the same procedures for all patients, rather than a small portion of the patients they served. Physicians then could become more familiar and comfortable with discussing functional abilities with patients. (Project Director)

3. **Community-based collaborations for health care reform are inherently fragile.** This project experienced challenges such as loss of key coalition participants over time and diverse participant objectives. In order for a community collaboration to be successful, it is critical to work in the spirit of a partnership rather than in the role of customers and suppliers. (Project Director)

4. **Competing initiatives/research studies created pressures that mitigated against successful implementation.** At a time when the Twin Cities medical care environment was facing concurrent projects or pressures to increase productivity, the Minnesota Health Partners project was not an organizational priority for all. Given that the change was very likely to be short term, the perceived "costs" associated with changing practice styles outweighed the perceived benefits. (Project Director)

Communications

Project staff published five articles (including one in *the Journal of Occupational and Environmental Medicine*) and nine reports on the project and evaluation. They made 26 presentations to professional groups.

AFTERWARD

Minnesota Health Partners, which was established to demonstrate and evaluate the Coordinated Health Care and Disability Prevention Model, closed its office with the

cessation of funding. The research group, headed by the principal investigator, is completing the cost analysis portion of the project. Further deliberation and recommendations related to any additional activities will follow completion of the cost analysis. No other activities are planned.

Prepared by: Robert Crum
Reviewed by: Richard Camer and Molly McKaughan
Program Officers: Michael Beachler, Michael Beachler and Michael Rothman
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APPENDIX

Employers and Clinics Participating in the Evaluation

(Current as of the end date of the program; provided by the program's management; not verified by RWJF.)

Test Employers

Blue Cross and Blue Shield of Minnesota

Dayton's

Reliant Energy Minnegasco

Rosemount Inc.

State of Minnesota

Wells/Northwest

Control Employers

3M

B.F. Goodrich

Cargill

Carlson Companies

Josten's

Land O'Lakes

Supervalue Inc.

Test clinics

HealthSystem Minnesota, Park Nicollet Clinic, Burnsville

Fairview CedarRidge in Apple Valley

Fairview Northland Region Clinics (Elk River, Milaca, Princeton, St. Michael, Zimmerman)

Central Minnesota Group Health Practice, St. Cloud

Health Partners, St. Paul

Aspen Clinic, Bloomington

Control Clinics

Park Nicollet Clinic, Minneapolis

Park Nicollet Clinic, St. Louis Park

Fairview Oxboro, Bloomington

Park Nicollet Clinic, Carlson Parkway in Minnetonka

HealthPartners, Como in St. Paul

HealthPartners, Maplewood

Allina (clinic to be announced)

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