

Family physician access to specialist advice by telephone

Reduction in unnecessary specialist consultations and emergency department visits

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Abstract

Problem addressed Timely access to specialist care is an important issue for patients with mild to moderate symptoms, and wait times for referrals are currently quite long.

Objective of program To provide FPs with quick telephone access to other specialists for treatment advice for patients with nonserious conditions that they would otherwise refer to specialist care.

Program description The RACE (Rapid Access to Consultative Expertise) program is a telephone hot-line providing FPs and nurse practitioners in the Vancouver, BC, area with timely access to specialist consultations. An evaluation of data from RACE found 60% of RACE calls prevented patients from visiting a specialist and 32% of calls prevented FP referrals to hospital emergency departments.

Conclusion Supported by RACE, FPs can more effectively remain the locus of patient care, calling on other specialist expertise when appropriate and providing better coordination of care for their patients. Evaluations to date suggest RACE helps reduce system costs by reducing unnecessary emergency department visits and face-to-face specialist consultations.

EDITOR'S KEY POINTS

- The RACE (Rapid Access to Consultative Expertise) model was implemented to give primary care providers timely telephone access to specialists to support enhanced patient care and to improve collaboration between FPs and other specialists.
- The RACE model appears to be an effective solution for many of the challenges faced by FPs and other specialists in providing effective and efficient care for patients with complex chronic conditions. Evaluations of the model suggest RACE is helping to reduce costs by preventing unnecessary emergency department visits and face-to-face specialist consultations; increasing capacity for specialist care; supporting better care by FPs; and enabling more appropriate use of consultative services.
- Supported by RACE, FPs can more effectively remain the locus of patient care, calling on other specialist expertise when appropriate and providing better coordination of care for their patients. The model is also adaptable for use in any community, and can be easily configured to address local needs.

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Possibilité pour les médecins de famille d'obtenir des conseils d'un spécialiste par téléphone

Diminution des visites à l'urgence et des demandes de consultation en spécialité

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Résumé

Problème à l'étude Pour un patient dont les symptômes sont légers ou modérés, la possibilité d'avoir accès aux soins d'un spécialiste en temps opportun est un facteur important; pourtant, il devra souvent attendre assez longtemps avant de rencontrer ce spécialiste.

Objectif du programme Offrir aux MF la possibilité de rejoindre rapidement un spécialiste au téléphone pour obtenir des conseils pour un patient qui ne présente pas de problème grave et qui, autrement, aurait nécessité une consultation en spécialité.

Description du programme Le programme RACE (*Rapid Access to Consultative Expertise*) utilise un téléphone rouge qui assure aux MF et aux infirmières praticiennes de la région de Vancouver, en Colombie-Britannique, un accès en

temps opportun aux conseils d'un spécialiste. Une évaluation des données de ce programme a montré que 60% des appels de ce type ont permis d'éviter une rencontre du patient avec un spécialiste, tandis que 32% de ces mêmes appels ont permis d'éviter une visite à l'urgence.

POINTS DE REPÈRE DU RÉDACTEUR

- Le programme Race (*Rapid Access to Consultative Expertise*) a été créé pour fournir aux soignants de première ligne un accès en temps opportun à des spécialistes de manière à améliorer les soins aux patients et la collaboration entre MF et spécialistes.
- Le programme RACE serait une façon efficace de répondre aux nombreux défis auxquels font face les MF et les autres spécialistes qui soignent des patients souffrant de maladies chroniques complexes. Les évaluations de ce programme donnent à croire qu'il contribue à réduire les coûts en évitant des visites inutiles à l'urgence et des consultations inutiles avec un spécialiste; en permettant aux spécialistes de soigner plus de patients; en améliorant les soins dispensés par les MF; et en favorisant une utilisation plus appropriée des services de consultation.
- Avec l'appui de RACE, les MF peuvent demeurer les principaux responsables du traitement de leurs patients, faisant appel à d'autres spécialistes au moment approprié, ce qui permet une meilleure coordination des soins. Ce type de programme pourrait être utilisé dans n'importe quelle communauté; on pourrait également l'adapter à des besoins particuliers.

