Evidence scan: Provider-Patient Continuity

Questions

(1) How does provider-patient continuity affect outcomes such as patient satisfaction, provider experience, health care quality, and health care utilization?

(2) What is the relationship between continuity, access to care, and telehealth?

Answer

There is consistent evidence that increased provider-patient continuity is associated with improvements in mortality, hospitalizations, emergency department visits, costs, and patient satisfaction, as well as some evidence that increased continuity is associated with improvements in preventive care, medication adherence, and complications. There is mixed evidence on the association between continuity and access to care, and studies suggest patient preferences for access vs. continuity might differ by situation, condition, and patient characteristics.

What is provider-patient continuity?

Provider-patient continuity refers to a consistent relationship between a patient and a provider that extends beyond specific episodes of illness or disease. Types of continuity include *relational continuity* (an ongoing trusted relationship between a patient and their provider); *management continuity* (a consistent approach to managing a patient's health condition); and *informational continuity* (the availability of medical information to all those involved in a patient's care). Nearly all research on this topic focuses on relational continuity.

Impact of continuity in primary care

Several systematic reviews and empirical studies have examined how provider-patient continuity in primary care may affect a range of outcomes. These studies have found:

Consistent evidence of benefits

- **Mortality**: 2 recent systematic reviews[1,2] (including 25 studies) found greater care continuity had a statistically significant protective effect on all-cause mortality. These studies also showed a protective effect specifically for mortality from coronary heart disease, cancer, and chronic obstructive pulmonary disease (COPD). Effect sizes were generally small but were in the same range as some treatment effects.

- **Hospitalizations and ED visits**: 2 systematic reviews[3,4] (including 15 studies) and 5 additional studies[5-9] found an association between greater continuity and reduced likelihood of potentially avoidable hospitalizations, all-cause hospitalizations, 30-day hospital readmission, and emergency department visits. Several studies noted the association was strongest among patients with chronic conditions, suggesting care continuity programs might maximize impact by focusing on these patients.

- **Costs**: One systematic review (including 2 studies)[3] and 3 additional studies[8-10] found an association between greater continuity and lower total health care costs. For example, a large-scale analysis of Medicare data (n=1,448,952 beneficiaries)[8] found expenditures were 14.1% lower among patients cared for by providers in the highest quintile for care continuity

compared with those in the lowest quintile. The value associated with this 14.1% reduction in costs is about $1000 per Medicare beneficiary per year.

- **Patient Satisfaction**: 3 systematic reviews[3,11,12] (including 29 studies) found greater continuity was associated with higher patient satisfaction. In a 1996 study[13] based at Group Health, satisfaction was highest when patients saw their own provider or had a choice of providers.

Some evidence of benefits

- **Preventive care; quality of care**: One systematic review[3] (including 5 studies) and one additional study[14] found an association between greater continuity and improved receipt of preventive services such as mammography, blood pressure management, and weight assessment. None of these studies found that continuity negatively affected quality of care.

- **Complications**: An analysis of Medicare data (n=241,722 beneficiaries)[9] found greater continuity was associated with lower odds of complications and patient safety issues related to congestive heart failure, COPD, or Type 2 diabetes.

- **Medication adherence**: A large cohort study among patients in Taiwan with type 2 diabetes (n=11,299)[7] found greater continuity was associated with improved medication adherence as well as lower likelihood of hospital admission.

Evidence of minimal impact

- **Cancer detection and referral**: Three studies (n=29,273 patients)[14-16] did not find a clinically important association between greater continuity and time to cancer diagnosis, time to referral, or stage at cancer diagnosis.

Continuity, access to care, and telehealth

Research on the relationship between continuity and access to care is limited, with mixed findings. Some studies[17-20] describe a trade-off between access and continuity; however, three recent studies[21-23] found that initiatives to increase access to individual providers contributed to greater continuity by making it easier for patients to schedule appointments with their own providers.

Several studies[3,17-20,24] note that patient preferences for access vs. continuity may differ by situation, condition and patient characteristics. For example, younger patients and those dealing with acute minor issues may value access over continuity; however, older patients and those with chronic conditions might prefer to see their own provider.

There is minimal evidence on the association between telehealth and continuity, though more research may be forthcoming as health care organizations seek to evaluate the impact of a shift to telehealth services during the COVID-19 pandemic. One brief report[25] published during the pandemic noted that telehealth offers the ability to offer care continuity to patients who cannot attend in-person visits because of transportation challenges, health issues, or strict lockdown restrictions.

Additional research needs

More research is needed on the association between continuity and telehealth. In addition, this review did not identify any existing systematic reviews, trials, or cohort studies on the association between continuity and provider experience or satisfaction.

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Additional documentation

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