The Question:
Do chronic disease outcomes differ when care is provided by teams or by solo physicians or nonphysician practitioners?

COVID-19 has pushed policymakers at all levels of government to consider lifting scope-of-practice restrictions for nurse practitioners (NPs) and physician assistants (PAs), including requirements for physician supervision and prescribing limits. These policy changes may impact the prevalence of inter- and intra-professional care teams involving NPs and PAs (or nonphysicians) and physicians. Thus, it is critical for policymakers to understand the impacts of provider type and team-based care on health outcomes for patients. While previous studies have evaluated quality differences between providers of different types or teams of different composition and generally found similar efficacy, little is known about the joint impact of team-based care and provider type on outcomes in chronic disease patients.

Maximilian J. Pany, Lucy Chen, and colleagues from Harvard Medical School, Harvard Business School, and athenahealth sought to address this knowledge gap by conducting the first large-scale empirical study examining the impact of team-based care and provider type on patient health outcomes across multiple independent practices and payers. Using deidentified health record (EHR) data from athenahealth, the researchers tracked differences in biomarker-based outcomes for patients with type 2 diabetes mellitus, hyperlipidemia, and hypertension treated by provider teams or solo providers. Pany, Chen, and colleagues further investigated whether solo provider type—i.e., physician or nonphysician—and team composition impacted care management. Full findings are available in Health Affairs.

The Implications:
Chronic disease treatment outcomes were not impacted by physician versus nonphysician care, but care teams, irrespective of composition, consistently outperformed solo providers in managing chronic conditions.

Pany and Chen found that care teams were more successful than solo providers in bringing patients’ chronic diseases under control. They also found that team composition—physician-only, nonphysician-only, or a mix of physicians and nonphysicians—did not impact health outcomes for two of the chronic conditions: type 2 diabetes and hyperlipidemia. Similarly, the researchers found little meaningful difference between the success of nonphysician and physician solo providers in treating patients with chronic disease. These findings suggest that care teams may provide higher-value care to patients than solo providers, and that nonphysicians are well-placed to address primary care workforce shortages. Though further research is needed to determine if scope-of-practice reforms increase or decrease the prevalence of care teams, these findings provide relevant planning information to policymakers considering reforms to both improve the value of care and sustainably build up the United States’ primary care workforce. Reforms that encourage the formation of care teams may be the best path forward.

Contact Us:
For more information on study findings, please contact co-principal investigators Maximilian J. Pany at maximilian_pany@hms.harvard.edu and Lucy Chen at luchen@hbs.edu
If you would like to learn more about other related work, please contact: Megan Collado, M.P.H., Director, AcademyHealth | megan.collado@academyhealth.org

Key Findings

- Care teams, irrespective of provider composition, outperformed solo providers in managing type 2 diabetes mellitus, hyperlipidemia, and hypertension.
- Teams of all provider compositions were equally effective in controlling type 2 diabetes and hyperlipidemia, although physician-only and mixed teams performed better than nonphysician-only teams in treating hypertension.
- Physician and nonphysician solo providers performed similarly.

Listen to an interview with the lead authors on the Health Affairs’ A Health Odyssey podcast here.