Conclusion Avec l'appui de RACE, les MF ont maintenant plus de chances de demeurer les principaux responsables du traitement de leurs patients, faisant appel aux conseils d'autres spécialistes en temps opportun, assurant ainsi une meilleure coordination du traitement de leurs patients. Jusqu'à présent, les évaluations du programme RACE indiquent qu'il contribue à réduire les coûts du système en diminuant les visites inutiles à l'urgence et les consultations auprès de spécialistes.

Cet article a fait l'objet d'une révision par des pairs.
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Timely access to specialist care is an important issue for patients, especially for those with mild to moderate symptoms. Results from the 2014 Commonwealth Fund report show 24% of older adults in British Columbia (BC) waited for at least 2 months to see specialists.¹ In BC, a survey of physicians found the wait time from FP referral to psychiatric care for patients with mild mood disorders, such as anxiety or depression, was longer than 5 months.² These wait times result in unnecessary delays in the delivery of patient care.

Patients with multiple comorbid conditions typically deal with multiple care providers and, as a result, can experience fragmented care and poor outcomes.³ For these patients, navigation through the health care system is difficult and the tenuous connection between services across primary, secondary, and tertiary care can affect continuity of care. To address these and other issues, in recent years in BC and across Canada there has been increased support for primary care and recognition of the central role of the FP for all patient care.

In large urban environments such as Vancouver, BC, FPs can become isolated in the community and disengaged from other specialists. The fact that FPs are experiencing increasing barriers to provision of inpatient care in such environments serves to augment that disengagement. In 2009, in support of FPs and their need for help to manage patients with cardiovascular disease, a pilot project—Rapid Access to Cardiovascular Expertise, or RACE—was launched in Vancouver to provide timely telephone consultation by cardiologists for FPs. In fact, the initial pilot between the Department of Family and Community Medicine and the Department of Cardiology was conceived in response to concerns from FPs that they were forced to choose from a collection of many subspecialty cardiologists at the local tertiary hospital when they themselves were uncertain which cardiac subspecialty was appropriate. As a result, patients might wait many weeks for a face-to-face consultation with the “wrong” cardiologist. Rapid Access to Cardiovascular Expertise seemed, to both family physicians and cardiologists, a reasonable solution to help with patient navigation to the “right” cardiologist (or to “no cardiologist,” if clinical situations could be handled by telephone), while also helping to build a relationship between the disciplines of family medicine and cardiology. An account of the Rapid Access to Cardiovascular Expertise pilot project was published in 2010.⁴ Following the success of the pilot project and to further support enhanced patient care by FPs, as well as to improve collaboration between FPs and other specialists, an expanded program was developed in 2010 through a partnership among Providence Health Care, the Vancouver Coastal Health authority, and the joint Shared Care Committee of the BC Ministry of Health Services and Doctors of BC.

Using the already familiar acronym *RACE*, the expanded multispecialty Rapid Access to Consultative Expertise (RACE) program is a telephone hot-line providing FPs and nurse practitioners (NPs) in the Vancouver Coastal Health region with timely access to a range of specialist consultation services. Family physicians and NPs can call one number, choose from a selection of specialty services, and be routed directly through to the specialist’s cell phone for advice, usually within a few minutes.

Objective of program

The program is designed to help FPs provide optimal care for their patients and to help patients avoid lengthy wait lists to see specialists for relatively straightforward health issues. Timely RACE advice also helps FPs avoid making unnecessary referrals of patients to hospital emergency departments (EDs) for management of non-urgent conditions (Y. Araki and S. Lear, 2012, unpublished data). For specialists, the service helps increase capacity by enabling them to provide advice to FPs by telephone for minor health problems, avoiding unnecessary face-to-face consultations and freeing up time for more specialized cases. In this article we present an overview of results from the expanded RACE program after 4 years of operation.

