

Optimizing Physician Payment Models to Address Health System Priorities: Perspectives from Specialist Physicians

Optimiser les modèles de rémunération des médecins pour répondre aux priorités du système de santé : point de vue des médecins spécialistes



YEWANDE KOFOWOROLA OGUNDEJI, MPH, PHD

Postdoctoral Fellow

*Department of Community Health Sciences
Cumming School of Medicine, University of Calgary
Calgary, AB*

AMITY QUINN, PHD

Postdoctoral Fellow

*Department of Community Health Sciences
Cumming School of Medicine, University of Calgary
Calgary, AB*

MEAGHAN LUNNEY, PHD

Research Associate

*Department of Community Health Sciences
Cumming School of Medicine, University of Calgary
Calgary, AB*

CHRISTY CHONG, MSc

Research Assistant

*Department of Community Health Sciences
Cumming School of Medicine, University of Calgary
Calgary, AB*

DEREK CHEW, MD, MSc

Research Fellow

*Duke Clinical Research Institute
Durham, NC*

GARETH HOPKIN, PHD

Research Fellow

*Institute of Health Economics
Edmonton, AB*

PETER SENIOR, MBBS, PHD

Professor

*Department of Medicine, University of Alberta
Edmonton, AB*

GLEN SUMNER, MD, MSc

Clinical Associate Professor

*Department of Cardiovascular Sciences
Cumming School of Medicine, University of Calgary
Calgary, AB*

JENNIFER WILLIAMS, MD

Clinical Associate Professor

*Division of Gastroenterology and Hepatology
Cumming School of Medicine, University of Calgary
Calgary, AB*

BRADEN MANNS, MD, MSc

Professor

*Departments of Medicine and Community Health Sciences
O'Brien Institute of Public Health and Libin
Cardiovascular Institute
Cumming School of Medicine, University of Calgary
Calgary, AB*

Abstract

Objective: Despite well-documented data on the mixed impact of physician payment models, there is limited evidence on how to enhance existing payment model designs. This study examines the approaches to optimizing payment models from the perspective of specialist physicians to better support patient and physician experience and other health system objectives.

Method: Semi-structured interviews were conducted with 32 specialist physicians across Alberta, Canada. Data from the interviews were analyzed using a framework approach.

Results: Respondents emphasized the need to incentivize physicians with the right blend of financial and non-financial incentives, including physician wellness. Respondents also highlighted the need for physician involvement and accountability to optimize the value of physician payment models.

Conclusion: To optimize physician payment models, it may be useful to include a blend of financial and non-financial incentives with clear accountability measures as this may better align physician practice with health system priorities.

Résumé

Objectif : Malgré des données bien documentées sur l'impact mixte des modèles de rémunération des médecins, il existe peu de données sur la façon d'améliorer les modèles existants. Cette étude examine l'optimisation des modèles de paiement du point de vue des médecins spécialistes afin de mieux soutenir l'expérience des patients et des médecins ainsi que d'autres objectifs du système de santé.

Méthode : Des entrevues semi-structurées ont été menées auprès de 32 médecins spécialistes de l'Alberta, au Canada. Les données des entretiens ont été analysées à l'aide d'une approche cadre.

Résultats : Les répondants ont souligné la nécessité de persuader les médecins avec le bon mélange d'incitatifs financiers et non financiers, notamment des incitatifs concernant leur bien-être. Les répondants ont également souligné la nécessité de la participation et de la responsabilisation des médecins pour optimiser la valeur des modèles de rémunération des médecins.

Conclusion : Afin d'optimiser les modèles de rémunération des médecins, il peut être utile de prévoir un mélange d'incitatifs financiers et non financiers avec des mesures de responsabilisation claires, car cela peut permettre de mieux aligner la pratique des médecins sur les priorités du système de santé.

Introduction

The way specialist physicians are paid (among other factors) has implications for the quality, quantity and cost of healthcare provided to patients requiring specialist care (Friedberg et al. 2018). Globally, there is a high reliance on fee for service (FFS) models, and it remains the predominant physician payment model in Canada (CIHI 2020).

