NEWS

Does health care “hot-spotting” really save money and improve care?

■ Cite as: *CMAJ* 2020 May 11;192:E524-5. doi: 10.1503/cmaj.1095867

Posted on cmajnews.com on April 24, 2020

The idea behind the Camden Coalition of Health Care Providers’ renowned “hot-spotting” program makes a lot of sense: Since many of the heaviest users of health care have unmet health and social needs, identifying and providing extra supports to those patients should improve their outcomes and reduce costs.

In 2009, the New Jersey-based Camden Coalition set out to do just that, attracting international attention when Atul Gawande profiled the program for *The New Yorker*. Known as the Camden Core Model, the coalition links complex patients to an interprofessional team of nurses, social workers and community health workers who visit patients at home, help reconcile their medications, accompany them to doctors’ appointments and connect them to social supports.

Care coordination programs for complex patients have since spread across the United States and Canada. Ontario’s Health Links program follows a similar model and has served 80 000 patients since it started in 2012. In Saskatchewan, hot-spotting programs launched in Regina and Saskatoon in 2015; last year, they supported around 200 patients.

But few of these programs have been rigorously evaluated. And the results of a randomized controlled trial (RCT) of the Camden Coalition’s program published earlier this year underscored the challenge of improving care for complex patients. The study by researchers at the Massachusetts Institute of Technology (MIT) found no difference in readmission rates after six months between patients enrolled in the program and those who were not.

Researchers randomly assigned 800 hospitalized patients who had complex social and medical conditions and at least one other hospitalization in the preceding six months to the coalition’s care-transition program or to usual care. After discharge from hospital, those enrolled in the coalition’s program received visits from a team of nurses, social workers and community health workers to coordinate outpatient care and link them with social services. Readmission rates fell dramatically for those enrolled in the program, but they fell by just as much in the control group.

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Recent research underscores that there are no quick fixes for complex health and social problems.

The findings emphasize the importance of proper controlled trials, something that is lacking in most studies of complex health care interventions, says Amy Finkelstein, an economist at MIT who led the research. If researchers had looked only at the patients who received the intervention, “you would have gotten a very different and misleading picture of the impact of the program,” she says.

According to Finkelstein, the results reflect “regression to the mean”; that is, the tendency for extreme outcomes to even out over time. “So, on average, these individuals who we’re intervening with at a time of exceptionally high use are more likely to [report] lower use in the future,” she explains.

In their discussion, the study authors noted that the coalition targets a much more complex population than other care management models evaluated through randomized trials. Additionally, the sample size was not large enough to tell whether the intervention might work

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better for some subgroups of patients versus others.

Comprehensive studies are important for the field of health care delivery, says Dr. Jeffrey Brenner, one of the doctors who started the Camden Coalition program. There is a lack of good data to help health care workers understand what works and what doesn't. "This is a much harder problem to fix than I ever realized," he says.

Aaron Truchil, director of data and analytics at the Camden Coalition, says the organization is confident there is a "plethora of outcomes that we think we are affecting," such as reconnections to primary care, specialists and social services. "We may need a more holistic picture than just readmissions to capture them," he says.

Dr. Andrew Boozary, executive director of health and social policy at the University Health Network in Toronto, applauds the coalition for rigorously evaluating its program. He says it's not surprising that the trial showed no difference between the control and intervention groups, "given the parameters that they had and the outcomes they were measuring."

For one thing, it's unrealistic to expect any program to overcome years of exposure to poverty and marginalization in a matter of months, Boozary says. "We can't go into this with moonshot ideas around health care being able to solve the complex and layered challenges that these patients have faced for almost their entire lives."

Notably, because many of the patients in the intervention group lacked stable housing, less than a third ended up receiving one of the key interventions — a home visit within a week of discharge from hospital. "That just speaks to the structural constraints," says Boozary.

Boozary also argues that the success or failure of programs for disadvantaged patients shouldn't be framed purely in terms of how much money they save the health system. "We've been chasing this myth that if we spend the money on coordinated care, some of these programs will pay for themselves with astonishing drops in hospital readmissions," he says. However, that's a "discriminatory frame" that doesn't get applied to other patient populations.

"There have to be patient-reported outcomes that are co-designed with disadvantaged patients about what's actually meaningful to them," Boozary says. "It can't just be about what's meaningful to the acute care sector." He argues that the Camden Coalition study should provide "impetus for there to be further evaluation in this area."

In Canada, few comprehensive evaluations of care coordination programs for complex patients have been undertaken. One study of Ontario's Health Links program in 2017 found that it did not improve a variety of indicators, including emergency room visits, admissions to hospital and days in acute care. Another independent evaluation of Health Links by the Institute for Clinical Evaluative Sciences is due in October.

However, other programs for complex patients have shown more promising results. A 2019 study of a "housing first" initiative in Toronto found that targeted rent supplements and mental health supports had an enduring positive effect on housing stability for people experiencing homelessness and mental illness.

The Camden Coalition will continue its hot-spotting program and use lessons from the MIT trial to improve, says CEO Kathleen Noonan. The program evolved throughout the MIT study, adding a "housing first" policy to prioritize getting people secure housing before dealing with other issues, as well as medical–legal partnerships to help patients navigate barriers to care while involved with the legal system.

According to Noonan, "now that we have the RCT data to work with, we will make some pivots based on it as we look deeper at the results over the next few months."

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