Program description

When RACE initially expanded in 2010, it offered support in 5 specialty areas: heart failure, cardiology, respiratory, nephrology, and endocrinology. The program has since grown to include 27 specialties. The specialty areas are listed in **Box 1** and can be viewed on the RACE website (www.RACEconnect.ca).

Development of the RACE program was overseen by a steering committee with members from the health authority, specialty care, and family practice. Funding for the program is provided through BC’s Medical Services Plan, enabling both FPs and other specialists to bill for consultations by telephone using fee codes. The reimbursement for a telephone consultation between physicians is \$100, based on fees of \$40 for FPs and \$60 for other specialists. The FP fee is based on the need for “urgent” telephone advice and the specialist fee is based on a 2-hour response time. In BC, this is approximately half the average direct cost for an in-office patient visit to a specialist (Y. Araki and S. Lear, 2012, unpublished data). Specialists are also able to bill for RACE calls received from NPs.

Using RACE, an FP or a NP can request telephone advice with an on-call specialist from any of the participating medical or surgical specialties. The service is available weekdays from 8:00 AM to 5:00 PM and is intended to support FPs in “real-time,” ideally while seeing a patient in the office. To ensure that RACE calls do not interfere with the normal flow of a physician’s

Box 1. List of current specialty areas in the RACE program

The following is a list of specialty areas currently included in the RACE program:

- Cardiovascular risk and lipid management
- Endocrinology
- General internal medicine
- Geriatric psychiatry
- Geriatrics
- Hand and upper limb orthopedic conditions
- Heart failure
- Nephrology
- Obstetrics and gynecology
- Ophthalmology
- Psychiatry
- Emergency medicine
- Respiriology
- General cardiology
- Rheumatology
- Addictions medicine
- BC Centre for Excellence in HIV/AIDS primary care
- Cardiac transplant
- Child and adolescent psychiatry
- Pediatric gastroenterology
- Transgender care
- Leg, ankle, and foot orthopedic conditions
- Refugee health
- Eating disorders—internal medicine
- Eating disorders—psychiatry
- Thrombosis
- Medical assistance in dying

RACE—Rapid Access to Consultative Expertise.

day or with overall patient care, the goals of the program include having most of the calls returned within 10 minutes (while the patient is still in the FP's office) and keeping 90% of all calls shorter than 15 minutes.

While the provision of fees for physician users of the service has been a key enabler, what sets RACE apart from other FP and specialist telephone consultation services across the province are the system supports for the service. These include a RACE on-call schedule for specialists from the 22 participating specialties to ensure a specialist is always available to return calls quickly. System support for RACE also provides FPs with a single telephone number for the service that automatically routes calls to a pager or mobile number for the requested specialist. The cost for the telephone system support is approximately \$120 per month. Administrative support of approximately 1 day per month is required to ensure specialist coverage schedules are in place and contact numbers are updated.

Evaluation

Guided by the Institute for Healthcare Improvement's Triple Aim framework,⁵ a formal structured evaluation of

RACE was conducted in 2012 (Y. Araki and S. Lear, 2012, unpublished data). The Triple Aim framework looks for overall improvement in 3 areas: the care experience, the per capita cost of care, and population health.

The evaluation process for RACE involved a mixed-methods approach based on FP surveys, stakeholder interviews, and a review of aggregated data on service use. The evaluation framework was designed after the RACE project had already been implemented; in BC, there has recently been a "prototype" culture of innovation in primary care, whereby projects thought to hold promise by front-line clinicians might be given start-up funding to test a service hypothesis. If deemed promising, evaluation frameworks might be designed "after the fact." These are not considered "research" projects, but rather "innovation" projects, and the evaluations tend to be "program evaluation" rather than "research outcomes."