In recent times, governments have emphasized a shift from FFS to alternative payment strategies such as capitation, episode-based payments, salaries and blends of these models including FFS. For example, in 2019, the Alberta government announced its intention to increase the proportion of physicians who are paid through alternate (non-FFS) payment mechanisms to facilitate health system priorities of high-value, team-based care and to allow for more prudent use of limited health care resources (Alberta Government 2019). Similarly, many developed health systems across the world have implemented and evaluated non-FFS models especially in primary care settings (Carter et al. 2016; Dumont et al. 2008). In contrast, specialists in many developed health systems have historically been remunerated through a pure FFS mechanism with only very recent, limited introduction of alternative payment models such as episode-based and salary-based payments.

Evaluations of payment models in different health systems and a recent systematic review focused on the impact of payment models on specialist physician care provide mixed results on the impact of these payment models on physician practice and health outcomes (Mosqueira et al. 2019; Ogundeji et al. 2016; Quinn et al. 2020). In addition, a recent evaluation of payment models in Alberta by Quinn et al. (2019) suggests that there were no significant differences in the quality of care or costs of services provided by FFS-based specialist physicians compared to salary-based physicians who cared for patients with diabetes or chronic kidney diseases (Quinn et al. 2019). However, significant practice variation in care was observed across physicians irrespective of payment model, which implied that other unobserved factors apart from payment models were important (Quinn et al. 2019).

Different payment models have inherent incentives and disincentives and may be suited to different health system priorities or policy goals. For example, while alternate payment models based on performance have been shown in some situations to increase high-value care, performance may be difficult and expensive to measure. Similarly, FFS has been shown to increase utilization of health services by vulnerable populations but may significantly impact overall healthcare spending (Deber et al. 2008; Quinn et al. 2020; Sutherland et al. 2013). Furthermore, the impact of physician payment models on physician practice is dependent upon both the financial and non-financial components, as well as interactions between individual preferences and practice patterns. In addition, unintended consequences have been reported (Ogundeji et al. 2016; Quinn et al. 2019; Van Herck et al. 2010).

However, there is limited research on how to enhance existing payment model designs to align physician practice with various health system priorities. Available research has more commonly focused on primary care payment reforms, but literature suggests that primary care practice may not be impacted by payment models in the same way as medical specialties due to their unique needs and differences in their practice patterns (Rutten et al. 2003). As different health systems seek to pursue the varying aims of improving patient experience and safety, health outcomes and financial sustainability, understanding and enhancing the link between physician compensation models and the delivery of high-value care is an important knowledge gap to address.

In this study, we sought to understand the perspectives and experiences of specialist physicians on how existing specialist payment models (FFS and alternate payment models) in Alberta, Canada, can be better designed to support high-quality, accessible care that leads to a high level of both physician and patient satisfaction while optimizing value for money. These data will ultimately inform the design of an optimal specialist payment model that is attractive to physicians, with incentives aligned to engage the physician as a willing partner in the achievement of health system priorities.

Method

Study design

We conducted semi-structured qualitative interviews with specialist physicians across Alberta between July and October 2019 as part of a larger qualitative program of research described in an earlier publication (Ogundeji et al. 2021). This study was approved by the Conjoint Health Research Ethics Board at the University of Calgary (REB # 19-0725).

Context

Specialist physicians in Alberta are paid either through FFS or the Academic Medicine and Health Services Program (AMHSP). The AMHSP provides fixed contracts, whereby physicians remain independent contractors and not government employees. In addition, within the AMHSP model, remuneration for clinical work is consistent regardless of volume, similar to a salary (or salary-based payment model). The specialist salary-based payment models are offered primarily in the large urban centres either in Calgary or in Edmonton, Alberta. The salary-based payment model in Calgary includes specialist physicians who are either full-time clinicians or clinicians with teaching or research responsibilities. In general, the salary-based model in Edmonton comprises only clinicians with teaching or research responsibilities.

Participants

A purposive sample of 32 specialist physicians was interviewed. This method of sampling allowed us to obtain heterogeneous participants who (a) maximize diversity of characteristics (Palys 2008), such as gender, payment model, specialty and experience with the payment models, and (b) reflect different practice patterns, views and perspectives across different physician groups. To select potential participants, members of a physician payment research advisory group (consisting of four FFS- and five salary-based specialist physicians in Alberta) were asked to suggest potential participants.

Potential participants were contacted via e-mail, provided information about the study and invited to participate. Among the 43 specialist physicians, 10 did not respond, and one physician responded to say they were not interested in the study. No participant dropped out of the study.