Although we hoped to capture the patient experience in the evaluation design, this was not possible for 2 reasons: First, this was not a research project and therefore consent was not obtained to contact patients. Second, we were influenced by informal feedback from FPs that patients could not reasonably experience the augmented service as "different" from usual care, given that the RACE experience was embedded into the "normal" office experience and portrayed as normal or "expected" care. The patients had no reasonable standard by which to gauge whether a RACE telephone call was more or less appropriate than a traditional referral to a specialist.

Online survey. Approximately 800 Vancouver-area FPs were invited to participate in an online survey about RACE. At the time of the survey (October to December 2011), the RACE program included 10 specialty groups (nephrology, general cardiology, heart failure, lipid and cardiovascular risk management, gastrointestinal medicine, respiratory medicine, endocrinology, internal medicine, psychiatry, and geriatrics) and it had been available as a service to FPs for about 16 months. The survey focused on the perceived benefits of RACE and the user experience for FPs and other specialists.

Interviews. In addition to the online survey, the evaluation included interviews with 23 stakeholders (10 specialists, 11 FPs, and 2 health system administrators) about their experiences with RACE. Interview guides for the stakeholder interviews were drafted by the evaluation team and circulated to the project's steering committee for input before use. Interviews were recorded and transcribed for analysis.

Service use. Service use of RACE was determined from the records of Telus, the telephone service provider for the centralized RACE call-in line, and from data gathered by the responding specialists at the time of the calls.

Results

Service use. As noted in **Figure 1**, the number of calls to RACE has continued to increase since its launch, as more specialty areas are added and more FPs take advantage of the service. As of February 2015, the overall number of calls to RACE was more than 20 000 and the monthly call volumes continue to climb.

At the time of its formal evaluation (August 2012), the RACE telephone service provider had registered more than 5000 calls to the line. Detailed data gathered by the responding specialists at the time of the calls (40% of total calls) indicated the following: Of the selected calls to the RACE line, 78% were responded to by a specialist within 10 minutes; 90% were shorter than 15 minutes; 60% prevented patients from needing a face-to-face specialist consultation; and 32% prevented patients from visiting a hospital ED for treatment.

Online survey. Responses to the survey were received from 102 FPs. Results revealed that almost all surveyed FPs (94%) knew about RACE, and among this group, 60% had used the service. Overall, FPs who used RACE said they were satisfied with the timely access to specialist consultations RACE provided, and with the quality and efficiency of the consultations. The nonusers of the RACE program (n=26) among the surveyed FPs

said they had pre-existing established referral relationships with specialists and managed their patients without consulting with the RACE specialists.

The 4 open-ended questions asked in the survey received a total of 100 comments that were subsequently content-analyzed. Of the comments received from surveyed FPs, 48 referred directly to their positive experiences with RACE and the benefits of the program. The following quotes exemplify the important themes that emerged from the FP survey:

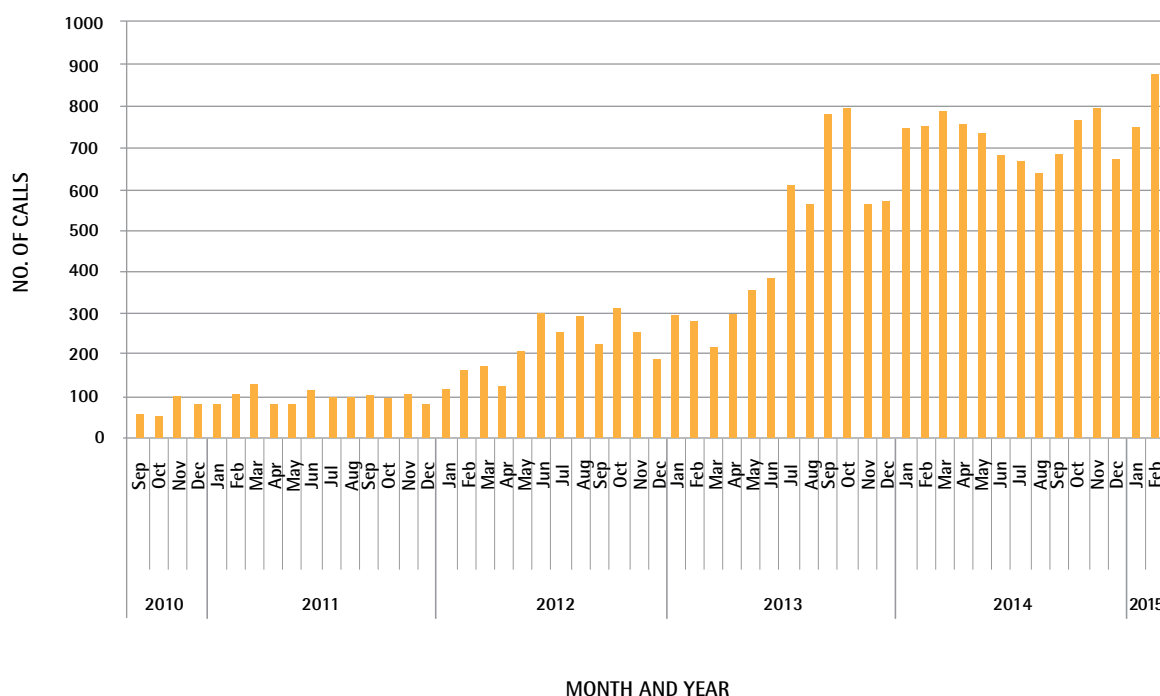
Rapid and timely advice:

The excellent service has helped me manage complicated patients in a timely fashion. It's a bit like the "old days," when I started practice in 1975, when you could call a specialist and they would actually take the call and give you advice when you needed it urgently.

Adding value to practice:

An excellent idea for resources. I practically manage [patients] in my office, consult with specialists already known to me, or send [patients] when appropriate to [the ED]. For new FPs or those without immediate resources, this would be a much more useful resource.

Figure 1. Monthly call volumes for RACE: Based on Telus reports, there were 20 107 calls to the RACE line in the defined period.



RACE—Rapid Access to Consultative Expertise.

Continuing education for FPs: “[This service provides] on-the-spot learning with a colleague.”

Reducing unnecessary referrals and ED visits: “[This service is] extremely helpful in obtaining timely advice from specialists, which has decreased [ED] visits and referrals.”

Improving FP-specialist relationships: “[This service] decreases time spent waiting for consultations. [It offers] point-of-care treatment and consultation.”

Other comments suggested program improvements such as quality assurance, expansion to other geographic areas, expansion to more specialty areas, and increasing awareness of RACE in the FP community.

Interviews. Qualitative data from interviews with physicians suggested that RACE was seen as a much-needed service with benefits for both FPs and other specialists, and that both groups of physicians were willing to participate in collaborative knowledge exchange events to learn how to make the best use of RACE in daily practice.

Family physicians also said that access to timely consultations through RACE helped them to manage care of their patients and helped their patients avoid unnecessary ED visits and referrals for specialist care: “Excellent, timely care—a real improvement in effective triage for my patients. I have used [it] and learned a lot and [it] served my patients well.”

All interviewed specialists reported anecdotal evidence confirming the overwhelmingly positive experience of RACE from the FPs they consulted with through the program. As exemplified by the quote from one specialist, RACE is seen as a valuable access solution by FPs:

There have been a lot of very enthusiastic reports back indicating that some [FPs] are absolutely tickled pink. That is not an exaggeration. They are just thrilled. Their worries about a patient ... their stress was greatly relieved by the information that was given. They were very happy about that.