Data collection

Our sample size (32 interviews) is in line with recommendations in the literature on descriptive qualitative studies (Sandelowski 2000). In-depth one-on-one interviews were conducted by the first author (YKO) who is trained in qualitative research and had no prior relationship with any of the participants. Explicit informed verbal consent was obtained from all participants.

The interview guide (Appendix 1, available online at longwoods.com/content/26577) included semi-structured open-ended questions, which were informed by existing literature, developed iteratively and then refined by the physician payment advisory group. The interview guide was piloted with three specialist physicians and further refined to enhance comprehension. The interviews were conducted both face-to-face and over the telephone, accompanied by field notes that were collated during and after the interviews. The interviews were audio-recorded and transcribed verbatim. Interviews lasted an average of 50 minutes.

Data analysis

Data from the interview were analyzed using the framework devised by Ritchie and Spencer (1994). This framework also allowed for a transparent audit trail by which the results were obtained from the data, and which enhanced the rigor of the analytical processes (Gale et al. 2013). Data were organized and managed using the data analysis software NVivo Version 12. The first author (YKO), supported by two independent coders, analyzed the data. The data analysis consisted of five stages: familiarization with the data, development of the thematic framework, coding, charting and mapping and interpretation. Following familiarization with the data, the thematic framework was developed, which involved discussions with the coders to refine initial themes, identify emergent themes and group codes into meaningful conceptual categories. Two coders who were trained in qualitative research (CC and ML) independently coded each transcript. In addition, at least 25% of coded transcripts were reviewed by YKO as a validity check. The coders and reviewer met together regularly to ensure that consensus was achieved. This helped to minimize the subjectivity of the researchers and improve the credibility of the research (Creswell 2009). We validated findings with members of the physician payment advisory group.

Findings

Participants

A total of 32 participants, 18 men and 14 women specialist physicians, were interviewed. FFS-based physicians comprised 60% and salary-based physicians comprised about 40% of the interviewed physicians. About 20% of the FFS-based physicians had been in the salary-based model but had switched to FFS. Table 1 shows the characteristics of the sample.

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TABLE 1. Participant characteristics

Characteristics	Salary-based model (N = 13)	FFS (N = 19)
Gender		
Men	6 (19%)	12 (37%)
Women	7 (22%)	7 (22%)
Location		
Calgary	10 (30%)	11 (36%)
Edmonton	3 (9%)	8 (25%)
Specialty		
Cardiology	1 (3%)	3 (12.5%)
Endocrinology	6 (18%)	3 (9%)
Nephrology	2 (6%)	3 (9%)
General internist and gastroenterologists	4 (12%)	7 (21.5%)
Other	0 (0%)	3 (9%)
Career stage		
In early-mid career (up to 15 years in practice)	8 (25%)	7 (22%)
In late career (more than 15 years in practice)	5 (16%)	12 (37%)
Primary practice site (where physicians spend over 70% of their time)		
Hospital	13 (40%)	5 (16%)
Community	0	14 (44%)

The percentages presented are of the total sample illustrated for each characteristic (e.g., gender).

Themes

Three themes provided a framework for understanding perspectives of specialist physicians on how to optimize payment models to better support patient care in Alberta. Study findings have been presented by themes and corresponding codes (Table 2). A descriptive summary of the themes has been presented with verbatim quotes as identified by the type of physician payment model.

TABLE 2. Themes and sub-themes emerging from the thematic analysis

Themes	Categories
Accountability	The need for physician accountability
	Difficulty in developing accountability metrics
Payment model incentives and funding solutions	Blended models as an option to optimize physician practice and patient care
	Better incentives for "good" clinical practice
	Revisit FFS fee codes
	Other funding solutions
Opportunities not related to payment	Promoting physician wellness and fulfillment

ACCOUNTABILITY

Participants thought that developing and implementing accountability mechanisms within both the FFS- and salary-based payment models was a key component for optimizing existing specialist payment models in Alberta. Twenty-three participants emphasized the need for accountability, and 14 participants addressed the potential difficulties in developing standardized metrics. On the need for accountability, FFS- and salary-based physicians' perspectives were somewhat aligned.