Triple Aim goals

As indicated, the evaluation of RACE was structured in accordance with the Institute for Healthcare Improvement's Triple Aim goals. Assessing the evaluation results on that basis suggests that RACE does indeed support the Triple Aim goals in view of the following outcomes.

Enhance the care experience. Online survey and interview data indicated the following:

- User satisfaction with RACE was unanimous—all FPs who had used RACE would use the service again.
- More than 95% of FPs who responded to the survey would recommend RACE to colleagues.
- The service was viewed by FPs as an excellent resource—access to RACE transformed how FPs sought prompt assistance.

- The service is seen by both FPs and other specialists as a means to improve relationships between these 2 physician groups.

The real-time consultations enabled by RACE were seen as an additional value. Overall, 83% of FP respondents believed the service helped them manage care for their patients. A frequent FP user of RACE described his experience as follows:

It is fantastic to be able to get answers immediately that I normally would ... refer to a specialist and have to wait months for an appointment; try and look up online but not be confident of the answer; play telephone tag or fax back and forth with a specialist regarding the clinical situation; or just take my best guess with the clinical situation. It has given me a level of professional satisfaction, professional empowerment, and improved patient care.

A specialist who participates in RACE explained his satisfaction with the program:

I like RACE because it allows me to answer a family physician's questions directly. It gives me great pleasure to be able to help my colleagues. It is satisfying to be able to give reassurance, to provide helpful advice in real time, and to share my knowledge.

An important aim of the program was to have as many FP calls as possible returned while the patient was still in the FP's office. The data show that more than 90% of calls to RACE were returned within 1 hour and 78% of calls were returned within 10 minutes.

A further aim of the program was for 95% of calls to be shorter than 15 minutes. The usage data show that 90% of calls were completed within this time frame.

Several FPs said RACE allowed for better medication management, improved triage through provision of rapid and timely advice, and provided practical and specific advice on the best way to manage patient care.

Improve population health. We cannot comment on its effect on population health, as the evaluation was not designed to measure this.

Control or reduce the per capita cost of health care. Based on data collected from FPs by specialists at the end of consultation calls, 60% of RACE calls prevented referral to a specialist and 32% of the calls prevented an ED visit. Using these data, a simple cost-modeling analysis was done, factoring in direct costs for specialist referrals and ED visits prevented through RACE.

The cost-modeling analysis used the standard initial consultation fees for the 10 specialties involved in RACE at the time of the evaluation (**Table 1**).⁶

Table 1. Initial face-to-face consultation fee by specialty (British Columbia, 2012)

FEE	SPECIALTY									
	CARD	HF	RM	GIM	GI	GERI	RESP	PSYC	ENDO	RENAL
Initial consultation, \$	166.15	166.20	166.20	161.10	155.00	171.00	163.10	211.45	177.25	155.10

Card—cardiology, Endo—endocrinology, Geri—geriatrics, GI—gastroenterology, GIM—general internal medicine, HF—heart failure, Psyc—adult psychiatry, Resp—respirology, RM—risk management.
Data from the Medical Services Commission.⁶

In **Table 2**,⁶ per-call savings are calculated based on the following inherent assumptions:

- Both the FP and the specialist billed for the teleconferencing services.
- All the recommendations from the specialists were followed by the FPs; therefore, relevant direct variable costs were avoided.
- There were no additional costs incurred through the use of RACE, such as if the specialist suggested further diagnostic testing or there was a subsequent related need for a specialist consultation.

The results of this analysis indicate an overall health system cost avoidance of, on average, up to \$200 per RACE call depending on the specialty involved in the call.

Indirect costs of specialist consultation borne by patients, such as time spent waiting, travel costs, time off work, etc, were not included in the cost analysis owing to an absence of data for these variables.

As shown in **Table 2**,⁶ it appears that RACE might save physician consultation fees by preventing unnecessary ED visits or specialist face-to-face consultations. However, per-call savings vary by specialty and for 2 specialties (renal and heart failure), RACE calls appear to add to the cost of patient care.