The need for physician accountability

A majority of the physicians interviewed emphasized that it was important to be transparent about expectations and what they needed to do to meet the expectations of the payment models. Participants stressed that holding physicians accountable discourages poor practice patterns.

It cannot simply be [that] I pay you a flat fee, and I really don't care how many patients you see, how many referrals you do and you continue to get paid. ...
No system works like that. (FFS physician)

The problem is not the fee code or how we are paid, the problem is [that] [if] there [is] no accountability, [then] the fee codes [and the way] we are paid, incentivizes bad behaviour on both sides [FFS and salary]. ... It has everything to do with the fact that there is no accountability. (Salary-based physician)

Difficulty in developing accountability metrics

Though physicians emphasized the need for accountability, some stated that developing standardized metrics could be a difficult task that requires careful deliberation and experimentation because different specialists see different types of patients with varying needs and/or procedures. Some physicians further stressed that the starting point to developing accountability metrics could be some basic, simple indicators that most specialists could agree upon.

The types of patients we all see are all very different. So, if you were doing a lot of procedures, then your productivity is going to be quite high, but that doesn't necessarily mean you are doing a better-quality job in terms of managing patients. I think we need to be more cognizant and look to better ways for understanding whether your clinical productivity in the salary-based model is adequately being adjudicated. (Salary-based physician)

Start simple with a few things that we can all agree [up]on. I think we can all agree on some basic quality indicators. [L]et's pick, maybe, three or four things that I think most physicians can agree [up]on, let's put a premium [on them and] let's incentivize that in a meaningful way. (FFS-based physician)

PAYMENT MODEL INCENTIVES AND OTHER FUNDING SOLUTIONS

About half the number of participants stressed on the need to consider alternative funding models, such as blended payment models where physicians are offered a baseline salary plus top-ups for additional work or targets met. Twenty participants (both FFS- and salary-based physicians) stated that revisiting FFS fee codes and providing incentives for good clinical practice might better support patient care. Eight participants also suggested other funding solutions including envelope funding and providing additional financial incentives to primary care physicians.

Blended models as an option to optimize physician practice and patient care

Participants articulated that blended payment models would provide the right mix of incentives that would be attractive to most specialist physicians and support the achievement of health system objectives to enhance care quality as well as maintain adequate volume of care. More salary-based physicians expressed these perspectives compared to FFS-based physicians:

I think a blended model offers the best chance in incentivized behaviours that you would want to see. It's hard to do, but you know, with leadership it can be done. (Salary-based physician)

I think that AMHSP [salary-based model] is as flawed as fee-for-service, and I think there has to be [the] sort of model that [is] a bit of a hybrid of the two where physicians get a sort of a base salary. We'll give you this much, and if you want to make this much, you've got to do all these other things. That would be a better system than [what] we have now. (Salary-based physician)

Better incentives for good clinical practice

As explained by the participants, providing the right incentives to encourage change in physician behaviour is important to optimize both the FFS- and salary-based models in Alberta. For example, participants described that incentives were not well aligned with health system priorities, and if certain behavioural changes were desirable, such as reduction in unnecessary tests or care or improvement in certain aspects of practice, there should be an incentive tied to it. Participants further alluded that these incentives could either be financial (such as additional fee codes) or non-financial (such as acknowledgment or recognition). Both FFS- and salary-based physicians almost equally expressed these views:

I think what's missing in both systems is the ability to incentivize the behaviour that you are seeking and so you know we can name any number of things. (Salary-based physician)

Everybody's personality is a little different, you know, but for the most part, I think doctors tend to be overachieving types that like praise. So sometimes even non-monetary acknowledgment can be a good motivator. (FFS-based physician)

Revisit FFS fee codes

Study participants stressed that fee codes for FFS-based physicians needed to be revised to incentivize good practice. For example, they expressed that the current fee codes for procedures should be updated to reflect current time/skills required to complete such procedures as opposed to following the fee structures that were specified years ago before such procedures became less complex. Additionally, participants also alluded that new fee codes that focus on changing patient behaviour (i.e., encouraging no-smoking) or leadership duties should be created. More salary-based physicians expressed the opinion of revisiting fee codes compared to FFS-based physicians. For example, a salary-based physician (formerly FFS-based) stated the following:

When I worked [for] fee-for-service, I used to resent the non-paid work [that] I did. So, you know, if I am sitting on committees or participating in things or doing things for patients where there was no billing code to get remunerated for [the service], it bothered me. (Salary-based physician [formerly FFS-based]).