Discussion

The aim of the RACE model was to provide FPs and NPs timely telephone advice from specialists. It was anticipated this would allow the primary care provider to remain the locus of care, thus increasing continuity of care for their patients. With 78% of the calls answered within 10 minutes, this model more often than not provides rapid access to specialty expertise.

Does RACE enhance the care experience? The criteria for RACE specialists state that the interaction is to have an educational component. This is an important aspect of the model to increase the capacity of FPs, thereby enhancing the providers’ care experience. The RACE program also enriches family practice by providing a collegial and continuing professional development-eligible educational experience that directly links physician learning to practice in real time.

Although the specialists rotate through RACE coverage and the FPs will likely not speak to the same specialists consistently, there might still be an improved

specialist–primary care interface through improved communication. In a patient focus group discussing the RACE model of care, patients expressed concern about being left out of the communication loop with the specialists. With three-quarters of RACE calls returned within 10 minutes, it appears likely that in most cases FPs received specialist advice while still with their patients. While many FPs report that they make the call and put the telephone on speakerphone so that the patient can also listen in, the effect of this was not measured in this study and is a limitation of the evaluation.

Anecdotal feedback from FP residents, not necessarily captured in the survey, was very positive. Residents reported being empowered to remain the most-responsible provider rather than finding themselves as “bystanders” in situations where consultants answered consultation requests when the resident was not present, and proceeded to write orders and assume oversight of cardiac aspects of care as opposed to engaging in shared care.

The patient journey might also be simplified, as patients can have their concerns dealt with in a timely manner instead of waiting several months for a specialist’s input. Feedback examples from FPs about instances in which they and a patient participated in a telephone call with a specialist were particularly powerful. These were not captured specifically in the evaluation.

Does RACE improve population health? The evaluation of RACE was not set up to measure population health improvement, and the number of calls at the time of the evaluation was 5000, so we cannot comment on any effect at this time. However, as the number of patients who need to see a specialist in person decreases when using a telephone advice strategy, specialists’ limited time can be freed up to see patients who require face-to-face consultation, thus increasing capacity. From a system-wide perspective, improving access to specialist care is a positive development for overall population health. The RACE model is easily scalable and has received more than 20000 calls. As specialties are added and awareness of the model is increased, RACE could be viewed as a population-wide intervention.

Does RACE affect the per capita cost of health care? Family physicians report the RACE discussion

Table 2. Per-call savings by specialty: Specialists reported data for 40% of the initial 5000 calls; 148 of these calls had complete information on the avoided ED visits and face-to-face consultations.

VARIABLE	CARD	HF	RM	GIM	GI	GERI	RESP	PSYC	ENDO	RENAL	TOTAL
RACE calls											
Total no. of calls	25	7	3	24	5	6	6	14	48	10	148
No. of calls that prevented specialist consultations	14	2	2	14	0	6	1	6	37	4	86
No. of calls that prevented ED visits	8	0	1	10	3	4	5	5	11	1	48
Costs, \$											
Total direct costs* (A)	2550	714	306	2448	510	612	612	1428	4896	1020	15096
Savings, \$											
Direct variable cost avoidance											
• Avoiding specialist consultations [†]	2326	332	332	2255	0	1028	163	1269	6558	621	14885
• Avoiding ED visits [†]	1536	0	192	1920	576	768	960	960	2112	192	9216
Total savings (B)	3862	332	524	4175	576	1796	1123	2229	8670	813	24101
Actual savings (B - A)	1312	-382	218	1727	66	1184	511	801	3774	-207	9005
Per-call cost avoidance [‡]	52	-55	73	72	13	197	85	57	79	-21	61

Card—cardiology, ED—emergency department, Endo—endocrinology, Geri—geriatrics, GI—gastroenterology, GIM—general internal medicine, HF—heart failure, Psyc—adult psychiatry, RACE—Rapid Access to Consultative Expertise, Resp—respirology, RM—risk management.