Other funding solutions

Five participants recommended considering other funding solutions, such as envelope funding, whereby practices are given a budget for all operations including physician payments or private healthcare to help contain rising costs of physician services. An FFS-based physician explained the following:

I actually approached Alberta Health to see about [the] development of an alternate payment funding model for cardiac care where you have a funding envelope, and it wouldn't just be for physician fees. It would have included nursing salaries. It might have included other technical aspects. (FFS-based physician)

Three participants also suggested providing increased remuneration to primary care physicians because they thought that they were the core of the health system, and better incentivizing them to work collaboratively with specialists could help contain the rising costs of the health system in the long run. This view is illustrated by the following quote from an FFS-based physician:

The reason why specialists get paid well, in my mind, is because of the extra training and expertise. But you only need specialists for the 20% of the hard stuff that [as] primary care physicians [you] can't figure out on your own. The other 80% they could probably figure out on their own. If primary care physicians were better incentivized to work collaboratively with specialists to deliver a team-based approach, if you [were to] change payment models to incentivize group practices like that, I think it would save the system money. (FFS-based physician)

NONPAYMENT-RELATED SOLUTIONS (PROMOTING PHYSICIAN WELLNESS)

Five FFS- and salary-based physicians stressed that an additional way to optimize current specialist payment models was to consider the role of physician wellness within both payment models. They felt that payment models that offer flexibility, part-time working arrangements and the ability to take vacations were important factors in reducing physician burnout. They emphasized that these factors had an impact on patient care or practice patterns. A salary-based physician said the following:

There [are] two sides [to] it. I think we want to put the patient first, but we also need to make sure that our physician population is healthy. (Salary-based physician)

Discussion

Shortcomings were identified in both payment models available to specialist physicians (FFS- and salary-based). Our in-depth interviews noted the need to consider blended payment models that included accountability metrics and combined incentives to improve physician practice patterns and physician wellness, fulfillment and engagement when designing specialist payment models.

Many study participants emphasized the importance of accountability to optimize specialist payment models. While there is limited evidence regarding specialist payment models in general, other studies that focused on primary care payment models in other provinces in Canada and other high-income countries found accountability to be an important requirement for successful implementation of payment model reforms (Health Quality Ontario 2014; Mukhi et al. 2014). Accountability is one of the many ways to encourage best practice, and it can be implemented as part of a payment model reform (for eg., in value-based payment models) or as a standalone mechanism. This is consistent with evidence that suggests that the health system may be optimized through other non-payment or non-financial incentive mechanisms, including regulation and oversight, establishing professional standards and peer reporting (Kreindler et al. 2019; Ryan et al. 2015). It may be important to use a combination of these approaches (with consideration of local context to determine the right combinations) to maximize their impact on the healthcare system.

Study participants also acknowledged that implementing accountability mechanisms to measure performance might be difficult and that there may be a need to create indicators

that are specific to different specialties. While study participants expressed that physicians should be engaged in their development, they also noted that their creation would be complex and other experts would be needed. This affirms the need for physicians to be a part of the process of transformation in healthcare systems, which has been identified as an important opportunity to improve physician payment reforms (Ein and Foggs 2014). Furthermore, Huynh and colleagues (2014) recommended that a number of factors must be considered when designing effective accountability frameworks. These include: (1) considerations for accountability or measurement at either the level of the group practice and/or of the individual physician; 2) determining “value” through standardized scores on clinical quality and resource use; and 3) extensive and ongoing physician engagement to reach consensus and regularly review performance indicators (Huynh et al. 2014).

Many physicians in our study noted that a blended model (that retains aspects of both salary- and FFS-based components) might be ideal, as it may offer the right mix of incentives to many physicians. This is consistent with the shift toward blended payment systems in many developed health systems across the world (Quentin et al. 2018). Blended payment models can take on different forms, wherein usually two types of payment models are variably combined into one to pay physicians (e.g., FFS plus capitation, capitation plus pay for performance). A few healthcare jurisdictions have experimented with variants of blended payment models. For example, in the province of Quebec, the government introduced a blended payment model for specialist physicians that combined a base wage (independent of actual patient encounter volume) and FFS (pro-rated fees for services provided) (Dumont et al. 2008).

However, blended payment models may have limited impact without strong accountability mechanisms in place to provide physicians with additional incentives to consider the costs and benefits of different treatment options thereby leading to an efficient level and quality of care (Carter et al. 2016; Scott et al. 2011). For example, in Ontario, blended payment models have been extensively piloted and implemented in primary care; but it was noted that although these “incentive blends” contributed to recruitment, retention and team-based care, the overall lack of accountability undermined other health system goals such as cost containment and quality. In addition, blended payment models were found to increase physician income in Quebec (Carter et al. 2016; Mattison and Wilson 2017). This suggests that blended payment models might require further investigation to better understand potential cost savings that may be related to more prudent physician stewardship of healthcare resources within such models.

Finally, there is substantial evidence that suggests an association between physicians’ wellness and the care provided by physicians (Dewa et al. 2017). Lemaire and colleagues argued that physician wellness is a missing quality indicator and that patients’ perception of the wellness of their treating physician has important implications on their likelihood to follow advice, seek a second opinion and/or be forthcoming with concerns, which subsequently impacts efficiency and cost (Lemaire et al. 2018; Wallace et al. 2009). Consequently, it is

important to recognize the impact of investing in physician wellness on patients and the overall effectiveness, efficiency and cost of the healthcare system. While physician wellness may not be directly related to payment models, components of the payment model can be designed in a way to support thriving physicians. This includes opportunities to select or choose payment models that offer flexibility, autonomy and other benefits.

Limitations

One limitation of our study is that the perception of specialist physicians who were interviewed may not represent specialists more broadly as there was a lack of representation from surgical specialties. In addition, the study sample was limited to large urban areas with academic medical centres in Edmonton and Calgary. Further research might be required to generalize these results to a broader specialist population beyond major urban centres in Alberta. Furthermore, this study was limited to the perspectives of specialist physicians only and did not include the voices of either patients or policy makers, whose perspectives may differ.

Conclusion

Our findings have important implications for health system funding policies. Insights from our study suggest that there might be a need to incentivize physicians with the right mix of financial and non-financial incentives as a part of their payment models. Our results suggest that this might be achieved through a blended payment model that maximizes the advantages of each while minimizing each model's weaknesses as well as facilitating physician wellness, which will positively impact high-value care. To optimize payment models, study participants also noted the need for clear accountability measures across both the FFS- and salary-based models and suggested that it would be important for physicians to be involved in developing these measures, including those that are relevant to different groups of specialists. Although performance indicators generally require health system data from the ministry or provincial health authorities, ministries are often unable to review accountability metrics and recommend the changes required to improve performance; hence, collaborating with physician groups and health authorities will be critical.

In general, developing new payment models will need to be led by the payers – usually the ministries of health. Depending on the province, legislative change may be required by the ministries to roll out alternate payment models, particularly if the ministry wishes to delegate the authority to create and implement physician payment models through a provincial health authority. Our results, which would seem to be generalizable across Canada, suggest it would be important for provincial health ministries to partner with physician leaders in designing and negotiating payment model contracts to offer a more holistic approach that incorporates financial and non-financial incentives and accountability mechanisms.

These recommendations present an opportunity for policy makers in countries, such as the US and Canada, who are looking for ways to solve problems related to the cost of, access

to and quality of healthcare in order to support health system transformation through the optimization of existing physician payment models. There is a need for additional research to support the development of an accountability framework and/or a blended payment model that will be attractive to specialist physicians and lead to the provision of efficient high-value care. Exploration of other factors that influence physician practice beyond payment models and how they interact with each other should also be considered.

Conflict of interest

Braden Manns, Glen Sumner and Peter Senior are compensated under the Academic Medicine and Health Services Program (by a salary-based payment model). The Government of Alberta provided support for Gareth Hopkin's involvement in the study through a grant to the Network of Alberta Health Economists. The terms of this grant mean that it is unrestricted and there was no oversight from the Government of Alberta on the topic, methods, results or interpretation of the study. There was no involvement from the Government of Alberta in the decision to publish. None of the authors has any conflict to declare.

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Correspondence may be directed to: Braden Manns. Braden can be reached by e-mail at braden.manns@albertahealthservices.ca.

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