*No. of calls × \$102.12, the average fee charged for a RACE call.

[†]Direct variable savings by avoiding specialist face-to-face consultations = no. of calls that prevented specialist consultations × specialist initial consultation fee (Table 1).⁶

[‡]Direct variable savings by avoiding ED visits = no. of calls that resulted in avoiding ED visits × ED visit fees (\$192).

[§]Actual savings divided by total no. of calls.

reduces face-to-face consultations and ED visits. The cost-modeling analysis showed a cost avoidance of up to \$200 per call depending on the specialty. Several cautionary notes are necessary for interpreting the results of this cost-modeling analysis. The modeling is based on the availability of self-reported data from RACE specialists. However, there were many unknown factors and unavailable data that would have contributed to a more accurate assessment of costs and savings associated with RACE. For this reason, the current evaluation is considered to offer only a best estimate of savings. For a more accurate estimate of cost savings, a more robust cost-modeling analysis using patient medical records, longitudinal health service use data, and billing records is required.

Limitations

The response rate for the online survey was 13%, and it is unknown how the respondents differed or were similar to those who did not respond. Results from the online survey showed that almost all FPs knew about RACE, and among this group, 60% had used the service. This is likely biased, as the group of FPs surveyed were the same FPs to whom RACE was marketed. The low response rate to the survey, the avoidance of face-to-face

consultations and ED visits based on self-report, the lack of patient feedback, and the simple cost-modeling analysis looking only at direct costs are all limitations of the evaluation. With the continuous evolution of RACE to include more specialty areas, a larger, more rigorous evaluation should be completed to fully understand whether the Triple Aim goals are being met.


Conclusion

The RACE model was implemented to give primary care providers timely telephone access to specialists to support enhanced patient care and to improve collaboration between FPs and other specialists. The RACE model appears to be an effective solution for many of the challenges faced by FPs and other specialists in providing effective and efficient care for patients with complex chronic conditions. Evaluations of the model suggest RACE is helping to reduce costs by preventing unnecessary ED visits and face-to-face specialist consultations; increasing capacity for specialist care; supporting better care by FPs; and enabling more appropriate use of consultative services.

The right patient should be seen by the right health care provider at the right time. If this describes an ideal model of health care, it is a model that is well supported

by RACE. With prompt and easy access to specialist expertise, FPs are in a much stronger position to provide the right care at the right time for their patients. Supported by RACE, FPs can more effectively remain the locus of patient care, calling on specialist expertise when appropriate and providing better coordination of care for their patients.

The RACE model is not intended to replace telephone consultations between FPs and specialists who have long-standing professional relationships. For FPs with these relationships, the service offers an option for additional support, while for FPs without strong links to other specialist colleagues, RACE provides more essential support. The model is also adaptable for use in any community, and can be easily configured to address local needs. For example, other models of RACE have now been implemented in all of the health authorities across BC.

Further and more rigorous evaluation of the RACE model is required to confirm these results and to establish a baseline for ongoing monitoring of the program's effectiveness. 

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Contributors

All authors contributed to the concept and design of the study; data gathering, analysis, and interpretation; and preparing the manuscript for submission. **Ms Wilson** was the first author and Project Manager. **Dr Mazowita** was Family Physician Lead of the Shared Care Committee and a reviewer. **Drs Ignaszewski** and **Levin** were RACE specialists and reviewers. **Mr Barber** was previously Executive Lead for the Shared Care Committee and a reviewer. **Mr Thompson** was Vice President of Providence Health Care, Executive Sponsor, and a reviewer. **Ms Barr** was a contributor to the RACE model and a reviewer. **Dr Lear** was RACE Evaluator and a reviewer. **Dr Levy** was Specialist Lead of the Shared Care Committee and a reviewer.

Competing interests

None declared

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